

The Analysis of The Factors Influencing on Electronic Payments and Relationship among Azerbaijan's Economy with Them

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Abstract: *In this article it has been analysed the aspects influencing on the scope of cashless payments and illustrated their relationship with country's economy. As it is clear, in the last 30 years, payment systems have been dramatically developed on the basis of technological changes and innovations, and as a result, a revolutionary transition from paper-carriers to electronic-carriers has occurred. In that case, beside increase of straight through processing and effectiveness of financial system, simultaneously, it causes a dramatic decrease in the value of country's shadow economy and as a result of the payment cards usage, consumption is increased and consequently, it stimulates economic growth. Therefore, in this article all aspects that impact negatively on the extension of payment cards' value have been analysed and afterwards, the solutions that can help to prevent these aspects have been illustrated. In addition, it is proved that these aspects not only decrease the value of payment cards, but also they impact negatively on the country's economy.*

Keywords: *electronic payments, electronic methods, payment infrastructure, shadow economy*

I. Introduction

In market economy, the requirement for existence of the payment systems in order to transfer fast, safely and effectively the funds of individuals and businesses proves that payment systems are one of the inseparable parts of the market infrastructure.

In practice, payment systems with excellent functionality play a crucial role in the development of interbank money and securities market.

Recent researches that have been done by many international organisations provide information that electronic payments impact positively on consumption and therefore, 1% increase in the volume of cashless payments results with 0.08% and 0.11% increase in the real GDP in the developed and developing countries, respectively [64, 65, 66].

According to Michel Camdessus, the former director of International Monetary Fund (IMF), "the improvement of payment systems is the main priority in the central banks of countries which transfer their economy from centrally planned economy to the market economy".

Payment systems are considered one of the main parts of the country's financial infrastructure and that is why reliable and effective operation of it is significantly important. Reliable and effective payment system is one of the essential factors of continuous operation of financial markets. Adequately established and effectively managed system helps to prevent financial crisis, also provides financial stability and increases economical activity by making the payment process cheaper and simpler.

Payment systems influence importantly on the economical processes being inseparable part of monetary policy. The circulation rate of money as being one of the main economical features is the major factor which fully defines the current situation of the economy and impacts directly on the level of inflation. From this point of view, to regulate the interaction of inflation and payment systems is important [4].

In market economy, the great value of operations are carried out by the entities every day. In the market economy with the modern financial system, purchase or sale of the products or services are carried out by cash or otherwise by cashless form through the transfer from one bank account to another one. The participants of market economy and furthermore, individuals and business processes operate in the real sector and financial market face with uncertainty in terms of acceptance and delivery of payments. This uncertainty depends on the different aspects, such as the choice of tools in order to complete payments on time and effectively and moreover it depends on the number of the interim participants involved in the payment flow. Furthermore, the existence and value of loan for the use of payer in order to eliminate temporary deficit in the money balance of the payer impacts entirely on the effectiveness of payment systems. Finally, the developed markets can tend to operate in the global scale to remove geographical limitations. The factors, such as the different location of payer and receiver and time differences of payment systems operations influence on the completion of payments on time.

In market economy, sometimes the parties turn to the participants of contracts which require to carry out payments for goods and services. All economic participants should keep reserve funds in order to fulfill its contractual obligations because of acceptance and delivery uncertainty of payments and execution of payments in cash in market transactions.

Nonetheless, the condition of keeping required huge amount of reserve funds by every participant to fulfill its obligation in terms of payments in order to eliminate the losses which arise from the delay of payments is not effective. Due to remove time interval between acceptance and use of funds of merchants which operate in the economical real sector, it is more effective that financial institutions like banks ready to provide loans, uses payment services.

II. Literature Review

Technological development has become one of the leading aspects after structural changes in the financial market and the born of new financial technologies and tools in the last 3 decades. The major changes create retail payment market by gradually replacing the traditional paper-based payment mechanisms with new electronic payment platform and tools such as payment cards.

