Problems of post-crisis development of the Azerbaijan banking cards market and the national payment system

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#### INTRODUCTION

Relevance of the research topic. Rational organization of the system of clearing settlements allows to ensure the normalization of monetary circulation, reduce the costs of the subjects of payment turnover, create favorable conditions for the economic development of the state. In Azerbaijan, the majority of payments by individuals are made in cash, some of the payments of enterprises are not conducted through the banking system. This violates the equilibrium of the money market and increases the cost of servicing the payment turnover. One of the effective ways to transfer the transactions of individuals and legal entities from cash to non-cash form is the development of the circulation system of bank plastic cards.

The introduction of bank plastic cards into the country's payment system allows to reduce the amount of cash, simplifies settlements with the population, makes the trade turnover transparent for the state, which, in turn, increases the efficiency of the functioning of the economy.

Formation of the circulation system of bank plastic cards in Azerbaijan was largely determined by the interests of issuing banks and international card associations. This circumstance has led to some negative trends in the domestic payment system. A special place among them is occupied by: a high level of risks accompanying settlements using plastic cards; outflow of bank capital abroad; use of plastic cards in the shadow economy. The identified problems necessitate the study of card operations and the development of proposals for improving the circulation system of bank plastic cards in Azerbaijan.

The purpose and objectives of dissertation research. The purpose of the dissertation work is the development of theoretical provisions and practical recommendations for the development of the circulation system of bank plastic cards in Azerbaijan.

To achieve this goal, the following problems were solved in the thesis:

- to systematize theoretical and methodological approaches to the formation of the circulation system of bank plastic cards;
- determine the role of the system of circulation of bank plastic cards in the economy of the state;
- to investigate the conditions and trends in the formation of the circulation system of bank plastic cards in Azerbaijan;
- propose measures to develop the circulation system of bank plastic cards in Azerbaijan;
- to develop methodical recommendations on risk reduction accompanying operations with bank plastic cards.

The object of the study is the system of circulation of bank plastic cards.

The subject of the research are theoretical, methodical and practical approaches to the development of the circulation system of bank plastic cards.

Theoretical and methodological foundations of dissertational research are the works of domestic and foreign scientists on the topic of the dissertation; publications in periodicals; materials of scientific and practical conferences and seminars on the functioning of payment systems based on the circulation of bank plastic cards; current legislative and regulatory legal acts of Azerbaijan and international organizations regulating the operation of payment systems and operations with bank plastic cards.

The scientific novelty of the dissertation research is the development of theoretical provisions, a set of methodical and practical recommendations for the development of the circulation system of bank plastic cards in Azerbaijan.

The practical and theoretical importance of the dissertation work is that the main theoretical positions and conclusions of the study are brought to the level of specific proposals that can be used to develop the circulation system of bank plastic cards in Azerbaijan. The proposed set of recommendations on the formation of a payment system based on the circulation of national bank cards can be used to

implement the monetary and credit policy of the state in order to improve the quality of non-cash settlements.

# CHAPTER I. THEORETICAL FOUNDATIONS OF THE FUNCTIONING OF THE MARKET OF BANKING PLASTIC CARDS

#### 1.1. History of the origin and development of bank cards

The history of money goes back to the depths of the centuries, in those times when humanity refused to directly exchange goods for goods. All the further evolution from exotic shells to rare substances, and then to precious metals, was the search for an optimal measure for human labor, excluding the emergence of inflation. At the end of this path were paper money, the issue of which was regulated first by the royal treasury, and later by the state bank, i.e. The main function of which was to regulate the country's monetary system. Theoretically, paper money has many drawbacks, but the main reason for the appearance of noncash forms of payments is the fact that money is easily withdrawn from circulation, lose the ability to generate revenues. But the bank check, guaranteeing the purchasing power of the merchant, left the bank the opportunity of profitable use of these funds until payment on the seller's account. Therefore, the wholesale market, and then the settlements between the organizations were long ago transferred to non-cash forms of payment, which make possible the maximum use of money.

In the late XIX - early XX century, the development of the banking system led to the birth of plastic cards.

Once, in 1949, Alfred Bloomingdale, the grandson of the founder of one of the largest American department stores, flew once again to New York to visit a seriously ill father, and met his longtime friend Francis McNamara. The affairs of both friends went unimportantly. Bloomingdale after work as a producer of Broadway shows unsuccessfully tried himself in the field of cinematography in Hollywood. McNamara was the head of the financial company Hamilton Credit Corporation, which at that time customers owed \$ 35,000, without much hope of ever returning these debts. Apparently, for this reason, McNamara had to spend much of his time with his lawyer Ralph Snyder. When they met, the three decided

to dine together at the Meigers Cubin Grill restaurant, located near the Empire State Building, in the heart of Manhattan. [23, p.258]

On that historic day, conversation over dinner went about one of McNamara's customers in the Bronx. This entrepreneur allowed neighbors to use their current bank account for interest. Salespeople, calling him on the phone, got permission from him to write down the cost of purchases to his account. This type of lending could not be called anything new, but it was the original one in which it was the presence of an intermediary using his creditworthiness to lend to people who otherwise could not get it.

However, the latter fact seemed to friends a flaw in this unusual financial scheme. After all, people who do not have a line of credit in the store, just lending and should not, with them most often there are problems. On the other hand, the peripheral area of New York with a small number of stores is not the best market for such operations. Perhaps because they were sitting in a restaurant, Manhattan with a huge number of restaurants, where thousands of businessmen daily dine, seemed to them an ideal field for a new business. In the heat of enthusiasm, they called the owner of the restaurant and asked him how much he was willing to pay for new customers whom he would not have received in any other way. He, without batting an eyelid, replied: "Seven percent." - The rate, which for several decades prevailed in the market of credit cards. Later, when the card business was already flourishing, they somehow asked the same owner, where did he get these famous "seven percent". "The travel agent would demand ten percent," was the answer.

To expand the range of customers and identify them in restaurants, the partners decided to use embossed plates, which by that time had already been used by many shops and gasoline companies. So, at the end of lunch it was decided to create a new enterprise.

McNamara and Snyder, as a share, contributed to Hamilton Credit Corporation with its \$ 35,000 of unsettled debts, Bloomingdale contributed \$ 5,000

in cash. These \$ 5,000 were the only real money from which the venture began. Although Bloomingdale became interested in the idea, but money brought more from friendly feelings than in the hope of a lucrative business.

After the departure of Bloomingdale in California, McNamara and Snyder enthusiastically set to work. Since their office was in the Empire State Building, they simply slipped leaflets under the doors of neighboring offices, inviting them to use the new service. The payment for the first cards was not charged, and the credit history was not checked in any way. To get a card, the client who came to him had to look decent and say that he works in the same building. In parallel to serve these customers were attracted 10-12 nearby restaurants. In the first month, the company received \$ 140 in revenue from turnover, which amounted to \$ 2,000. During the second month, business began to grow even faster, and there was an urgent need for additional capital for lending.

Bloomingdale on the relevant request of partners set a condition for increasing its share in the company's capital. After New Yorkers, confident in the ultimate success of the enterprise, did not give up, Bloomingdale began his own operations in Los Angeles with credit cards in a similar scheme, known as "Dine and Sign". He managed to attract 25 restaurants, in 3 months his monthly turnover was \$ 150,000, and he also began to experience difficulties, since he himself did not have any significant sources of credit.

In New York, by that time, the monthly volume of operations was \$ 250,000, and then the partners decided to unite on the basis of the principle: "if we lose, then all together." So in just three months their company has acquired a "national scale", operating in New York, Los Angeles, and also in Boston, where they redeemed the operations previously started by the former partner of Bloomingdale in "Dine and Sign".

After they merged, the matter was universally called "Diners Club". 70% belonged to McNamara, the rest were equally divided between Bloomingdale and Snyder. By this time, Bloomingdale had contributed another \$ 25,000, which,

together with the original 5000 and a small amount spent on "Dine and Sign", were the only real money ever invested in this venture.

A year later, Diners Club had contracts with 285 commercial points and 35,000 cardholders, who were charged for using the card 3 dollars a year. By the end of 1951, Diners Club earned a net income of \$61,222 from a turnover of \$6.2 million. In subsequent years, the system continued to expand both geographically to Europe, and diversifying the commercial network. Initially, commercial and service companies did not really like the cards "Diners Club", because, firstly, it undermined the positions of their own branded cards, and secondly, because of the need to pay a commission of the company.

However, the main difficulties began when competitors started to enter the market. The most significant for universal cards in this respect, undoubtedly, became 1958.

This year the Carte Blanche system was created, which was originally a private card of the Hilton hotel corporation. In 1965 Carte Blanche was sold to Fest National City Bank (later Citibank).

The idea of using prepaid cards for the first time was expressed in 1880 by the American economist Edward Bellamy in his work "Looking Backwards" (Edward Bellamy, "Looking Backwards") - In 1914, the company "General Petroleum Corporation of California" issued the first cardboard card, whose application was limited to the payment of petroleum products. The fragility of the cardboard made them look for a replacement, and a decade later the first metal and then plastic cards with embossing began to appear. Stamping allowed to partially automate the process of servicing these cards, since it was possible to make prints and transfer information about the owner to pre-printed checks (slips) from cards. And in the sixties on plastic cards began to place a magnetic strip on which information was recorded.

Back in 1914, large department stores in the US began to issue credit cards to their customers. In 1928, a prototype of plastic cards was invented-a metal label

on which the name and address of the customer were squeezed out. In 1936 appeared the first association of enterprises that agreed to lend to common customers. A special success fell to the share of restaurant credit card "Diners Club" ("Dining Club"). Regular visitors of restaurants, having a good reputation, could get a "Diners Club" card and present it in many restaurants in New York instead of cash. The restaurants handed over copies of invoices to the "Diners Club", which monthly presented to the client a joint account. The customer paid with the "Diners Club", and the one with the restaurants. [26, p.96]

A number of large American banks, assessing the success of the pioneers, issued their credit cards, which could be used not only in restaurants, but also in other places. So, payment systems began to be formed: the bank issued a card and opened an account to the client; On the territory of the country and abroad a whole network of shops, bars, restaurants, hotels, etc., where they accepted cards for payment issued by the issuing bank, was equipped with a center that was engaged in servicing (processing) plastic cards. Pioneers in the development of the plastic money market were the now well-known Bank of America; Master Card; American Express; Visa International.

The success of using non-paper payment means is explained:

- they are more protected from forgery, which allows them to be used in a wider scope of settlements and with a large number of participants;
- Clients see in them a more convenient form of payment and make it possible to widely use credit in everyday practice;
- interest appears at retail outlets, which with the consent to accept, as a means of payment, cards expand the circle of their customers;
- from the position of the state, the use of payment systems reduces the cost of servicing the available cash, accelerates the turnover of the money supply.

The main feature of payment systems built on plastic cards is the maintenance of retail turnover in the economy. Features are expressed in the

technical features of payments and are disclosed when considering the types of plastic cards, their evolution.

In modern life, the presence of a bank account is not surprising, and every person is familiar with the principle of the plastic card. However, this method of payment systems has survived a long enough evolutionary path before it became a modern means of electronic payments.

Many banks faced similar difficulties. Perhaps the most successful was the financial policy of Bank of America, which produces the "BankAmericard" card.

Although this advantage was due more to the territorial and material features of the state of California. There was a larger percentage of wealthy people and a large network of trade enterprises.

As the development of programs related to the use of credit cards, banks face the problem of the limited scope of their services. In this regard, Bank of America in 1966 decided to issue a license to issue its cards to other banks. In response, several large competitive banks Bank of America decided to unite and established their Interbank Card Association.

The association began to cooperate with banks in the western states that issued their Master Charge card. After analyzing all the advantages, the ICA bought the right to issue and use this card in 1969, and most of its members switched to a new "Master Charge".

In opposition to the association stood the banks that issued "BankAmericard". They secured the withdrawal of the production of these cards from the control of Bank of America, and in 1970 created their own organization called National BankAmericard Incorporated - NBI.

Thus, by the beginning of the seventies, two main competitors in the market of universal bank cards formed in the United States: the NBI and the ICA. They shared about 90% of the sphere of influence among themselves. The remaining percentage was occupied by non-bank universal cards «American Express».

It should be noted that initially universal foreign cards were divided into two categories: financial (or bank) cards and cards for "travel and entertainment" (Travel & Entertainment - T & E).

The second category of cards was issued by Carte Blanshe, Diners Club, American Express, they were mainly intended for traveling businessmen and helped pay for tickets, hotel rooms, restaurant accounts, etc. But bank cards were intended for ordinary people and maintenance of simple consumer purposes. In our time, such a clear division can not be held, we use plastic cards for any situation.

In the future such monopolization led to the fact that those banks that had just started issuing cards had to join either the NBI or the ICA. This continued until, in 1971, Worthen Bank and the Trust Company of Little Rock became a member of both systems. In order to preserve their integrity, the NBI was followed by sanctions in the form of a ban on the issue of Master Charge cards by the NBI members. The case reached the court, which lasted five years. During this time, many banks have started issuing cards of two companies. And in 1972, the District Court, considering this issue, issued a 26-page conclusion that "the prohibition of the NBI is a violation of antitrust law, it hinders the development of free competition and limits the rights of consumers." The NBI tried to appeal, but ultimately surrendered when, when several large NBI member banks, including Bank of America and Chase Manhattan, applied for membership in the Interbank Card Association in October of the same year and, accordingly, for the issue of Master Charge cards.

The development of the card system was in full swing not only in America, but also in Europe. The UK took the lead in 1951, when the Diners Club issued the first license to British banks to use their name cards.

Then the British Association of Hotels and Restaurants started issuing a universal credit card BHR, which was not banking.