Therefore, the issues about payment systems and tools are not only for researches but they are also a discussion topic for the financial markets. The economics of payment systems has attracted various researchers from the different areas of the economics such as financial economy, macro-economy, monetary policy and regulators [1, 21, 22, 23]

Moreover, most of the researchers have discovered that the extend usage of payment systems stimulates the formation of cashless society and as a consequence cashless payments increase the economic growth [21, 22, 26]. In the cashless society the value of electronic payments is raising by using internet, self-service terminals, smartphones and other various electronic tools by people. In the society there is a positive correlation between the weight of electronic payments and the number of people who have a bank account.

There are several researches examining expenses and profit related to the usage of electronic payment tools by reflecting possible positive impacts of allocation, collection and growth of capital. Allen N. Berger (2003) stated that the productivity is significantly increased as a result of improvement of services by banks such as internet banking, electronic payment technologies, information exchange and other technological developments in the financial system. He defined that, there are important impacts in terms of productivity and getting profit in economic scale as a consequence of decreasing bank expenses which is mainly consist of the expenses of back-office by switching from paper based payments to electronic payment tools [1].

David B. Humphrey (2006) and Iftekhar Hasan (2009) provide information that the development in the usage of electronic payment systems, especially electronic retail payment tools is strongly depend on the improvement of bank operations. The issues about improvement are not only depend on the bank operation expenses but also they are related to the profit aspects (European Central Bank and Netherland Central Bank, 2009). In fact, 32 billion USD was saved in European countries between 1987 and 1999 by switching paper based payments to electronic payment systems which was 0.38% of the aggregate GDP in 1999. Furthermore, it has been discovered that it is possible to save the amount equal to 1% of the country's GDP if the country purely uses electronic based payment systems and improves the card infrastructure [23, 24, 25, 26].

"According to the research done by "Global Insight" organisation with the support of "Visa Inc." international card organisation in 2003, the customer expenses have been increased by 6.5 billion USD in the USA in the last 2 decades. Most of these expenses have been realised with the usage of payment cards. The customers prefer to use payment cards due to tend the usage of more effective and comfortable payment tools in terms of time and expense. In the study the data cover the time period between 1960 and 2002 was used and econometric model which measured the impact of card payments on the private consumption was used [40].

7 hypotheses were claimed in terms of the relationship between electronic payments and economic growth by the researchers investigating European retail payments market (Hasan, Renzis and Schmiedel 2012: 7; Hasan, Renzis and Schmiedel 2013: 6-9) and moreover they tried to prove those hypotheses. Their hypotheses were proved on the basis of Areldlano-Bon methodology by using the retail payments statistics of 27 European countries in the period of between 1995 and 2009 [26].

The presence of wide scale of payment tools and also optimal use of these tools is necessary in order to meet with the increasing customers needs. It has been accepted that retail payment systems should be adopted as a systematically important, because it plays an irreplaceable role in the operations from a customer to a customer and commercial and consequently, it impacts essentially on the general economy (Hasan, Renzis and Schmiedel 2012: 4-8; Hasan, Renzis and Schmiedel 2013: 3-5). Customers must have a broad scale of payment tools choices as globally accepted and with the access to the funds in terms of deposit and credit (Kokkola, 2010: 25-28; Hasan, Renzis and Schmiedel 2012: 3-8; Hasan, Renzis and Schmiedel 2013: 5-7). Similarly, merchants should be provided with the electronic transactions which is fast, high secure and cost less than paper-based transactions [25, 26].

Actually, the elimination of the market imbalance and effective payment infrastructure with the reduced costs help to strengthen trade, service, fund transfer and economical interaction.

In the study of “Electronic payment system and economic growth: The summary of the transition to a cashless economy in Nigeria” done by the researchers of Adama Technological University and Kogi State University in Nigeria in 2013 (Oginni, El-Maude, Jibreel, Mohammed and Michael), it was measured the impact of cashless payment to the economic growth (the real GDP per person) and discovered that there is a significant positive relationship between electronic payment systems and economic growth. Furthermore, it was defined that 1% increase in the volume of transactions carried out by electronic payment systems makes 0.12% increase in the real GDP. In addition, it was found out that the usage of ATM is wider and mobile banking is less in comparison with other cashless payment tools [15].