In this area successfully competed and Sweden. In 1965, the Swedish company Rikskort, owned by the Wallenberg family, merged with the British association and established Eurocard International.

Plastic cards of world systems VISA and MasterCard.

Along with European card companies, American card associations tried to take their share of the Western market. The first significant breakthrough in this competitive struggle with BankAmericard was made by the ICA when in 1974 it signed an agreement with the British Access Card system. Since that moment, the cooperation between Eurocard and the American Interbank Card Association, which produces "Master Charge", began. This connection was one of the reasons why in 1976 the NBI decided to rename its "BankAmericard" card to the now known "VISA" card. Following it, and the ICA in 1980, it appropriated its "more international" name to "MasterCard".[16, p.48]

Eurocard also took steps to distribute the sphere of influence, expanding its cooperation with MasterCard and other banks. She entered into an agreement with Cirrus and Maestro to expand the production of plastic cards, which made it possible to increase the range of services offered to customers by receiving cash from ATMs. As a result, in 1992 Eurocard International merged with Eurocheck payment system, and was transformed into a larger company Europay International.

Gradually the largest American representatives of payment systems came not only to Europe, but also to the countries of the rising sun. However, in Japan there was a large representative of plastic cards - the company JCB, which, despite the active attempts of VISA and MasterCard to win this market, was not inferior to occupied positions.

The total number of JCB card holders in 1980 was almost twice as much as the ones issued in Japan "VISA" and "MasterCard" combined.

Thus, in the modern banking system, the largest payment institution is VISA Int. It occupies about 60% of the market of bank cards. The second largest is

Europay / MasterCard Int., Which regulates another 30% of the market. The remaining 10% falls on the cards of other international organizations and various banks.

The third financial revolution began in the USA, in 1950, when the company Diners Club put in circulation, as a means of cashless payments, payment cards accepted as payment for services in restaurants, hotels and travel agencies. Subsequently they received the names of cards of tourism and entertainment. This was, in fact, the first full-scale scheme of a tripartite agreement involving the issuer of the card, trading enterprises and cardholders. By 1957. in the US there were already 26 issuing banks, in the programs of which 754 thousand cardholders and about 11 thousand traders participated. The volume of payments was 400 million dollars a year.

On October 1, 1958, the first American Express card was issued. Within a year, the company had 32,000 enterprises and more than 475,000 cardholders. This success of American Express is due primarily to the fact that the company acquired the Universal Travel Card, issued by the Association of American Hotels. But the main reason was already existing ramified international network of traveler's checks "American Express" and huge financial resources that allowed to lend to customers.

At the first stage of development banks considered cards as an additional service to clients and did not see those huge potential opportunities that were opened by cards in the sphere of settlements and crediting.

A fundamentally new period in the development of the card business began when the first and second largest American banks joined it: "Bank of America" and Chase Manhattan Bank. It happened in the same way in 1958.

The Chase Manhattan Bank had 350,000 cardholders at the end of the first year of the card program and attracted 5,300 retailers. By 1960, the volume of card transactions had grown to \$ 25 million. But at the same time the number of cardholders decreased to 160,000, operating expenses and non-refunding of loans

increased, and the program as a whole became unprofitable. In January 1962, the bank sold it for \$ 9 million to Uni-Serv, which began issuing a Uni-Card card on its basis. Amazing and dramatic is the fate of this program: for a while it became part of American Express, then in 1969 it was redeemed for \$ 50 million by its initiator, Chase Manhattan Bank. But the second attempt of this bank was unsuccessful: the program brought an annual loss of 1 million dollars and in January 1972 it was again sold to the National Bank Americard Association.

Similar problems were encountered by other banks, but nevertheless the success of BankAmericard, produced by Bank of America, grew. The main advantage of this bank was the large network of branches in the state of California with its rich clientele.

The first mass credit card, providing the possibility of an extended loan, was issued in 1958. Bank of America, now Visa. The volume of operations with Bank of America increased in 1961-67. from 75 to 335 million dollars, the number of cardholders - from 1 to 2.7 million people, the number of traders participating in the program from 35 to 83 thousand.

At the same time, in the northeastern United States a number of large banks experienced failures with the introduction of their own cards. The reason was the underdevelopment of the network of individual banks in the region, which hampered the development of transactions with private individuals and prevented the introduction of cards into the payment turnover.

With the growth of card programs, most banks have faced the main obstacle - the locality of the service network of their cards.

In 1966 there was an event that had a serious impact on the entire subsequent development of card systems. "Bank of America" established a separate organization - "Bank Americard Service Co", in which all operations with the cards of this bank were concentrated. But the most important thing was that the new company started selling licenses for issuing cards to other banks, which enabled thousands of small banks to join the card business. They received know-

how and the necessary technical means, but had to put their card transactions under strict control of "Bank Americard Service Co", which set standards and defined rules for handling cards. By the 1970s. already 3,300 banks became participants in the new system. Some foreign banks joined it, for example, Barclay's Bank (Great Britain).

However, "Bank of America" failed to monopolize operations with cards on the domestic and international markets. In the east and northeast of the USA in the 60s a number of regional associations for the production of cards arose. On their basis in 1967. The Interbank Card Association (ICA) was established, which combined many banks and became the second largest bank card association (along with Bank Americard Service Co). This association was distinguished by the fact that its participants at first had independence in resolving operational issues. On their cards belonging to the association was designated by the letter "i". Then inevitable standardization and centralization of control followed. Banks went on to issue a single Master Charge card. By the 1970s. three-quarters of ICA members issued this card.

All subsequent development of the card business in the USA (and in other countries) took place in the conditions of fierce competition "Visa" and "Master Charge"; the last in 1979. was renamed to "MasterCard". The number of "Visa" cards in 1980. reached 73 million, and the annual volume of operations - 1 billion dollars. By 1998, 1,022 million Visa cards were in circulation, 79% of which were Visa Electron, and the volume of transactions reached 171 billion dollars. Fast rates The scope of operations of MasterCard also grew: in 1980, - 55 million cards, the volume of transactions - 10.4 billion dollars, in the mid-90's - 90 million cards and 99 billion dollars. [11, p.103]

In parallel with the development of the American market was the internationalization of card transactions. It started back in 1951, when the Diners Club gave the first license to use its name and scheme in the UK.

Around the same time, the British Association of Hotels and Restaurants started issuing a credit card "BHR", which, not being a banking card, was still a universal card. In 1965, this system, merged with its Swedish rival Rikskort, owned by the Wallenberg family, established the company Euro International Card International, headquartered in Sweden. Eurocard, expanding its cooperation with MasterCard, signed agreements with Cirrus and Maestro as new technologies were introduced, which allowed expanding the range of services offered to customers by using cash cards to receive cash from ATMs.

The development of card transactions in Europe repeats the process of the formation of the American card system, when non-cash payments are estimated to account for almost 100% of the total of all transactions.

So, in the UK the first credit card - "Barclaycard" was released in 1965. In 1966 Barclay's bank signed an agreement with Bank of America on cooperation, which allowed using the infrastructure of the American association to introduce Barclaycard into international circulation.

In the early 1970s, other banks of the country - N Westminster, Llojd s and Midlendbank, concerned about the success of Barclay's bank, began to organize the second nationwide network of payment cards. Established by them, "Joint Credit Card Company Ltd" released in 1972. the "Access" card. A little later, the company entered into an agreement with MasterCard in the UK, and Access was accepted by MasterCard counterparties in many countries around the world.

Competitive struggle between payment systems unfolded not only in Europe. In Japan, for example, despite active attempts to win this market, "Visa" and "MasterCard", they lost to JCB cards. The total number of holders of these cards in 1980 was almost twice as much as the ones issued in Japan "Visa" and "MasterCard" combined.

However, it was to the American issuers of "Visa" and "MasterCard" cards that they managed to turn into associations of a global scale. About the scope of their expansion can be judged from the data provided by MasterCard International

in March 1999: MasterCard cards are issued and serviced by 21,700 banks and financial institutions in all parts of the world.

The number of associated retailers and service establishments accepting the MasterCard and Europay cards reaches 12 million (in Europe - 3 million). The total annual volume of transactions was in 1999. 320.6 billion dollars, and the number of cards in circulation - 227.9 million (of which about 100 million - cards of the "Europay" system).

Association "MasterCard" was the developer of a number of technical and organizational events, which were subsequently adopted by other companies of bank cards. In particular, she was the first in 1983 to place a laser hologram on the card, which made it difficult to forge and significantly increased the reliability of the cards. In 1984, the association commissioned two powerful communication systems that provide information exchange and settlements: "Banknet" - authorization and cash settlements for 5 million trading enterprises and "Master Card Point-of-Sale-Program" - a network of electronic terminals in retail outlets with a capacity of 11 million operations per day. In 1987, the association bought the largest network of ATMs in North America "Cirrus".

In 1988 "MasterCard International" signed a cooperation agreement with "Eurocard International", subsequently renamed into "Europay International". This step allowed "MasterCard" to significantly expand the number of participants in the system and the scope of the cards, which strengthened its competitive position in the European region and other parts of the world.

Europay International was formed in September 1992 as a result of the merger of three companies - Eurocard International, Eurocheque International, Eurocheque International Holdings. The financial institutions of 22 countries of Europe participate in the capital of the company. It specializes in providing payment services to participants in payment by bank cards and Eurochecks.

The agreement with MasterCard created a unified infrastructure, including banks, trading enterprises, ATMs and electronic terminals.

The structure of management bodies of international card associations is determined by the scale of their activities. Thus, Visa International has several directorates, each of which is responsible for the activities of associations in a certain region of the world: a separate zone is the United States, another is Europe, then the Middle East, etc. "MasterCard" has a single board of directors, but a third of the seats in it belong to foreign financial institutions. This association has offices in seven European countries.

It should be noted that initially in the foreign classification universal cards were divided into "Travel and Entertainment" (T & E) cards and purely bank cards. The first were issued by the companies Diners Club, American Express, Carte Blanche and were intended mainly for payment of hotels, restaurants, that is mainly for traveling businessmen. The same cards issued by banks had a more "consumer" character and were intended for "ordinary customers". To date, these differences have largely disappeared, and this division is very conditional.

### 1.2. The essence and classification of plastic cards

The transition to new forms of economic relations led to the restructuring of the banking system and the introduction of new software forms of settlements, including plastic cards. A bank plastic card is one of the types of financial cards, which is a personalized means of payment intended for payment of goods, services and receipt of cash in banks and ATMs (ATMs). The cardholders of the trade / service enterprise and the bank branches form a network of card service points, or a receiving network.

The peculiarity of sales and the issuance of cash on cards is that in these operations carried out by shops and banks, goods and cash are provided to customers at once, and the means for their reimbursement come to the accounts of service companies more often after some time (usually 2-3 day). The guarantor of payment obligations arising in the process of servicing plastic cards is the issuing bank that issued them. Therefore, cards remain the property of the bank during the

whole term of validity, and cardholder clients receive them only for use. The nature of the guarantees of the issuing bank depends on the payment authority granted to the client and fixed by the card class.

When the card is issued to the client, it is personalized: the data is entered on it to identify the card and its holder, as well as to verify the creditworthiness of the card when it is accepted for payment or for cash. The process of approving the sale or issuance of cash on the card is called authorization. Authorization - permission granted by the issuer to conduct an operation using a bank card and giving rise to its obligation to execute documents compiled with the use of a bank card. To conduct it, the payment system is requested to confirm the powers of the bearer of the card and its financial capabilities. The technology of authorization depends on the scheme of the payment system, the type of card and the technical equipment of the service point. Traditionally, the authorization is carried out manually: the seller or the cashier sends the request by phone to the operator (voice authorization) or automatically: the card is placed in a POS terminal or POS terminal, the data is read from the card, the cashier enters the payment amount, and a card holder with a special keypad - a secret PIN (PIN - personal identification number). [24, p.75]

Authorization can be in two modes: on-line and off-line. Online mode is a mode where communication with the payment system database is performed. The implementation of additional data exchange with the card itself is called off-line mode. In the case of cash withdrawal, the procedure is similar in nature with the only feature that money is automatically issued by a special device - an ATM, which performs authorization.

In domestic and foreign practice, several types of bank cards are distinguished depending on the classification. There are different criteria for the classification of plastic cards:

- by the method of recording information on the card;
- by the nature of the interaction with the reader;
- for general use;

- by card issuers;
- on technical features of calculations;
- depending on the economic content of the card transaction;
- by the clientele category, on which the issuer is oriented (in international payment systems this is called types of cards or products products);
  - depending on the type of agreements concluded;
- depending on the legal status of cardholders. Let's consider each of these criteria.
  - 1. By the method of recording information on the card:
    - graphic recording;
    - embossing;
    - bar-coding;
    - encoding on a magnetic strip;
    - chip;
    - laser recording (optical maps).

The earliest and simplest form of recording information on the map was and remains the graphic image. It is still used in all maps, including the most technologically advanced ones. Initially, only the name, cardholder name and information about her issuer were put on the card. Later, a sample signature was provided on universal bank cards, and the name and name were embossed (mechanically squeezed out).

Embossing allowed to make payment card operation much faster, making an impression of the slip on it. The information embossed on the map is instantly transferred through the carbon paper to the slip. In order to combat fraud, slips can also be used without a copying layer, but the way of transferring the information embossed on the card remains essentially the same - mechanical catching. Embossing did not completely replace the graphic image. Moreover, with the advent of systems based on paperless technology, the card number and holder name were again applied to the map graphically using personalizers. Modern

personalization equipment for a few minutes also allows you to transfer a color photographic image of the card holder and a laser sample of its signature to plastic.

The recording of information on the card with the help of bar-coding was applied before the invention of the magnetic strip and was not distributed in payment systems. However, cards with barcodes similar to those applied to goods are quite popular in special card programs where calculations are not required. On the magnetic stripe of bank cards, the card number, duration of its validity and PIN of the cardholder are usually encoded. In some systems, some other information may also be recorded on the magnetic strip.

Magnetic recording is one of the most common methods of applying information to plastic cards today. It is especially popular in payment systems. However, the magnetic strip does not provide the necessary level of protection of information from fraud and counterfeiting, and this is very important in payment and banking systems based on cards. A more reliable way of recording information is a chip (from an English chip - a chip with an integrated circuit) or a chip. Cards with a chip are also often called smart cards (smart cards) or smart cards. Their characteristics and detailed description deserve special attention, since these cards are more promising in many respects today (security, reliability, security, convenience); and magnetic cards on these indicators are much inferior to cards with a chip. At present, almost all Western companies that issue financial cards on the modern market are beginning to introduce and offer to customers such a product as a smart card.

The plastic card with the chip was patented in 1974. Despite the obvious advantages, chip cards have so far had limited use and are mainly distributed in France. The reason is simple - this card is an order of magnitude more expensive than a card with a magnetic stripe. Only in recent years, when the damage from fraud with magnetic cards in international payment systems has become very high and continues to grow, it was decided to gradually switch to chip cards.

Not all chip cards have a microprocessor. Specialists subdivide chip (microprocessor) cards into two types: memory cards and microprocessor cards. The largest capacity is available with optical memory cards that use WORM technology (one-time recording - multiple reading), similar to that used in laser discs. To read it you need special laser devices. Memory cards are one-time and allow for multiple re-recording. The volume of their memory is much higher than the cards with a magnetic strip, and they are much better able to protect the recorded information. In most bank card programs based on chip cards, it is "protected memory" that is used, which gives the best "price and security" ratio.

The microprocessor cards themselves are true smart cards equipped with a microcircuit containing a microprocessor, memory, I / O devices, and its own operating system. The architecture of the microprocessor unit integrated in the card allows the installation of a data encryption device. [15, p.68]

- 2. In accordance with the nature of the interaction with the reader, smart cards are divided into:
  - •contact (direct contact with the reader);
  - •non-contact (for the transmission of information a radio signal is used).

Smart cards for their reliability and performance characteristics far exceed conventional magnetic cards and have a number of advantages:

- •in the production of cards, a unique code is entered into each chip that can not be duplicated;
- •when issuing a card to the user, one or more passwords known only to the cardholder are applied to it;
- •when an unauthorized use is attempted, some types of smart cards can be automatically closed, and to restore the efficiency of such a card, it is necessary to return it to the place of issue;
- •smart cards work in off-line mode. Carrying out any operation using a smart card requires the owner to dial a personal password. This password is

recorded on the card itself, which means that there is no need to access the authorization centers;

- •The smart card allows you to control purchases that are not secured by the financial capabilities of customers. The owner of the card is charged a certain amount. When paying for a purchase, the cash register reader (reader) checks the availability of funds on the card and debits the required amount from it.
  - 3. For general purposes, plastic cards are divided into:
  - identification;
  - information:
  - for financial transactions (settlements).

In principle, this division is not mutually exclusive. For example, a large company may issue to each of its employees a card that:

- is a permit permitting (restricting) passage to certain zones of the enterprise (identifying function);
- on the same card can be written in coded form "medical history" or some other important information about the card holder (information function);
- In addition, such a card can also be used for settlements in the canteen and stores of the company (settlement function).

Systems using multifunctional maps exist abroad. The trend of combining many functions in one plastic card is very promising, since such a multifunctional card is convenient for both the issuer and its holder.

- 4. By issuers, the cards are divided into:
- •bank (universal) cards issued by banks and financial companies;
- •Private (private) cards, issued by commercial companies for settlements in the trade and service network of this company.
  - 5. On technical features of calculations:
  - Autonomous "electronic wallet";
  - "Electronic wallet" with duplication of the account from the issuer;

• "Key to account" - means of identification of the account holder maintained by the issuer.

Most bank cards are identifiers, not purses. These include all Visa, Euro Card / Master Card, American Express, Russian Union Card and STB Card cards.

- 6. Depending on the economic content of the transaction on the card:
- Debit;
- Credit.

When making settlements, the cardholder is limited by a number of limits. The nature of the limits and the conditions for their use can be very diverse. However, in general terms, all comes down to two main options:

- The holder of the debit card must deposit a certain amount in advance on his account with the issuing bank. Its size determines the limit of available funds. When making payments using the card, the limit is synchronously reduced. The limit is controlled by authorization, which is always required when using a debit card. To renew (or increase) the limit, the cardholder needs to refund the funds to his account.
- To secure payments, the cardholder may not make any preliminary funds, but obtain a loan from the issuing bank. This scheme is implemented when paying by credit card. In this case, the limit is related to the amount of the loan granted, within which the cardholder can spend the funds. The loan can be either single or renewable. Renewal of the loan, depending on the agreement with the cardholder, occurs after the repayment of either the entire amount of the debt or some part thereof.
  - 7. In the category of clientele, to which the issuer is oriented:
  - •regular map;
  - •silver card:
  - gold card;
  - •electronic card.

A regular card is for an ordinary client. This is Classic Visa and Mass (Standard) Euro Card / Master Card. Silver card is called a business card (Business Card) and is not intended for individuals, but for employees of organizations (companies) authorized to spend their company's funds in various ways. Gold card is designed for the most wealthy customers.

- 8. Classification according to the agreements concluded:
- check guarantee cards;
- bilateral credit agreements;
- multilateral card agreements.

A check guarantee card is issued to the holder of a current account with the bank to identify the drawer and guarantee payment by check. The card is based on a credit line, which allows the account holder to use the overdraft credit. At the same time, the bank guarantees the trader receipt of money by check within the established limit in the event that the required amount is absent on the account of the drawee. The basic rules for using a check guarantee card are as follows:

- the signatures on the check and the card must be identical;
- the amount of the check should not exceed the limit indicated on the card;
- if the amount of payment on the check exceeds the amount of funds on the account, the owner is charged a commission for using the credit line and the interest on the overdraft.

Bilateral cards arose on the basis of bilateral agreements between billing participants, where cardholders can use them to purchase goods in closed networks controlled by the issuer of cards (department stores, gas stations, etc.).

- 9. Depending on the legal status of cardholders on;
- •corporate cards for legal entities;
- •personal cards for individuals. [12, p.187]

Corporate cards are divided into: "salary cards" (the issuer concludes a contract with the organization, and card holders are its employees as private

individuals) and "gasoline" cards (the issuer concludes a contract with the organization for payments for petroleum products by one or several employees).

#### 1.3. Organization of the market of bank plastic cards in Azerbaijan

Analyzing the specific directions of the development of new banking products, services and technologies in Azerbaijan, it should be noted that many local banks, as the basis of integration and unification of the systems for the promotion of their own products and services, widely practice banking cards, which were originally intended for remote and round-the-clock access of customers to their accounts.

Table 1.
Statistics of plastic cards [34]

Years	Number of cards,	Volume of internal card	Number of transactions, mln.	
Tears	thousand pieces	transactions, million		
2010	1 562,0	1 368,0	19,001	
2011	2 798,0	2 472,0	30,008	
2012	3 649,0	4 247,0	40,121	
2013	3 947.0	5 165.0	45,289	
2014	4 213,0	5 678,0	46,540	
2015	4 508,0	6 787,0	50,935	
2016	5 080,0	8 292,0	57,196	
2017	5 637,0	9 554,0	67,821	

According to the CBA, out of 43 commercial banks of Azerbaijan, 39 cards were issued.

Although most of the country's banks participate in the issuing process, however, in general, the current level of use of plastic cards in Azerbaijan is low. On average, one working citizen has 1.2 payment cards, as well as 0.3 salary cards. In general, there are 0.6 cards per person. In comparison with the developed countries (maximum: in the UK - 2.4 maps and Norway - 2.3, minimum: in Finland - 1.2 maps, Denmark - 1.1, France - 1 card), this is very low.

Table 2. The top ten banks in Azerbaijan by the number of plastic cards (at the beginning of 2015)

Place	Bank	Active plastic cards, pieces
1	Kapital Bank	2 424 491
2	Azerbaijan International Bank	2 241 171
3	AzeriGazBank	63 369
4	Bank Respublika	63 660
5	UniBank	61 181
6	Bank Technique	42 494
7	Bank Standard	42 057
8	Azerbaijan Senaye Bank	32 525
9	Zaminbank	28 479
10	AtaBank	23 721

However, the dissemination of these payment instruments in Azerbaijan objectively contributes to an increase in the volume of non-cash payments and the widespread use of information technology in the payment and payment sphere. For the years 2005-2013, the volume of non-cash turnover in Azerbaijan increased 24.0 times - from 249.3 million manat to 5,976.1 billion manat. At the same time slightly more than 6% of operations in the economy of Azerbaijan are carried out in non-cash settlements, although in 2009-2013, the use of cards in cashless settlements increased almost 5 times.

Diagram 1.
Number of cards per capita (pcs, 2012-2013) [35]



This situation is due to the fact that although about 60% of the population of the republic owns bank cards (salary, pension, etc.), but actively uses them no more than 6-7%. 93-94% of the total number of transactions is cashing out of funds, and only 6-7% is accounted for by other transactions. In our opinion, the main reason for this situation is the poor awareness and low financial literacy of the population, an ingrained habit of using cash.

According to the CBA, 01.06. In 2014, out of more than 5.9 million plastic cards, only slightly more than 1.1 million (18.7%) were credit cards, while others were debited and were used only to withdraw funds from ATMs. We have to state that for the Azerbaijani consumer the bank card, first of all, is a means for withdrawing cash, and is not used as a payment instrument. Although the practice of developed countries indicates that it is credit cards that are of paramount importance in expanding the absolute and relative scale of non-cash payments. Additional confirmation was MasterCard's research conducted by MasterCard in Azerbaijan, during which interviewed respondents named the following advantages of using credit cards: convenience, profitable offers from the bank and security. Although credit cards are used in Azerbaijan mainly when buying clothes in local shops, however, citizens would like to use cards in public transport, medical institutions, in all trade networks and cafes.

Table 3. Classification of payment cards (01/01/2014)

Index	Quantity, thousand pieces.	%
Total incl.	5 673,0	100,0
debit	4 730,0	83,3
of them:		
- social	2 505,0	44,1
- salary	1 437,0	25,3
- others	788,0	13,9
credit	942,0	16,6

The market of credit cards in Azerbaijan for 2010-2013. grew 7 times. If at the beginning of 2012 only 4% of all payment cards accounted for credit, then by the results of the first half of 2014 this indicator grew to 19%. At the same time, 1 credit card falls on 10 people. For 2010-2013 years. In the retail loan portfolio of Azerbaijani banks, the share of credit cards was 2.23 - 3.26%, while in the developed market this figure should be at least 25%. According to the estimates of the CBA, taking into account the withdrawal of cash through ATMs, the volume of card transactions is 10% of payment transactions in the country and 0.5% of the domestic consumer market. With such quantitative characteristics, it is possible to achieve fundamental qualitative changes mainly through the expansion of card products and services by banks. [34]

Significant is the contribution of the state to a positive solution to the issue of expanding bank card products and services. In particular, the purpose of the Program to expand the use of modern electronic payment services in the Republic of Azerbaijan for 2012-2016. The expansion of the scope of electronic services in the following areas is defined:

- Payment of taxes and state duties via the Internet, as part of the implementation of projects by the state structures under the program "Electronic Government";
- expansion of the range of electronic services offered by banks, the number of POS-terminals,
  - services offered by the postal operator in the districts and rural areas.

As a result of the implementation of the state program, it is expected that a single payment space will be created that will simplify the process of making payments by the owners of payment cards.

A serious negative factor is the fact that in Azerbaijan the tariffs for acquiring services of domestic banks are relatively high. For customers whose monthly transactions on POS terminals do not exceed 1000 manats, the amount of payment for the service remains stable. For business entities whose volume of

transactions exceeds AZN 1,000 per month, the amount of payment is set at 1-3% of the transaction amount. Although in almost all CIS countries the cost of acquiring is high, however, for example, in Russia it varies from 1-1.5% to 2% of the amount of the operation, in Ukraine, the corresponding figures are 1-2% and 2-2.8%, respectively, in Kazakhstan - 0,5-2% and 1,5-3%, in Moldova - 1,8 and 2,8%. In Europe, the cost of acquiring is from 0.4% to 0.6%.

The regional VISA regional branch of the CIS countries provided information on 16 acquiring banks of Azerbaijan on topical issues of development of trade acquiring in the country at the present stage, the results of which were announced at the CBA jointly with the payment system Visa Inc. On May 26, 2010, the "round table", showed that:

- 84% of respondents believe that the lack of supervision by the supervisory authorities over compliance with the rules for accepting cards at points of sale is the main legal factor hampering the development of trade acquiring;
- 66% of respondents indicated insufficient awareness of consumers about the purpose of the card as an instrument of non-cash payment of goods and services in the retail sector as a factor of the organizational structure;
- 75% of survey participants named the lack of transparency in financial accounting at enterprises as the main reason for the weak inclination of trade and service enterprises to use POS-terminals.

In connection with the latter, it should be noted that the quantitative parameters of the infrastructure for servicing plastic cards (the absolute number of ATMs and POS-terminals) in Azerbaijan are growing at a rapid pace.