In 2013, in the article “Shadow economy in Europe, 2013” by Friedrich Schneider with the support of “AT Kearney Inc.” and “Visa Inc.” organisations the relationship between shadow economy and electronic payments was analysed and proved that electronic payments help to decrease the value of shadow economy [34].

With the support of “Visa Inc.” international card organisation “Moody’s Analytics” organisation conducted a broad research to examine influence of the electronic payments on the economic growth in 56 countries which make 93% of the world GDP in 2013. As a result, it was defined that there was 983 billion dollar economic growth as a consequence of using electronic payment tools in those countries in the period of 2008-2012. This figure is equivalent of 1.9 million new jobs. Likewise, it was discovered that the GDP of developing and developed countries raised by 0.8% and 0.3% respectively, as a result of the increase in the value of electronic payments in the same period. In this time period, the world real GDP increased by 0.2% on the basis of electronic payments. Correspondingly, it was found out that 1% increase of the usage of payment cards causes 0.056% and 0.035% increase in the consumption and GDP, respectively (Zandi, Singh and Irving, 2013: 3-16) [41].

Similarly, the same research was done by “Moody’s Analytics” on the basis of 70 countries in 2016. In the study for the first time Azerbaijan was included in the list of countries make 95% of the world GDP. According to the result of the research the increase of electronic payments contributed 296 billion USD in 70 countries’ GDP in 2011-2015. Electronic payments influence more positively on the economy of the developing countries in comparison with the developed countries economy. In this time scale electronic payments contributed 0.08% and 0.11% additional funds to the GDP of the developed and developing countries, respectively. In Azerbaijan, this figure was 0.03%. From Commonwealth of Independent States (CIS), this number was 0.33%, 0.07% and 0.02% in Russian Federation, Ukraine and Kazakhstan respectively and it was 0.22% in Turkey. Generally, it must be stated that electronic payments contributed 0.10% and 0.18% additional funds to the GDP and consumption of 70 countries in the period of 2011 and 2015 and caused opening of 2.6 million new jobs [42].

In 2016, in the article “Reducing the shadow economy through electronic payments” by “EY Poland” organisation, shadow economy, its types and limiting the value of shadow economy by electronic payments and other topics were analysed [32].

In the study of “Electronic payments as the main aspect of economic development” done by Olena Slozko and Anna Pelo the researchers of Ukrainian Academy of Sciences Institute of Economics and Forecasting (2014), it was used correlation demonstrates the statistical relationship between electronic payments and economic growth on the basis of data covers 2009-2012. As a result of this study, it should be mentioned that the correlation between the increase of the electronic payments value and nominal GDP is equal to 0.78. This means, cashless payments impacts directly positively on the increase of GDP in Ukraine.

According to the research of “Paper-electronic payment systems in India – analytical research” done by Subramanian the professor India’s National Institute of Management Studies (2014) on the basis of the statistical data covers the time period of 2003-2013, 90% of general payments carried out on the paper carrier in the country. Therefore, it was stated in the study that the improvement of e-banking, the explanation of the higher cost of transactions carried out with paper carrier in comparison with electronic transactions and enlightening of the population play an important role in terms of development of cashless payments.

III. The aspects that impact on cashless payments

Generally, defining the features that increase the value of cashless payments, analysing all of these features separately and illustrating the relationship between cashless payments and them are very significant. The mentioned features are as below:

- the value of country’s shadow economy;
- illegal and low income level;
- low pension and high food consumption;
- non-controlled commerce;
- infrastructural opportunities and technological level;
- payment culture and financial literacy;
- gaps in legislation;

- realization of administrative and stimulating policy in that case.

The definition of shadow economy is not exactly defined by the researchers tried to measure it. Generally, accepted definition is that shadow economy is an economic activity that occurs in the economy and officially supports the increase of gross national product, nonetheless it is not registered. In other words, shadow economy is an economic activity that arises from breaking the laws or avoiding taxes or/and customs duties.

Generally, 3 methods are used in order to evaluate shadow economy [34]:

- direct procedures which is used to define the scope of shadow economy in micro level at the exact time period (survey may be an example of this.);
- indirect procedures using macro-economic features;
- econometric models to estimate the shadow economy as a non-observed variable.

In the scale of this study, some important topics have been analysed, such as the current situation in terms of the shadow economy in Azerbaijan, whether shadow economy impacts on cashless payments positively or negatively and how significantly cashless payments decrease the value of the shadow economy.

According to the research about the shadow economy in countries done by World Bank in 2010, Azerbaijan is 148th out of 151 countries with 52% for 2007 (Diagram 1).

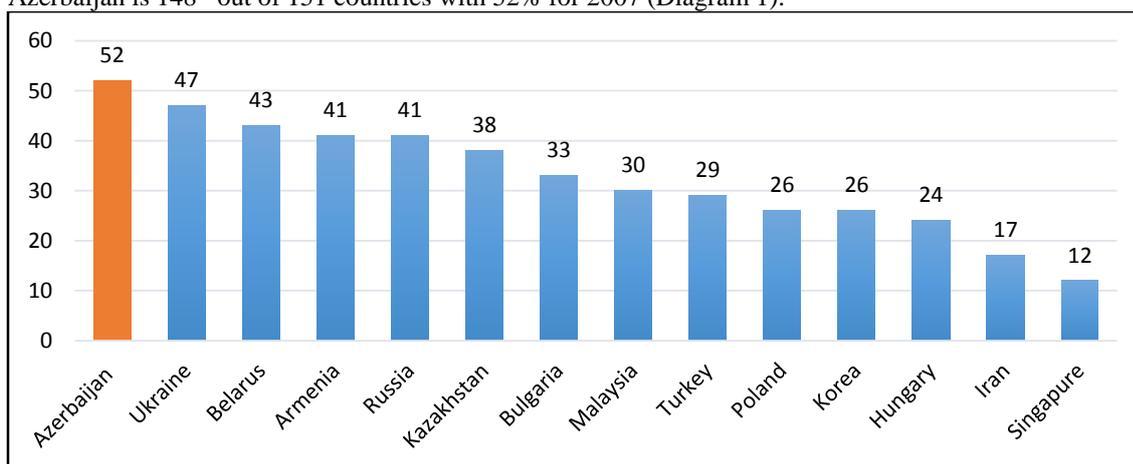


Diagram 1. Statistical data about the value of the shadow economy

Source: Created by the authors based on the research “Shadow economy in the world” done by World Bank in 2010.

Average shadow economy is 43%, 28% and 29% in Commonwealth of Independent States (CIS), Eastern Europe and Turkey, respectively. As can be seen the shadow economy in Azerbaijan is quite high and consequently, it impacts negatively on the improvement of cashless economy.

There are 395.3 thousands entrepreneurs that are individuals in the country; however the number of individuals that have a bank account is 4.7 times less than the above mentioned number (only 83.9 thousands have bank accounts).

Another method defining shadow economy in the country is to find the difference in the import by using mirror statistics. As can be seen from the diagram 2, during 11 years time period 27 billion USD illegal cases happened in customs fees in Azerbaijan.