At the same time, as of 01.07.2013, there were 490 ATMs for every million people in Kazakhstan, 624 for Latvia, 618 for Estonia, 618 for Estonia, while in Azerbaijan it was only 239 units. But on the POS-terminals, statistics are improving rapidly. In particular, as of 01.07.2013, Azerbaijan outstripped Kazakhstan by the number of POS-terminals for every million people - 4130 units

against 1708, but continues to lag behind Latvia (12100) and Estonia (20273). [26, p.58]

It should be noted that an important advantage of bank cards is that if the use of other tools for accessing the account is limited in time, then bank cards, incl. and Azerbaijan do not have procedural procedural restrictions and can work around the clock throughout the calendar year to the year. In addition, modern bank cards also act as carriers of other banking products and services that are technologically associated with them (for example, overdrafts, loans, deposits, etc.). At the same time, the functional capabilities of the national processing system operating in Azerbaijan, including AzeriCard "MilliKart" processing centers and "KapitalCard", allow the customer to use modern channels of interaction with customers (mobile and Internet banking, etc.). All processing centers of Azerbaijan support the whole range of electronic channels of interaction with the client functioning in the country, and they can interact with various systems both inside and outside banks. Therefore, in many banks of Azerbaijan, various service channels have unified management centers. This creates an opportunity for roundthe-clock access of customers to products and services through a processing system, support of all electronic channels of banking services, a unified volume of products and services provided through all channels of banking services.

MasterIndex Researh conducted by MasterCard in Azerbaijan revealed that there is a considerable demand for multi-purpose programs on discount cards from the population, because they offer citizens interest-free installments and return some of the funds spent. The study showed that interest-free installments are the most requested card service. Although less than 10% use it, more than 70% of respondents wished to use this service as an alternative to bonus cards.

It should be noted that back in January 2007, "Bank of Baku" started issuing virtual MasterCard cards. In comparison with traditional cards, the main and decisive advantage of a virtual card is that customers who want to purchase a virtual card get not a high-tech "plastic", but a special PIN envelope with the

appropriate code that allows customers to pay for the purchased space services and services. Since 2012, with the efforts of AzeriCard and the International Bank of Azerbaijan (IBA), it has become possible to order from a mobile number of virtual cards in real time. Being like a traditional card, it is a convenient tool, but virtual cards can be used to pay for electronic services and goods exclusively on the Internet, both on domestic websites and foreign ones. From one mobile phone number, you can order three cards, both in manats, dollars and euros. Their balance is replenished through "Kart Transfer" card transfer services or cash through Cash In ATMs in the AzeriCard system. Validity of virtual cards is limited to a calendar year.

In June 2013, Bank of Azerbaijan for the first time in the republic presented a contactless payment card MasterCard PayPass. Despite the fact that it is not virtual, but its owner can, without inserting a card into the payment terminal, quickly and safely perform operations. Transactions within the limits of 20 manats use MasterCard PayPass without scanning the chip, PIN-code and signature. Thus, the owner of a contactless payment card is released from the need to carry cash, enter PIN-codes, sign checks. The introduction of this technology in the market of banking products and services of Azerbaijan has become an effective payment solution for modern trade enterprises, public transport, fast food and other points of retail and service business where payment is required immediately.

A new stage in the development of new banking products and services in Azerbaijan was the launch of the AzNNSS (Azerbaijan National Net Settlement System) system on Visa cards in manats. Currently, all Azerbaijani banks that are clients of Visa are connected to this system and use the standard advantages for the whole world that banks receive when processing international transactions (technical support, risk management, etc.). [33]

It should also be noted that in November 2013 the International Bank of Azerbaijan (IBA) and the national payment system of China UnionPay International signed a partnership agreement. The agreement for the first time in

Azerbaijan provides for the beginning of the IBA issue of plastic cards in conjunction with UnionPay, as well as the acceptance by the ATM and POS terminals of the IBA of the cards of the Chinese payment system.

Since February 2013, the AzeriCard processing center has implemented the Cash to any Card (or "Kart Transfer") service, which allows replenishing the balance of plastic cards via Cash in ATMs. Unlike the standard procedure, in this case the process proceeds without using the plastic card itself, the balance can be replenished not only by the cardholder himself and for this purpose it is not necessary to contact the bank, the service can be used at all Cash in ATMs that support this function.

Today in Azerbaijan in the market of plastic cards such services as Mobil Bank, SMS-Notification, e-commerce, Internet Banking are widely practiced and perfected. For example, since December 2013 holders of bank cards serviced by the AzeriCard processing center were able to use the SMS Notifications service not only in the national mobile operators (Bakcell, Azercell Telecom and Azerfon), but also outside Azerbaijan. The service has become available in the networks of 800 mobile operators in 190 countries.

In order to understand how the Azderbaijan market of bank plastic cards functions, it is necessary to consider its legal basis, analyze the process of conducting transactions on different types of cards and study the most common payment systems in the Azerbaijan, and also reflect their main differences. This will be discussed later.

At the present stage of the development of the Azerbaijan society, plastic cards in the sphere of monetary circulation represent one of the most optimal instruments for organizing non-cash settlements for the short term and a special mechanism for providing electronic banking services.

The main prerequisites for the development of the Azerbaijan market of bank cards are:

- integration into the world system of non-cash payment systems;

- a reduction in the amount of cash, and, as a result, a decrease in the cost of operations.
- the desire of the credit institution to enter the international market and, as a result, the growth of its prestige and attractiveness for the client;
- organization of operational and convenient forms of payment for customers.

In accordance with a number of programmatic documents (the Strategy for the development of the national system of payment cards, the Strategy for the Development of the Banking Sector of the Azerbaijan, the Main Directions of Monetary Policy), one of the most important areas is the reduction of cash turnover and the introduction of non-cash settlements instruments based on modern banking technologies, including payment cards. Normative regulation of non-cash settlements carried out on transactions using such instruments is one of the Bank of Azerbaijan's tasks performed as a regulator of relations in the sphere of payment systems and settlements.

Speaking about the legal basis for regulating relations in the sphere of issuing and circulating banking multiples, it should be noted that intensive development of banking services with their use is taking place against the background of a significant backlog in the development and adoption of legislative acts regulating the process of their circulation.

To conduct payments through bank cards, the sales point must be equipped with a POS-terminal. The POS-terminal is connected by a dedicated telephone line with the bank and the processing company. It is a device for prompt and automatic reading of card details for the purpose of forming a payment request and sending it to a bank participating in the system (the details of the store are added to the details of the card and the amount of payment is typed on the keyboard). Its main task is to create an electronic image of the payment document, print out a cash voucher (slip), communicate with the acquirer bank and its processing company for automatic authorization and transfer of the payment demand. A processing

company is an intermediary between programs for the initial processing of client orders and operational programs by participating banks of the card system. Its task is the automatic processing of electronic payment instructions and their transfer to banks participating in the system. The processing company is a set of servers, computers, special software, a lot of incoming communication lines.

## CHAPTER II. ANALYSIS OF THE CONTEMPORARY STATE OF THE AZERBAIJAN MARKET OF BANK CARDS

#### 2.1 The current state of the Azerbaijan market of bank cards

Most economically developed countries use bank plastic cards as an inalienable attribute to pay for purchased goods or services. A large number of transactions in the market, conducted using bank cards, determines the degree of association of the society and the state banking system. The high integration of society and banks in European countries can be judged from the fact that in these countries, plastic card settlements account for 90 percent of total money transactions on the market.

Modern economists call the development of bank plastic cards a "service of the century", as well as one of the important elements of the "technological revolution in the performance of banking operations on the market." It is for this reason that it is very important to study the problems of the development and use of plastic cards on the Azerbaijann market. And it should be noted that familiarization with the world practice of their use, as well as the all-round development of the market of bank plastic cards in the Azerbaijann Federation, is now of enormous importance.

The nature and scale of the use of plastic cards in the country for non-cash settlements can be considered as one of the most important indicators of the degree of development of the banking business. A plastic bank card is a reusable credit or payment instrument intended for long-term use. It is worth noting that these cards are very highly protected, both from counterfeits and from unauthorized use. In addition, plastic bank cards contain confidential identification information about their owner, through which you can easily verify its solvency.

Currently, the development of the market of bank plastic cards is going on at a tremendous pace and amounts today to approximately 1.3 billion cards already issued. At the same time, the annual turnover of money in the world, which was carried out through cards, exceeds \$ 3 trillion. In today's market, you can pay with

plastic cards in more than 20 million trade and service organizations. As for banks, about 500 thousand bank branches, providing various services to the population, make payments using cards, and the number of installed ATMs exceeds 700 thousand. It should be noted that, in addition to national mutual settlement systems, international payment systems, where bank plastic cards are used, are also increasingly developing today.

At the same time, the major share of the world market of corporate plastic cards is under the control of the two largest companies - MasterCard International and Visa International.

At present, the development of the market of bank plastic cards in Azerbaijan is rapidly gaining momentum, as Azerbaijan banks are keen to develop their business as much as possible in relation to servicing bank cards. And it should be noted that the banks of Azerbaijan have already accumulated sufficient experience in the production of both foreign cards under the license of large financial companies, as well as their currency and ruble cards. But all the same, the scale and number of payment cards used in Azerbaijan is much less than in the countries of Europe, and indeed throughout the world.

The banking sector of the Republic of Azerbaijan over the past years is one of the most dynamically developing sectors of the country's economy. To date, there are 46 banks in Azerbaijan, of which 2 are state-owned and 44 are private. [5, p.26]

The global financial crisis, which began in the fourth quarter of 2008, did not bypass the economy of Azerbaijan, having had a certain impact on the growth dynamics of the banking sector of the republic. At the same time, partly because of the underdevelopment of the local stock market and relatively small amounts of foreign borrowing, this influence was not as severe as in other CIS countries. However, at the initial stage of worsening of the global financial situation, the country experienced a sharp decline in consumer lending, due to the increasing complexity and cost of access to external borrowing.

Against this background, the Central Bank of the Republic of Azerbaijan, in order to support the banking sector and the economy as a whole, gradually reduced interest rates to 2%, reduced mandatory reserve rates, and also carried out a number of other measures aimed at saturating the economy with "live money". In addition, powerful currency interventions were made to maintain the exchange rate of the national currency - manat.

These measures proved to be effective. Today, the mortgage and consumer crediting market of the republic is reviving, the dynamics of the outflow of deposits of both legal entities and individuals has slowed, moreover, today their volumes are growing, especially with regard to retail deposits (see Table. 4)

 ${\it Table~4}$  Volumes of loans and deposits in the banking system of Azerbaijan

DATE	Loans granted (million manat)		Deposits (million manats		
	Interbank loans	Loans to individuals and legal entities	legal entities	individuals	Total
30.06.2016	358,18	5980,35	2431,23	1763,92	4195,15
30.09.2016	602,0	6340,3	2013,59	1196,35	3209,94
31.12.2016	441,82	6861,85	2015,60	1499,49	3515,09
31.03.2017	483,02	5823,85	1049,83	1088,95	2138,78
30.06.2017	570,21	6606,25	1143,52	1794,03	2937,55

Banking specialists for some reason are convinced that credit cards, especially with options of interest-free period and installment payments, are a

product that is profitable from the point of view of implementation for not every bank in Azerbaijan. As a reason, they indicate that among the whole range of loan products, taxicab-credit cards represent the most complex instrument. There are a number of specific features related to receiving payments, transactions on the card on the Internet, cashing out funds, synchronizing their balance, calculating bonuses, linking cards to partner networks of banks, calculating months of installments. In addition, it is unprofitable for a bank when payments for repaying a credit on cards are not limited to a clear amount. It is worth considering and the fact that the loan amount itself is not negotiable.

Drawing 2000 AZN, each holder of a credit card has the right to leave half of the funds intact on its balance sheet. It is more about a revolving credit line. The bank establishes only a limit within which the card holder can use the amount convenient to him. In this regard, the interest rate on the loan is also ambiguous. First, because of the grace period, when accruals are not made. [7, p.108] The rate is influenced both by the duration of the grace period, and by the date when the customer withdraws the amount. Secondly, the interest accrued depends on the repayment amount, and it almost always changes. To exclude this kind of situation, most retail banks have provided their credit cards with a taxi option for mandatory installment payments. In addition to the fact that tacit allow to stimulate non-cash purchases in partner networks, they to some extent systematize interest income.

If you conduct a detailed analysis of the cost of credit cards issued and serviced by various banks in the country, you can see that the cost of borrowed funds is strongly influenced by one-time commissions - for opening a card account, withdrawing cash, converting, annual maintenance. But in order to interest the client, banks prefer to nullify them, introduce bonuses, compensating their expenses with an interest rate. This allows them to increase sales by creating in the advertising communications the myth of a "free" credit card. The fact that the number of active credit cards has exceeded 1 million units in Azerbaijan is already a confirmation of the fact that it is profitable for them.

Specificity of sales and the nuances listed by us do not allow to make an unambiguous conclusion that there is some "ideal" version of a taxi or credit card on the market. To make the right choice in favor of the card that suits you, you should carefully study the conditions of each bank. Particular attention should be paid not only to the amount of the credit line or the number of taxis, but for the availability of a grace period, real interest rates, the procedure for charging commissions, and penalties. Only by clarifying these nuances, we can talk about the choice in favor of a particular bank.

Nevertheless, at the moment, despite the crisis situation, VISA and MasterCard continue to occupy a leading position in the Azerbaijan market. According to the Central Bank of the Azerbaijan, in the period from 2010 to 2017, the number of issued plastic cards in Azerbaijan has increased more than three-fold (from 10 to 31.8 million units). And their share in the total world volume of bank cards has grown from 7.3% to 14%. At the moment, more than 50% of the total number of plastic cards are activated.

At present, the Azerbaijan market of bank cards and payment systems, in general terms, is not much different from the global one. It is divided by world giants VISA and MasterCard. The difference is in the percentage. Most of the bank cards on the territory of the Azerbaijan are issued on the basis of two worldwide payment systems: VISA and MasterCard (more than 80%). The remaining 20% includes lesser known international, foreign and local payment systems: American Express, UnionPay, JCB, Dinners Club, Golden Crown, etc.

But this situation in the near future will begin to change rapidly. The main reason for this future event is the creation of a national payment system.

A payment system is a set of organizations interacting according to the rules of the system for the purpose of establishing a transfer of funds, including the operator, payment infrastructure service operators and participants.

The modern, fundamentally new instrument of banking services for foreign trade in the AP are customs cards. Their introduction allows exporters and

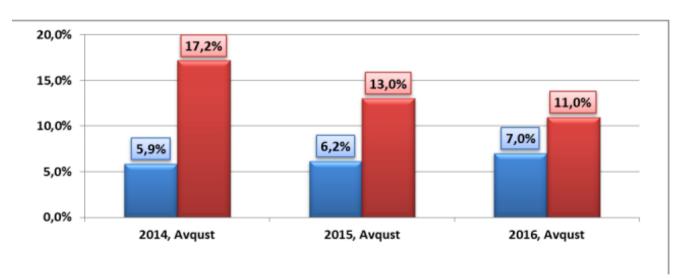
importers to carry out all types of customs payments by bank transfer directly at customs posts and terminals at the time of customs clearance and ensures full reliability of the transactions. The need to use a plastic card for payment of customs payments was provided for by the Decree of the President of the Republic of Azerbaijan of February 25, 2011 "On Some Measures to Strengthen Social Protection of the State Customs Committee (SCC) Staff, Facilitation of Procedures and Improving Transparency in the Field of Customs". The participants of FEA using this tool have the opportunity to pay customs payments from their bank account in real time, control the movement of their funds and the execution of payments. Currently, for the purpose of conducting customs payments through bank cards, all the customs bodies of the Republic of Azerbaijan are in the process of installing POS-terminals.

It should be emphasized that the use of a customs card has a number of advantages. The key one is simplification and acceleration of settlements on customs payments, which are carried out at the time of filing the declaration. The availability of a printed invoice from a participant in foreign economic activities confirms the fulfillment of the duty to pay customs duties. At the same time, transactions using the customs card exclude the need to transfer advance payments and can be conducted regardless of the bank's operating day in the mode of operation of the customs post, including around the clock. In addition, you can urgently make an additional payment in the event of incorrect calculation of customs fees, changes in the exchange rate or the amount of customs duties, the possible imposition of a fine, etc. Also, with the help of a customs card, it is possible to make customs clearance of excisable goods. Payment of all types of customs payments with its use is possible in non-cash order without limiting the amount of payment and its "binding" to a particular customs office. All this, ultimately, allows you to significantly reduce the time of customs clearance and reduce the document flow.

At present, the Azerbaijani market of bank cards and payment systems, in general terms, differs little from the world market. It is divided by world giants VISA and MasterCard. The difference is in the percentage. Most of the bank cards in the territory of the AR are issued on the basis of two worldwide payment systems: VISA and MasterCard (more than 80%). The remaining 20% includes lesser known international, foreign and local payment systems.

In general, within 8 months of 2016, through the payment cards issued by banks, transactions were made in the amount of 8.877 billion manat, and the number of operations reached 54.2 million. Compared to the same period of the previous year, the volume of transactions with cards inside the country increased by 0.3 %, and the number decreased by 3.5%.

Analyzing the structure of operations with payment cards it is clear that the share of non-cash transactions accounts for a very small amount. Since, for 8 months of 2016, the volume and number of non-cash transactions in the total volume and number of transactions with payment cards amounted to 7% and 11%, respectively. [1, p.97]



As can be seen from the table, for each past period the volume of non-cash transactions in the total volume of transactions with payment cards increases, and the number of them decreases. At the end of August 2016, the volume of non-cash transactions amounted to 523 million manats, of which 40.5% accounted for the

share of transactions using ATM, and 59.5% through POS terminals. These transactions increased by 12.7% over the past year, which is mainly the result of an increase in non-cash transactions made by POS terminals by 20%, and the volume of non-cash transactions made with ATM increased by only 3.9%.

Over the past 10 years, the volume of electronic payments has increased by 15 times and amounted to 2 times of GDP. The number of plastic cards exceeds 5.9 million units. Over the past 7 years, the volume of transactions with cards has grown by 2.5 times. The number of POS-terminals has increased more than twice in last year alone. Electronic banking services are also rapidly developing.

The number of banks issuing payment cards during the year was 40, and the number of card holders was 5.1 million. has risen to the people. The number of payment cards is 5.7 mln. of which 4.7 mln. numerical debit, and 942,500 are credit cards. In general, the volume of transactions carried out by country banks with payment cards issued by banks in 2013 amounted to 9.56 bln. The amount of transactions is 63 million manat. of which 6% and 18.3% respectively fall on noncash payments. Compared to last year, the volume of transactions with domestic payment cards increased by 64.5%, and the number of transactions increased 2.3 times. In the conditions of increased settlements with payment cards, issues of risk management in fraud management with payment cards were kept in focus. An inter-bank information exchange system was drafted on fraud cases on payment cards. At the same time, a package of proposals on stimulating cashless payments in the country, expanding the infrastructure for these payments and strengthening the legal framework has been presented. In 2013, one of the priorities was the stimulation of banks to increase the use of modern banking technologies and expand the cashless settlements. For this purpose, the Central Bank has been nominated for the Leading Bank on Cashless Payments and Leading Bank in Electronic Banking Services among banks. Valuation tables prepared on the basis of statistical indicators of nominees are posted on the Central Bank's website on a monthly basis. A draft law "On payment services" was developed and submitted to

expand the access to payment services in the country, to strengthen the competitive environment in the payment services market and to increase the protection of the rights of the payment service users.

Currently, international payment cards issued by international organizations such as Visa Int., MasterCard Worldwide, American Express, Diners Club, and local payment cards are issued by banks operating in the country.

Credit cards are a payment tool that takes place in consumer spending. Bank cards are different from credit cards. The holder of a credit card may make a certain amount of money without making a payment. The bank card does not qualify for credit transactions. The credit card processing scheme can be viewed as follows: The customer submits an application for a bank credit card purchase. After checking the creditworthiness of the company, the company's payroll is detected and the card is opened within the limit and a plastic card is issued to it. When the cartoon owner issues goods and services, he / she presents his / her cartridge to the seller and sells the trade account (slip) and is called imprinting. The score is drawn up in three copies, the 1st copy is sent to the card holder, to the second dealer, and the third to the bank, ie to the bank. On the basis of a contract signed by a bank or a customer, the trader transfers the amount mentioned therein to the seller's account, and retains only 2-5% of the amount of the commission. The bank receives money through the bank-emitter, ie, the information exchange interchange system and returns the commission fee to the issuer for information. At the end of each month, the bank sends a special invoice of its card account to the issuer card holder. The buyer, that is, the card holder also pays commission fees and the expenses incurred during the month. If the seller's account is with a cardholder, the calculations are simplified. A person with a debit card may spend the amount of money spent on his / her current account. The world's first ATM started operating in 1967 in London. At present, the largest ATMs in the world are in the Pacific-Asia region. ATMs are broken down into several types of operations: Simple ATMs are fully functional, ie these ATMs can carry out more complicated operations: money transfer, foreign exchange fluctuations. ATMs can be placed on the streets and offices. The operating mode of the ATMs is as follows: on-line mode; autonomous mode (off line); table mode.

The bank requires a pin code from it when it issues a bank card to a card holder. It is not possible for a person who holds a card, but does not know the code, to receive money from the bank. Credit cards are cards that store goods and services without the use of cash. On the other hand, credit cards expands the credit usage in the payment process or in purchases. Credit cards are now a product of the American lifestyle philosophy "Buy Now". At the outset, though, it has become a key element of banking, operating and individual money management, despite the fact that it has only facilitated trade. Nowadays, credit cards have become an effective tool for paying and receiving checks. It is not imperative for a cardholder to carry money, but to solve any problems that may arise from the non-acceptance of a check, and to pay for all the needs in a certain amount of time. There are various types of credit cards: payment cards, credit cards, travel and entertaiment cards, store cards, company cards, international and domestic cards. When paying attention to the rapidly increasing transaction size with credit cards, we can clearly see that a credit card system is a system that has been developed in developed countries.

The advantages of using a credit card are as follows: eliminate the risk of loss or theft of large quantities of money when you do not have enough cash; the fact that unforeseen events occurring during the journey have no effect on the power of payment; the absence of an over-the-counter currency conveyance by international passport holder, a certain percentage of payments, a possibility to cash out some of the cards, using some of the services offered at low prices, and many similar services.

By taking advantage of the business location, it can increase its mortgages by selling them to customers who do not buy cash at the moment, accepting a sale credit card transaction from the bank, as if by selling cash, thus checking the risk ) can escape from their terms.

In terms of banks, credit cards are an important tool in increasing revenue. Commissions received from member businesses, membership fees per card, increase in customers' credit card can be an example.

In many respects, due to the universality of the payment card that adequately meets the needs of the retail business, it is possible to solve different tasks not only in the sphere of retail services, but also in the social and budgetary spheres. Therefore, credit institutions that develop their retail banking services are given preference (not only in Azerbaijan, but also abroad) to the card area. Currently, more than 60% of banks issue payment cards (709 credit organizations out of 1136), the number of bank cards they issued (data as of 01.12.2009) was 126 million. [4, p.105]

Taking into account the significant growth rate of card issuance (about 40% annually), it can be predicted that in a few years each person in Azerbaijan will have one card each. Although in 2017 the growth rate slightly decreased and amounted to about 25%.

Among cardholders, the vast majority are individuals. Their share in the total number of cards issued is 99.9%. At the same time, the number of cards received by the holders on their own initiative is still insignificant, the overwhelming majority of cards are cards issued by credit organizations in the framework of "salary" projects. The age category of credit card holders is the population between the ages of 25 and 44.

# 2.2 Main problems and prospects for the development of the bank plastic cards market in Azerbaijan

Electronic money is gaining more and more importance on the market, which is stimulated by the appearance of new services, expanding opportunities and accessibility of the service. So one of the directions can be the activation of the

transfer by banks of their client base to remote service channels. For market leaders, these channels are already of strategic importance from the point of view of competitiveness and profitability of business. Remote services today are perceived not as a separate service, but as one of the main channels of communication with the client and the bank. You can open offices at every step, and you can build up remote services. At the same time, the concepts of "remote service channels" or "remote services" combine several technologies of banks' interaction with customers. This is not only an Internet bank, that is, an opportunity to use a wide range of bank services through a personal computer connected to the Internet. This is also mobile banking (that is, the ability to perform operations using a cellular phone), as well as telephone banking (that is, the ability to use certain services by communicating with the relevant bank service through any phone).

In our opinion, from the point of view of the client, it is necessary to create multi-application cards that would allow adding (decreasing) the necessary applications to them for the specific individual requirements of each citizen. This direction will allow citizens to independently form packages of services necessary for them for a certain period of time, including allowing to quickly and more efficiently manage their financial resources and significantly save their time.

However, from the point of view of the bank and state structures, in order to realize this direction, a serious reorganization of the whole system of servicing the population is necessary, as well as large financial and intellectual expenses for interfacing the work of various systems and creating new ones, which can substantially change the channel of competition in the plastic card market. The most important problem with credit cards is that there are not enough laws on cards.

The analysis of the use of plastic cards in the Azerbaijan as a modern payment instrument shows that the modern development of the financial services market rendered by banks is characterized by a wide introduction of electronic technologies and a rapid growth in the use of plastic cards. There is a rapid development and implementation of technologies for the use of various types of payment cards and the corresponding payment systems of issuers and acquirers. However, there are a number of factors that reduce the growth rate of cash turnover using plastic cards, which include the lack of confidence in the reliability and safety of transactions with their use, and the inadequate development of the service network.

There are clear trends in the development of plastic cards in the direction of their intellectualization on the basis of modern achievements of microprocessor technology and electronic communications. Intellectualization of plastic cards will allow in the near future to combine, using one plastic card, access to services, both in financial and social spheres.

Currently, the share of non-cash transactions in GDP is 1.38%. This is more by 0.09 compared to the previous year. In the ratio of non-cash transactions to M2, too, growth is observed. Over the last two years, this indicator has increased more than twice and reached 5.3% at the end of August 2016. It should be noted that since April 1, 2016, the Interbank Card Center has been commissioned to increase the efficiency of card transactions, the operative regulation of the cost of services in accordance with market requirements, and the efficiency of non-cash settlements. [34] All the banks operating in the country, processing centers and postal operator joined the center. Providing an interface between the infrastructures of all organizations engaged in processing, this center allows processing transactions of domestic payments by resident banks issued by issuers without resorting to VISA and Mastercard.

In addition, over the past year there has been a serious change in the volume of plastic cards. Changes in prices for energy resources have seriously affected the macroeconomic processes in Azerbaijan. Compression of aggregate demand and regulatory requirements in the banking system associated with the restriction of credit cards in US dollars led to a reduction in the number of credit

cards. At the end of August 2016, the number of active plastic cards amounted to 5.27 million units, down 6.9% compared to the beginning of the year.

Table 5. Number of plastic cards, thousand units

Indicators	At the end	Compared	Compared	At the end	As of the			
	of August	to the	to the same	of 2016	end of			
	2017	beginning	period last		August			
		of the year	year		2016			
Payment	5270	-6.9%	-8.5%	5659	5759			
cards								
In particular:								
Debit cards	4542	-2.3%	-1.2%	4650	4599			
Social cards	2363	-3.6%	-3.8%	2451	2456			
Salary cards	1531	4.4%	4.5%	1467	1465			
Others	648	-11.5%	-4.4%	732	678			
Credit cards	728	-27.9%	-37.3%	1010	1161			

As can be seen from the table, the reduction took place on both debit and credit cards. But in the case of credit cards, the change is more significant and compared to the beginning of the year the number of such cards decreased by 27.9%, and in comparison with the same period of the last year by 37.3%. The table below shows the structure and dynamics of payment cards compared to the beginning of the year.