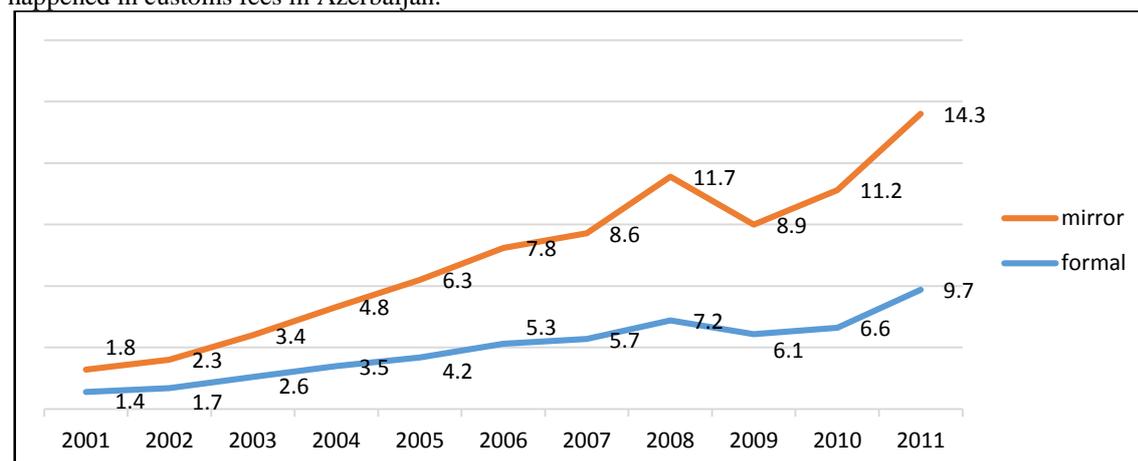
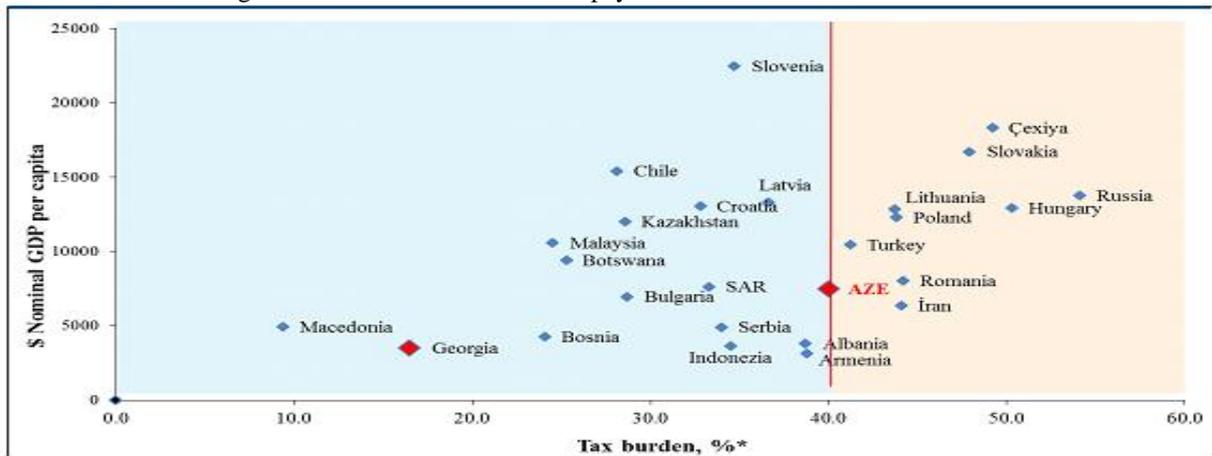


Diagram 2. The difference in import by mirror statistics

Source: calculated and created by the authors according to the statistics data of Azerbaijan State Customs Committee and the World Trade Organisation.

One of the aspects reflecting the current situation of shadow economy in the country is to define the relationship between tax burden and nominal GDP per person. Generally, tax burden means the volume of tax divided by nominal GDP. Nonetheless, as can be seen from diagram 3, tax burden is the percentage ratio of tax payments to the profits of organisations. It is clear from the diagram that in Azerbaijan, tax burden is approximately 40% and nominal GDP per person is 7630 USD. 32%, 62% and 6% of the tax burden is from income tax, payroll tax and other taxes respectively. Average world tax burden rate is 44.7% and 36%, 36% and 28% of it is from income tax, payroll tax and other taxes respectively. The tax burden in some oil-exporting countries, such as Brunei, Qatar, Kuwait and Saudi Arabia is approximately 13%. In addition to these, the tax burden is 16% in Georgia.

In practice, to avoid from the tax is much higher in the countries with the higher tax burden. As a result it extends the scale of shadow economy and consequently, the value of cashless payments is decreased, because in such cases other illegal tools are used in order not to pay taxes.



*The ratio of tax payments to income, %

Diagram 3. The relationship between nominal GDP per person and tax burden (2012)

Source: Calculated and created by the authors according to data of The World Bank’s International Financial Corporation, PwC and International Monetary Fund.