As noted above, the decrease in the number of credit cards is due to the requirements of the regulator, namely, the Financial Markets Supervisory

Authority, established in 2017, for responsible borrowing. In addition, the restriction on the issuance of consumer loans in dollars also affected this situation.

Over the past period, in the framework of the supervision of payment systems, the National Bank has taken measures to prevent card fraud. Since, on a quarterly basis, statistics on fraud cases with payment cards were collected and analyzed. In addition, the National Bank adopted several regulatory requirements to improve the level of security in the retail payment infrastructure. In this connection, the amount and number of frauds decreased. In 2015, the total number of card fraud was 9.7 thousand, which is 26.5% higher than in 2014, and the volume was at the level of 1.2 million manat, that is less by 5% than in 2014.

For the successful development and operation of the entire system of circulation of "electronic money" including using plastic cards, it is necessary to finalize legislation with a view to formulating clear definitions of terms and concepts, functions and responsibilities, rights and responsibilities of participants in the plastic card market.

The area of plastic cards is one of the most vivid examples of the use of information technology in the banking business. The rapid development of this business segment indicates that it is effective for credit organizations and in demand among their clients.

The segment of bank cards of the domestic market shows good rates of development from year to year. Since 2012, the number of bank cards issued by credit institutions on the territory of the Azerbaijan has increased almost 14 times and by January 1, 2017 it amounted to 200 thousand. This means that for today in our country there are about 87 bank cards per 100 people. Despite this, the Azerbaijan market of bank cards is still far from the massive use of plastic cards.

Among a number of the main factors restraining the development of the market, it is worth noting:

- · Low level of incomes of the population as a whole in the country, low level of legal incomes of the population;
- · The difference in the technological platforms of Azerbaijann payment systems, which prevents the formation of a single infrastructure for servicing the data cards of the systems;
- · A low degree of development of the infrastructure for servicing plastic cards in general, as well as the lack of a culture of using plastic cards among the majority of the population;
- · Tariff policy of payment systems (the rates of credit organizations for the collection of cash are lower than the fees set by payment systems for non-cash settlements), which leads to the lack of interest (unwillingness) of trading enterprises and services in the sale of goods through payment cards and the development of the corresponding infrastructure at the legislative level, limits on cash turnover in retail outlets);
  - · Insufficient level of financial literacy of the population;
- · Psychology of clients of credit institutions, expressed in their mistrust of payment cards;
  - · The habit of the population to cash, the risks of card fraud;
- · A low percentage of incentive programs for non-cash spending (discounts when buying goods on bank cards, encouraging regular customers, etc.), i.e. plus a percentage discount will be added to the commission of the bank for trade and service enterprises. discount is provided at the expense of the enterprise accepting bank cards for payment;
- The unavailability of a number of trade organizations to demonstrate the "transparency" of their trade turnover in the conduct of operations with bank cards and, as a consequence, the reluctance to install the appropriate equipment, in addition to the unwillingness to install equipment affects the need to pay commission to the bank;

- · Insufficient awareness of enterprises that make retail payments about the actual number of cardholders;
- · Refusals under any pretext (equipment does not work, there is no communication, etc.) of enterprises that installed the relevant equipment in making non-cash payments to cardholders;
- · Legislative and regulatory problems (in some countries there are restrictions on cash turnover for trade and service enterprises).

The majority of bank plastic cards in Azerbaijan are cards issued in the framework of salary projects, the use of which is reduced more often to obtaining cash. This trend is particularly evident in the regions. The ratio of "cash withdrawal / payment by cards" is currently about 6: 4. This indicates insufficient financial literacy of the population, which is caused by the lack of specific and accessible information about the convenience and benefit of using bank cards. The Central Bank of Azerbaijan currently pays sufficient attention to this issue and plans in the near future to organize programs in the field of financial literacy, in particular in the field of retail payments. A detailed and easy-to-understand information on how to use the card in a trade and service network, overcoming negative stereotypes that prevent payment of goods and services by the card, will help to change the nature of payment cards.

Individual entrepreneurs without the formation of a legal entity often use the scheme of withdrawing funds from their current account using bank cards. Credit institutions set limits on the withdrawal of funds from bank cards, thereby limiting cash circulation of funds. [9, p.47]

Bank cards are subject to mandatory control, which are often used for transactions related to entrepreneurial activity. When funds are received from legal entities to bank cards, funds are to be withdrawn through ATMs or cash desks of banks. In such cases, the bank has the right to reduce the daily limit for transactions using a bank card until the reasons are ascertained whether these transactions are related to entrepreneurial activities.

Also, significant problems in the calculation of plastic cards are:

- · The possibility of using the card by the illegal owner prior to blocking it;
- · Unauthorized access to funds on the card, using her personal data;
- · Risk of hacking payment systems;
- · Fraud on issuing "fake" plastic cards and others.

This indicates a large gap in the criminal prosecution for fraud with plastic cards. There is a criminal law (the production and sale of counterfeit credit or payment cards and other payment documents), but it does not allow to bring to cheating scammers.

If the requirements for ATM equipment are not met by anti-killing devices, scammers will be able to compromise a bank card by reading data from the magnetic strip and declassifying the PIN code. Operations on a compromised card are usually conducted in ATMs other than the issuing bank and in regions other than the place where the cards are issued.

Summarizing the above, it can be concluded that the joint efforts of banks and the state are necessary for the development of a national system based on payment cards. Banks - in terms of further development of products and services, as well as compatibility. States - in terms of improving market regulation, ensuring the integration of maps into state and regional social and information projects.

In Azerbaijan, the development of the plastic (bank) card market, it would seem, should be placed in a series of state tasks. But while this area is more developed commercial banks and technology companies. After a decade of its existence, the market, despite its rapid development in the past few years, is still far from the massive use of plastic (bank) cards.

To popularize the use of plastic (bank) cards among the general public, it is necessary to show in practice how really it is convenient to use this payment instrument, and for this it is necessary to create certain conditions. Today the population of Azerbaijan, unlike legal entities, has not yet formed a mass culture of using banking services. Currently, the greatest demand for currency exchange and

term deposits. Therefore, while banks are not ready and are not able to offer affordable loan products to the mass private customer, the optimal principle of servicing private clients should ensure the reliability and profitability of own funds' storage, as well as the convenience of their use. This convenience is a diverse service that allows you to quickly manage your bank account funds, including paying for consumer spending.

The majority of plastic (bank) cards of Azerbaijan make the cards emitted in the framework of salary projects, the use of which is reduced more often to obtaining cash. With the increasing volume of transactions with cards in general, the share of cash withdrawal operations remains high. [1, p.29] Despite the positive trends in the development of the card service infrastructure, namely the network of trade and service enterprises, it does not provide for the daily use of cards to pay for goods or services. Considering in general the potential capacity of the plastic (bank) card market, we can say that the situation itself determines the necessary direction for its further development. Thus, in conditions when there is no mutual incentive in the market, the increase in the issuance of cards does not cause an expansion of the infrastructure for their servicing. At the same time, on the contrary, priority undeveloped market segments to be developed should be identified. First of all, this is the area of payments performed by the majority of the population on a regular basis in payment for consumed services. For example, the reception of utility payments is traditionally handled by the Atabank of the Azerbaijan, which has a wide network of branches and established relationships with enterprises that receive payments. At the same time, the procedure for implementing them is far from ideal: the loss of time due to queues and the manual filling of the required forms is familiar to many. Other commercial banks do not yet play a significant role in the maintenance of utility bills. At the same time, in order to gain the confidence of an individual client, he must provide a minimum set of settlement services. In conditions when interest rates on deposits are low and almost the same, and the level of confidence in banks by potential customers is low

enough, the implementation by banks in a convenient form of the most popular regular payments may be the first step to winning a private client. Another segment of the market is telecommunications. In recent years, the number of mobile communication users and the Internet has increased significantly. However, commercial banks, in many respects because of the crisis, have not yet managed to take a worthy place in servicing these payments.

Many telecommunication companies, especially cellular operators, began to develop non-banking payment service networks, accepting payments in their own offices or selling advance payment cards through dealer networks. A distinctive feature of this type of payment is the requirement for the speed of transfer of information about payment to the accounting (billing) system of the operator - the payee. At the expense of speed, the payee confirms the fact of payment without waiting for them to actually receive funds to their account.

In connection with consideration of the prospects for the development of settlements by plastic (bank) cards, it is necessary to note not only economic characteristics, which are certainly important in the proposed aspect, but also legal ones.

It is also necessary to highlight the range of current regulatory and legal acts that regulate these legal relationships in order to identify trends in the development of plastic card payments, the legal development of these legal relationships in various spheres of life.

Another important criterion for the development of payments by payment cards is statistical data. So, the market of plastic cards in Azerbaijan in recent years demonstrates growth.

Azerbaijan banks recently ceased to focus exclusively on extensive growth and began to focus more and more on the new possibilities of card products. The share of active users is growing steadily, which is more often paid by a card of purchase and services, rather than withdrawing cash from ATMs and independently applying to the bank for a card.

The Azerbaijan market of card products is increasingly attracting foreign investors. In addition, virtually all plastic cards in Azerbaijan are issued by the largest international payment systems. [10, p.4-7]

Speaking about the prospects for the development and improvement of the plastic (bank) card market, one can also say that the state policy (the policy of municipal authorities) is aimed at increasing the level of using non-cash payments by plastic (bank) cards as an effective payment instrument.

And it is the legal regulation of payments by plastic (bank) cards that gives the legal registration of these legal relations. For example, due to changes in currency legislation, the list of operations for individuals and legal entities, both residents and non-residents in the territory of the Azerbaijan and abroad, has expanded. At the same time, technological aspects and accounting issues related to the use of payment cards were made beyond the limits of currency regulation.

The main promising areas for the development of banking services associated with the circulation of plastic cards can become such services of banks as: the provision of co-brand cards, the increase of salary and income cards.

Analysis of the construction of the national system of plastic cards allows us to conclude that the Bank of Azerbaijan can and should take in the development of such a system direct (setting criteria for the participation of banks) or indirect participation by regulating the market for payment cards (establishing a high level of interchange commission, security requirements, etc.).

It is obvious that the creation of a national system of plastic cards will help reduce the costs of banks and the population for servicing in international payment systems, and reduce the risks of possible financial crises. Credit organizations and banking associations need to make joint decisions regarding the prospects for the development of a national payment card system, so that in the long run it meets the requirements of the mass market. This will give Azerbaijan the opportunity to fully realize the positive potential of bank cards and improve the efficiency of the national economy.

In recent years, the development of the Azerbaijan plastic card market has become more dynamic than ever. Clients of the bank ceased to get only credit cards and started using cards not only for cashing out salaries. For 2013-2017 years in Azerbaijan there was a growth in the market of bank cards: according to the results of 2013, the number of bank cards in circulation reached 121605 thousand units. In 2014, the indicators increased by 16 million pieces and, in 2015, increased by another 30 million, in 2016 the number of cards in circulation reached 209 million 369 thousand units. In 2017, growth continued and the figures were 210 million 831 thousand units; The number of transactions using plastic cards also increased. The Azerbaijan market of plastic cards is developing, but there are a number of problems in this area: the difficult economic conditions associated with the impact of the global financial crisis, the uneven distribution of plastic cards in the country, and the lack of a mass culture of using banking services.

In addition to these problems, in Azerbaijan, as in other countries, the development of the plastic card market is hampered by a large number of crimes in the field of bank plastic. Methods to combat them are: installation of alarms, video surveillance, insurance, installation of a control program for motorized card readers, the use of decorative overlays, chip cards, and explanatory work with bank customers.

### CHAPTER III. RECOMMENDATIONS FOR THE DEVELOPMENT OF THE BANKING PLASTIC CARDS SYSTEM IN AZERBAIJAN

# 3.1 Using foreign experience in creating favorable conditions for issuing and servicing bank plastic cards

Now the "industry" of plastic cards is being formed in Azerbaijan. Throughout the world, millions of retail, hotel and multi-service businesses are involved in the circulation of plastic cards; the number of users of such cards is close to 500 million. Almost all banks of developed and developing countries work with cards. Analysis of the development of this "industry" shows that bank plastic cards are developing most successfully. And this is understandable, because in itself a card is a payment instrument that crowns the system, at the base of which there are settlement-payment relations, i.e. non-cash settlements carried out on a modern technical and technological basis. An important role is played by the resource base of banks, which makes it possible to constantly develop and improve the technological and technical base. This, in turn, enables banks to continuously improve and expand the range of services provided to their clients.

As is known, the dominant settlement and payment systems were "European", "VISA" and "America Express", which are transnational corporations. Payment instruments of these systems are used in many countries of the world - both in internal and external payment turnover.

The main problem in the Russian Federation is a reduction in the volumes of cash circulation due to various forms and methods of non-cash payments and its protection. This can be done by creating a specialized system of settlement and payment relations, integrated into the Western European settlement and payment system. Within the framework of international systems, Azerbaijani banks can use international payment instruments; the same payment instruments in manats can be used in domestic payment turnover, which, by the way, is already actively used by leading Azerbaijan commercial banks. This can become an essential technical

element of the practical implementation of full conversion of the Azerbaijani manat.

There remains a difficult question regarding the transition to chip cards (that is, equipped with microprocessors). Undoubtedly, "chip technology" has a future, and most importantly - allows dramatically expanding the circle of users of plastic cards (since the card will record pre-paid money), do not resort to authorization in different modes.

The breakthrough of a large volume of plastic cards into the payment and settlement turnover does not mean that other payment instruments have become of secondary importance.

The main form of payment we still have cash. Cash and money circulation generates huge costs associated with printing paper money, chasing coins, issuing them, processing, transporting and storing them. Reduce cash circulation, reduce the costs associated with servicing retail settlement and payment turnover, it is possible only by using a variety of payment methods in this turnover. These are, first of all, advance payments, debit and credit cards, credit checks (in particular Eurocheckcard), bank and traveler's checks. At the same time, it is always necessary to clearly imagine what space can effectively fill this or that means of payment. The system of advance payments, like plastic cards, is connected with the circulation of personal incomes. It consists in the fact that the bank automatically transfers to the current account of the customer or writes off the amounts from it according to a contract previously concluded. [3, p.119]

Plastic cards are effective in their large space, where you can get goods and services at a convenient time for the user upon presentation of these cards. In this same space appeals to "Eurociccard".

Now the control card can work as a payment (debit) card, and where there are no corresponding terminal devices, a check is issued and the plastic card is used as a control card.

Travelers' checks are also used in this space. This payment instrument has not lost its relevance from the clientele of banks. It is personified (the personification is certified by the sample of the client's signature at the time of sale of checks). In case of loss or theft of checks, the corresponding amount can be refunded subject to the rules of using checks. These checks are convenient where the limits of plastic cards do not allow a large purchase of goods or services.

The bank check takes its place. This means of payment is mainly used in interbank turnover in the presence of an agreement between banks, fixed in the agreement on correspondent relations. It is very convenient when transporting and receiving large sums of money in other cities, countries.

In the same space, another payment instrument can be used, when it is necessary to make regular payments in large amounts at certain times to organizations and citizens located in other cities and countries. This is an irrevocable revolving monetary letter of credit. This payment instrument, like a bank check, is an element of a correspondent agreement with a certain bank.

The combination of payment instruments that effectively operate in different spaces allows banks to provide their customers with more convenient and cheap services.

The big problem is creating an "industry" of plastic cards providing it with expensive technological equipment purchased in developed countries. To create this equipment in Azerbaijan according to the standards of "VISA" and "Europe" would be cheaper for the Azerbaijani consumers. For these purposes, an investment company with the participation of Western banks and firms is needed to select from among the many conversion enterprises those who could make the appropriate equipment and communications. The market for the realization of such equipment in Azerbaijan is provided for many years ahead.

Profit as the ultimate goal of marketing, a priority focus on the needs of the client; setting management tasks and planning specific actions to achieve the goals.

In the field of marketing card products, the bank's management faces the following tasks:

- attraction of new card accounts;
- expansion of the network of outlets accepting bank cards;
- cooperation with other card issuers to develop common rules of operations and prevent counterfeiting and fraud;
- development of additional services for attracting new participants to their card programs;
- отбор кредитоспособных владельцев карточек для продажи им других банковских продуктов.

Among these tasks, a special place is occupied by the problem of attracting new customers and opening them card accounts. At the dawn of the card business, banks resorted to mass mailing of cards without first studying the financial situation of the addressee. This practice led to large losses. As a result, banks began to take seriously the marketing of cards and resorted to a detailed study of the personal financial services market. [6, p.354]

The growth in the use of cards and the saturation of the market led to a reduction in the inflow of new customers. Accordingly, the costs of finding and attracting cardholders increased sharply.

Banks for various reasons lose annually from 9 to 15% of card accounts (non-payment of debt, death of the owner, withdrawal from the bank, etc.). Therefore, annual attraction of 12-15% of new accounts is required. Hence the role of marketing as a means of expanding the client base.

Marketing should also stimulate the activity of cardholders. Operations with cards are unprofitable, if one or two transactions per month are made on the card account.

The work of the bank's marketing services is aimed at identifying target markets for various financial products, (services).

A target market is a group of clients that is suitable for the sale of a certain type of goods or services to them.

The search for a target market is connected with segmentation, that is, the allocation of homogeneous groups of clients on which the marketing program is oriented. Segmentation can be based on the differentiation of customers or financial products. In the field of banking marketing, client segmentation is more convenient, since the operations of various banks differ only slightly from one another. Financial innovations are rapidly spreading and adopted by different banking institutions.

Therefore, the basis of bank marketing programs is the principle of customer segmentation for a number of personal characteristics. Usually factors such as age, occupation, residence, socio-economic status are taken into account. Age is especially important for bankers, as they try, as early as possible to attach the client to banking services and "tie" him to themselves for a long period. The client's occupation largely determines the level of his income and way of life. Residence "ties" the client to a certain branch of the bank. [19, p.109]

As for the "socioeconomic status", he is reluctant to use for segmentation due to the uncertainty and blurriness of this concept.

In banking marketing, an important role is played by the approach to evaluating clients from a life-cycle perspective. This approach allows us to distinguish several stages throughout the life of a person, each of which is characterized by certain financial needs and means to meet them.

The bank can easily carry out the segmentation of customers by age category, as when opening a bank account they are interviewed and a map containing detailed information about their age, level of education, etc. is filled in. Having statistical distribution of clientele on the chosen parameters, you can then "bind" certain types of banking products to the age categories.

At the same time, it is necessary to emphasize once again that segmentation by age and stages of the life cycle is too general. In each age group, the needs, tastes and possibilities for banking services can vary significantly depending on a number of other factors - income, education, marital status, professional status, etc..

The introduction of bank cards as one of the main means of non-cash settlements is the most important task of the "technological revolution" of banking. This means of calculation, having many undoubted advantages, provides both cardholders and credit organizations involved in issuing and servicing them a lot of advantages. For credit institutions, there is an increase in competitiveness and prestige, availability of payment guarantees, reduction of costs for manufacturing, accounting and processing of paper- money supply, minimum time costs and saving of living labor. [28, p.158]

Plastic money is invented to ensure that real money remains at the disposal of banks and bring them the maximum profit through investment and credit programs. The ordinary holder of a plastic card does not know what profits (while abroad) banks have, using its funds in its resource base. According to experts, in the hands of the population of our country is 35 billion dollars and tens of trillions of cash manats, which are simply withdrawn from circulation. For any commercial bank, it is of great interest to attract these funds to their investment and credit flows.

In other words, it is possible to concentrate the bulk of cash flows and send them through banks, only under one condition: a sharp increase in the volume of non-cash payments, both in the payment of wages, and when the population makes the bulk of payments.

In the presence of an extensive payment acceptance infrastructure, the range of possible transactions with cards can be described as follows:

- Salary projects,
- Corporate debit cards for payments on small business transactions,
- "Petrol" cards for payment of fuels and lubricants by private individuals and organizations,

- Cards for servicing interregional cash flows (in the interests of individuals, wholesalers and their dealers, small entrepreneurs),
  - "Club", store, etc. maps.
  - cards serving utility bills, and others.

All banks are eager to implement payroll projects, when the whole enterprise moves to pay wages to staff through plastic cards of any bank.

Only the development of infrastructure will create the prerequisites for further development in the market. Banks can be recommended to install ATMs on the territory of enterprises with a fairly large number of employees or close to open their branch, it is also recommended to install electronic terminals in the nearest shops, consider the possibility of transferring money by employees for keeping children in departmental pre-school establishments, pay for meals in factory canteens, , pay for vouchers, etc. Upon retirement, employees continue to use plastic cards, but on a card account Pensions and benefits are already being spent. The bank, which took care of the service, keeps personal accounts of pensioners. Similar work is carried out in universities and student projects are being developed.

# 3.2. The formation of a national system for the settlement of bank plastic cards in Azerbaijan

The market of payment cards is increasingly becoming a field of competition between Azerbaijani banks. Operations on bank cards are among the most profitable types of banking activities. On average, the income per unit of costs in the card business is higher than for other types of transactions. First, we should note such profitable projects as the implementation of salary schemes, so popular in Azerbaijan and some CIS countries. The costs of maintaining similar projects for the bank are minimal due to the high degree of automation of the process. Secondly, commission fees for making payments with the use of plastic cards, as well as commissions received from trade and service companies for servicing, can be very significant for a bank.

The specificity of the Azerbaijani market is that the market is developing mainly not at the expense of individual investors and cardholders, but at the expense of salary projects. The essence of which is the servicing by the bank of the process of calculating and issuing wages to employees of the enterprise using bank plastic cards. This system is very widespread in the regions of Azerbaijan and the share of salary cards leaves about 80 percent of all issued cards. This largely explains the behavior of the holders, who, after charging their wages, immediately withdraw it from the ATM, hence the high percentage of withdrawal of cash. However, the stimulus to use plastic cards in Azerbaijan will be a combination of two conditions. First: the mechanism of payment on the card should be no less convenient than using cash. Second: the use of cards should be affordable, that is, the minimum cost and profitable client.

The development of plastic cards in Azerbaijan is not as turbulent as in the world, however, Azerbaijani plastic cards are very widespread and promising. Almost every bank issues such cards and gives them completely different possibilities and advantages. Each future card holder can choose a card according to his wishes and possibilities, which only once again underlines the broad prospects for the development of the plastic card market. [2, p.187]

People in our country have long been accustomed to live in debt, so the credit card market is growing at a faster rate. According to the research of international payment systems, in 2010 over 5 million plastic cards were issued. However, despite this, it is possible to say firmly today that the credit card market in Azerbaijan in 2011 is developing much weaker than in other countries. And it is coherent, with the general lag of both financial and economic development of the whole country.

In general, only 20% of the population used credit cards today. This figure is very small. But thanks to the emerging new trends, the situation can radically change in the opposite direction. For example, a number of banks already today

offer to issue a credit card through the Internet, telephone or even by mail. Terms of consideration of applications are reduced and sometimes only 20 minutes.

The infrastructure for accepting payment cards is growing. Today you can pay for purchases not only in stores, but also cafes, restaurants, gas stations, including going abroad.

We can say that now in our country is a post-crisis period, when most of the solvent population has cards, but not all of them use it. However, the economic situation improves, credit institutions, realizing that borrowers are finally ready to spend money again, began actively developing retail lending, offering all new product lines and paying more attention to joint projects with mobile operators, air carriers, etc..

Thus, it can be said that the credit card market in Azerbaijan continues to develop in 2018, but not at the pace we would like, but that if banks begin to offer the maximum service and, if possible, low interest rates, then the demand and confidence of borrowers will return. [29, p.44]

The study of the problems of the use of plastic cards in Azerbaijan is especially urgent, and the study of the world practice and prospects for the development of the plastic cards market in Azerbaijan is currently acquiring concrete significance.

Let's highlight some problems of development of the plastic cards market in Azerbaijan.

**1.** Increase in interest rate.

Most banks raised interest for using loans

**2.** Informing the client about the change in the interest rate.

Not all banks do this openly, that is, by mailing a notice to the cardholder. Expecting to save money, some financial organizations stopped sending out "paper" letters to customers and switched to SMS-informing about changes in card conditions. There is also a less friendly approach to the consumer - informing him through publication in the general Azerbaijan press. This was done, in particular, in

the Home Credit and Finance Bank by posting an advertisement in the newspaper Komsomolskaya Pravda.

**3**. The introduction of a fee for the option of connecting a loan account or a grace period for lending.

This applies to banks that issue debit-credit or overdraft cards. Sometimes, if a client wants to use a certain service, the bank charges a commission for connecting it. So, if the holder of the card of the Azerbaijan Development Bank needs a grace period (it is 30 days in this case), he will have to pay 20 dollars, 20 euros or 34 manats depending on the loan currency.

**4**. Increase in the cost of withdrawing money from a credit card at an ATM.

Undoubtedly, banks are trying to teach their clients to think that credit cards exist to pay off in stores, and not only to withdraw cash from them. But, alas, it often happens that today we need a cache. Before the crisis, the withdrawal of money costed an average of 3-7% of the requested amount (depending on the card issuer bank) in its home ATM and 5-8% in the third-party.

Some credit institutions did not take interest at all for cashing cards through their ATM. At the same time, many financial organizations do not notify customers about the increase in the cost of the service in person, limiting themselves to posting on their websites.

### **5.** Cutting the credit limit.

For most newly issued credit cards, the limits are significantly reduced compared to the amounts that banks provided to customers before the crisis. As a result, in the same company with the same salary, the size of the credit limit can vary at times. So, for an employee who receives 1,700 manat per month, according to the cards issued earlier, the limit was 5,000 manat, and on the same cards issued today, his colleague is granted only 2,300 manats. But under the old, existing credit card, the bank can cut the limit if the borrower is sloppy.

**6**. Overestimation of cross-currency translation rates.

Credit cards are a means of payment. Especially they are loved by those Azerbaijanis who are interested in shopping abroad. Many admit that they take credit cards "in case the sale does not have enough money." However, few people think how much is lost on conversion. After all, the account on the card is conducted in manats. If you pay by credit card Visa system in Europe, then the currency conversion will be triple: Visa calculates in US dollars, so manats from the client's card will be first converted into dollars and only then - in euros. And exchange rates and so are established by the issuing bank at a level higher than the current exchange rate on the market. However, the problem of pricing for cross-transactions applies to debit cards, but in the case of a credit card they are doubly unpleasant: an overvalued conversion rate creates for the user an additional canopy of debt.

### 7. Classification of clients depending on the credit risk of the employer.

Those who for the first time plan to apply to the bank for a credit card, it is necessary to understand: it is necessary to prove their solvency in a stubborn struggle. Financial organizations have tightened the assessment programs for potential borrowers: everywhere you need a certificate of income (form 2-NDFL), but this document is often not enough. Credit institutions calculate the risk of bankruptcy of the employer of the borrower and assess the prospects for a particular person to remain without income - depending on which area he is in demand. If a potential customer is employed in the banking sector, construction, works in retail chains, the market position and debt burden of his employer company will be carefully studied for possible bankruptcy.

**8**. Return of payment for repayment of loans through devices and services not belonging to the bank. [21, p.86]

Azerbaijanis managed to get used to repaying loans - and at the same time making payments for the use of mobile communications, the Internet and satellite TV - you cannot even come to the bank branch, that is, through terminals that are almost at every corner. Another five years ago, for "convenience" had to fork out,

but in the fall of 2008 almost all networks reported that their services are free of charge.

In fact, the fee was assumed by banks and operators. Today they almost completely refused to compensate for the costs of such terminals - and again the commission's payments went to consumers. Therefore, repaying the loan through the terminal, it is necessary not only to make an amount for the debt, but also to pay additional services. So the best thing is to go to the bank the old way. True, this advice can only be applied to those financial organizations that have offices and additional offices.

**9**. Introduction of payment for SMS-informing the client or for Internet banking.

Almost all banks have introduced a fee for sending out messages to their customers about the status of their account.

This is how the project manager, lawyer of the law firm Alexey Gurov comments on this position: "Providing information on the debt status is a compensatory service provided to the borrower. He has the right to receive full information about it in advance, prior to its connection, in order to be able to choose: to use the service or to refuse it. Imposing paid services to the consumer is illegal ".

**10**. Blocking payments by credit card over the Internet.

It's no secret that many of our compatriots are already free to travel around the world and create a credit card, including to pay through the World Wide Web for goods and services, in particular, to purchase tickets for international flights. Some banks refused such an option, considering that in a situation of global crisis such operations are unsafe.

The main problem of issuers of plastic cards is to teach Azerbaijanis to use cards for payments for goods and services. The decision will take several years. Dangerous Azerbaijani consumer can not appreciate all advantages of plastic cards.

According to the Bank of Azerbaijan, he still prefers to put the cash in his pockets, and not into a bank account and pay in the shops - again from his pocket, and not on the card. [8, p.79]

Thus, it is obvious that plastic cards still do not perform the function of the non-cash payment facility, since the majority of plastic holders in Azerbaijan today are so-called payrollers who withdraw money from debit cards through ATMs. With the fact that the Azerbaijani market of "plastic" now grows precisely with salary schemes, virtually all bankers agree. And this worries them greatly, as the market of payroll projects is clearly approaching saturation.

In search of an exit from the current situation, banks are trying to diversify the card products. For example, now a debit card can fulfill the credit function. However, such combined cards make it easier to attract new customers to the same salary schemes, but they do not solve the problem, in fact.

Three quarters, to be exact, 76% of the Azerbaijani market of bank cards are accounted for by two international payment systems - Visa and MasterCard. Despite the constant growth of the share of international payment systems in the Azerbaijani plastic market, there remains a place for local players. Although it is already obvious that the Azerbaijani payment systems will not be able to compete with international.

The reluctance of the majority of Azerbaijanis to use cards to pay for goods and services has become a major problem for banks and payment systems today. They are intensively searching, how to stimulate cardholders to use the ATM network less. [19, p.167]

- transport bank card travel in the metro, train and trolley. The process of issuing and buying a travel document using a bank card takes place in the same mode as the purchase of a bank card in the store. In confirmation of the transaction, the passenger is given a cash receipt;
  - cards for students (discounts on credit);

- social card for pensioners (photo holder with his name, surname and patronymic, social discount for medicines and payment for goods and services, electronic ticket);
- a mobile bank with a SIM card. Mobile Bank is an additional function of the SIM card, which allows you to access the funds in your bank account from your mobile phone.

# 3.3 Measures aimed at minimizing the risks accompanying operations with bank plastic cards

When using the card, both abroad and at home, you need the following:

- 1. PIN-code (personal identification number) is a combination of numbers, containing 4 characters and intended for identification of the Cardholder, as well as for protection against unauthorized use of the Card. Information about the PIN-code must be known only to the Cardholder.
- 2. Do not store the PIN and the Card together, do not write down the PIN on the Card itself. Remember the PIN-code or store it separately from the Card in an inaccessible place.
- 3. Do not transfer cards to unauthorized persons for any transactions, except for bank employees and trade and service organizations.
- 4. To reduce the risk of fraud when visiting countries with high levels of fraud (countries in South-East Asia, countries in Africa, Latin America, Moldova, Ukraine, Turkey, USA), especially carefully observe all security measures.
- 5. Keep checks and slips with the print Card confirming the payment of goods and services within a year from the date of the transaction on the Card. If the transaction for some reason does not take place, keep checks on unsuccessful transactions using the Card and (or) alternative payment (cash payment using another Card), if it is held. These documents may be required to confirm the validity of an operation performed using the Card or to resolve disputable situations.

- 6. Regularly (at least once a month) check bank statements. If you have any questions related to the transactions performed on the account (unauthorized charges or erroneous charges), immediately contact the Bank where your bank account is maintained.
- 7. To ensure control over operations using the Card, you can use the service "SMS-informing". With the help of this service it is possible to receive information about the available balance on the Card, the notification of receipt of funds to the account and the expense transactions on the account, the SMS statement on the bank card, the notification of the expiry of the validity period of the Card, and also through SMS messages, block the Card, receive reference and other information provided by this service.
- 8. For safe use of banking Internet resources, it is necessary to use the addresses (domain names) of the official Web sites of credit institutions posted on the Bank of Azerbaijan website and / or specified in documents received directly from the credit institution. These measures are connected with the appearance in the Internet of Web-sites imitating the Internet representation of a number of Azerbaijani credit organizations. Domain names (addresses on which the company offers services through the Internet) and the style of registration of these sites, as a rule, are similar to the names of genuine Web sites of banks. The use of such requisites carries a risk and may lead to undesirable consequences (including financial losses). In case of self-identification of a false Web-site of the Bank or receipt of such information by e-mail or otherwise, immediately contact by telephone the Customer Support Service. [22, p.213]

It should be remembered that in cases where it seems that the PIN-code has become known to strangers, suspicions arose in the illegal use of the Card, the Card was lost, stolen or seized by the ATM, you should immediately contact by telephone the Customer Support Service of the Bank or personally contact the Bank with a request to suspend operations on the Card and order a new Card and / or a PIN-code.

It is recommended that you always keep information about phone numbers of the Bank's Customer Support Services with you, but separate from the Card. This information will be required in the event of any problems with the Card.

In most economically developed countries, a plastic card is an indispensable attribute of the sphere of trade and services. Carrying out transactions with payment cards shows the degree of integration of the banking system and society. Suffice it to say that non-cash payment for goods and services in industrialized countries reaches 90% in the structure of all monetary operations.

Economists call a plastic card a "service of the century," one of the key elements of the "technological revolution in banking." Therefore, the study of the problems of the use of plastic cards in Azerbaijan is particularly relevant, and the study of world practices and prospects for the development of the plastic card market in Azerbaijan is currently acquiring concrete significance. [2, p.135]

The scale and nature of the use of payment cards are reasonably considered as one of the most important indicators of the level of development of retail banking business. A plastic card is a reusable payment and credit instrument of long-term use, which has the highest degree of protection against counterfeits and, moreover, contains identification information about the card holder, which allows to verify its solvency. At present, the plastic business is more than 1.3 billion issued cards. The annual world turnover exceeds 3 trillion. Pay cards are accepted by more than 20 million trade and service enterprises. About half a million bank branches providing services perform operations with payment cards, and the number of ATMs has exceeded 700 thousand. Along with local (national) systems, international payment systems using payment cards are increasingly being developed. The major part of the world market of plastic cards is controlled by two largest companies - Visa International and MasterCard International. If we divide the entire world market of plastic cards into spheres of influence of the main players - payment systems, then the following picture will appear: Visa accounts

for about 57%, for Europay / MasterCard about 26%, for American Express - about 13%, and for others including DinersClub and JCB) - 4%.

Azerbaijani banks have always differed in their desire to actively develop the card business and have already accumulated a certain experience of issuing both foreign cards licensed by the largest financial associations and their own manat and currency cards. Nevertheless, the scale of the use of payment cards is still noticeably inferior to the average for Europe. [29, p.238]

The market of payment cards is increasingly becoming a field of competition between Azerbaijani banks. Operations on bank cards are among the most profitable types of banking activities. On average, the income per unit of costs in the card business is higher than for other types of transactions. First, we should note such profitable projects as the implementation of salary schemes, so popular in Azerbaijan and some CIS countries. The costs of maintaining similar projects for the bank are minimal due to the high degree of automation of the process. Secondly, commission fees for making payments when using plastic cards, as well as commissions received from trade and service companies for service, can be very significant for a bank.

The specificity of the Azerbaijani market is that the market is developing mainly not at the expense of individual investors and cardholders, but at the expense of salary projects. The essence of which is the servicing by the bank of the process of calculating and issuing wages to employees of the enterprise using bank plastic cards. This system is very widespread in the regions of Azerbaijan and the share of salary cards leaves about 80% of all issued cards. This largely explains the behavior of the holders, who, after charging their wages, immediately withdraw it from the ATM, hence the high percentage of withdrawal of cash.

However, the stimulus to use plastic cards in Azerbaijan will be a combination of two conditions. First: the mechanism of payment on the card should be no less convenient than using cash. Second: the use of cards should be affordable, that is, the minimum cost and profitable client.

Nevertheless, despite the presence of obstacles and difficulties, as well as the fairly large initial costs associated with the launch and development of technologies for the use of plastic cards, Azerbaijani banks are increasingly using this tool to implement strategic goals for the development of retail business. If the bank expects to remain in any niche in the private deposit market, it cannot do without issuing payment cards.

As the economists themselves assert: "The future of banking services is behind plastic cards." And this is true indeed - despite a number of problems, the Azerbaijani market of plastic cards is developing at a rather rapid pace and inspires great hopes.

#### **CONCLUSION**

The analysis of economic literature devoted to the study of calculations using bank cards made it possible to identify the lack of a unified approach to determining the content of a bank plastic card. In the existing definitions of a bank card, it was possible to compare it with electronic money, with a bank account management tool.

In order to determine the place of bank cards in the system of monetary circulation, an analysis was made from the position of the basic concepts of modern monetary science: types of money, money functions, forms of money circulation, types of monetary systems and monetary aggregates. In the course of the analysis, it was concluded that bank plastic cards serve as a means of payment, circulation and world money (with reference to international system cards). Cash on card accounts takes the form of electronic money, is part of the monetary aggregate Ml and is used in non-cash settlements. The paper substantiates the opinion that a bank plastic card is a temporary carrier of funds used in non-cash settlements.

As a result of the comparative analysis of instruments of non-cash payments (bills, checks, non-bank plastic cards, electronic money, bank plastic cards), three main components were identified in the structure of the bank plastic card: a technical facility, a special bank account, a set of banking services. This became a prerequisite for the definition of a bank card, as a complex banking product, representing both a technical facility, a bank account, and a package of banking services intended for individuals to conduct cashless payments.

The technology of the circulation system of bank plastic cards is a process of organizing settlements using bank cards. The process of forming the system consists of four stages (preparatory phase, implementation phase, maintenance and development stages). The characteristic features of the technology of the circulation system of bank plastic cards are: servicing non-cash retail payments;

presence of debit and credit scheme of payments, guarantee of payments by the issuing bank of the card.

The infrastructure of the circulation system of bank cards includes the legislative base that regulates legal relations in the sphere of circulation of bank plastic cards; Software and equipment servicing operations with bank cards.

The role of bank plastic cards in the economic development of the state is expressed in the overall positive effect of using bank plastic cards for payment system subjects.

Traditional interbank payment systems mainly serve settlements of enterprises and organizations, while payment systems based on the use of bank plastic cards are the leaders in servicing non-cash transactions of individuals.

The formation of a national card settlement system will entail the following positive trends in the economy of Azerbaijan:

- strengthening and development of the domestic banking sector and information and financial technologies to increase competitiveness and the opportunity to act as equal partners in competition with foreign banks and technologies, as a result of the expulsion from the domestic market of international card systems;
- The production of equipment servicing operations with bank cards by domestic enterprises;
- development of a system of non-cash retail settlements, replacement of cash turnover with the purpose of increasing the transparency of financial transactions in the retail services sector;
- formation of a flexible, manageable, distributed and technologically unified system of retail non-cash settlements that can become the basis and instrument for implementing state policy in the areas related to the distribution and accounting of financial resources of the general population;
- transfer of payments of population for housing and communal services and to the budget in the field of cashless payments, which in turn will increase the

speed of these transfers, reduce the time spent by bank employees on servicing individuals, reduce the costs of the population to pay commissions for the transfer of funds;

- The possibility of entry of local regional banks into the national system due to lower costs than in international systems, due to which the rapid spread of national maps to the regions of the country.

Thus, the formation of a national card system with the participation of the state allows eliminating the main shortcomings of the system of circulation of bank plastic cards in Azerbaijan present at the present stage: the dominance of the number of international bank cards, the uneven development of the card market by regions of the country; increase in the share of card payments in payments for goods and services.

To build a risk management system that accompanies operations with bank cards, commercial banks are recommended to carry out risk management at two main stages of implementing the program of work with bank cards:

- •minimization of risk at the stage of choosing the variant of working with bank cards and the set of clients;
  - •minimization of risk in the process of servicing client card accounts.

When choosing a variant of the program for working with plastic cards, banks should correctly determine the level of probability and losses from the occurrence of a risk event.

After choosing the option of organizing a plastic business, determining the group of individuals and legal entities to whom cards will be issued, the bank needs to develop a system of risk assessment and management accompanying card transactions, by type, paying special attention to credit risk, operational risk and the risk of fraudulent transactions.

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