Other main factors that impacts negatively on the improvement of cashless payments in the country are illegal and low income level. It means, the income is not received legally; therefore, it is impossible to realise it with cashless. If the payment made with cashless then the data is created and it becomes easier to follow and get information from the transaction. If the income is illegal, none of the sides would accept to keep the traces.

Low income level prevents directly the extension of the scope of cashless payments as well such as, low income is directly cashed by ATM or POS and spent to daily consumption products and for other needs.

As can be seen from diagram 4, monthly average salary in Azerbaijan is more than 2 times less than the average of the world. It is clear that collection rate of the population is not high and the income is spent only to daily consumption and other needs; therefore electronic payments do not have priority.

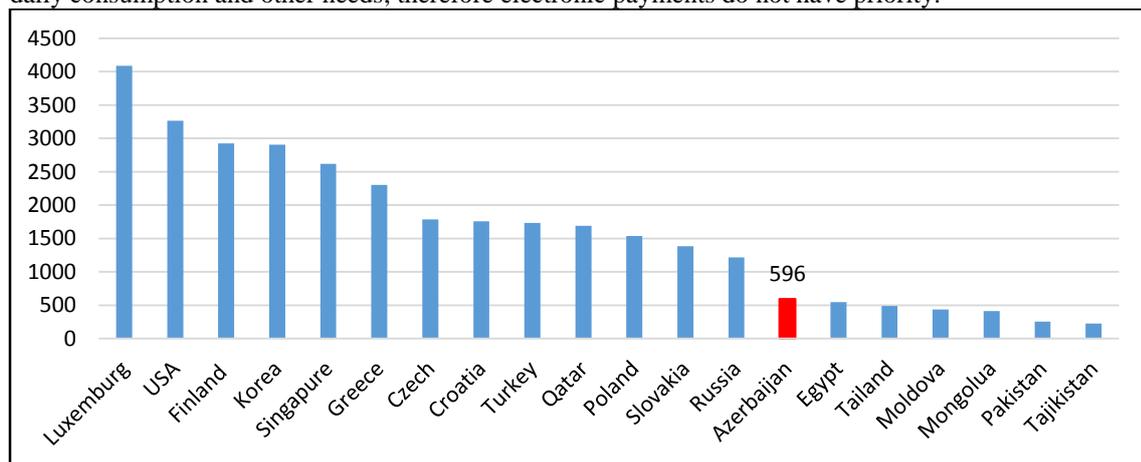


Diagram 4. Monthly average salary with USA dollar (2012)

Source: created by the authors according to the data of International Labour Organisation (ILO).

Another important issue is the way of payment of salaries. It impacts directly on the value of electronic payments, because if an employee receives salary with payment card, first of all he/she gets information about the payment card and secondly, the possibility to make electronic payments becomes more realistic. As can be seen from Table 1, in the public sector nearly all of the employees get their salary with payment card which must highly be appreciated. Nonetheless, in the private sector the situation is completely contrary, such as most of the employees get their salary with cash. In Azerbaijan, the most unpleasant situation in terms of salary is that there is double accounting for salaries especially in the private sector. It means, less amount of the salary is paid to an employee in cash form and another illegal part of the salary is paid with payment card. As can be seen, increase in electronic payments results with decrease in shadow economy in all sectors.

Table 1. The methods of salary payments in Azerbaijan (2014)

	Public sector	Private sector
Cash	2.4% <i>(27.4 thousand people)</i>	95.6% <i>(3090 thousand people)</i>
Cashless	97.6% <i>(1115.8 thousand people)</i>	4.4% <i>(142 thousand people)</i>

Source: calculated and created by the authors according to the data of Azerbaijan State Statistics Committee (ASSC).

Other major factors that impact on the scope of cashless payments are low pension and high food consumption.

813 thousand people receive pension in the country. 24% and 76% of pension in terms of salary fall into the share of Baku (25% of pensioners live in Baku) and regions, respectively. It can be seen from Diagram 5, average amount of pension is low (close to the minimum living cost) and therefore, it is mostly used for consumption.

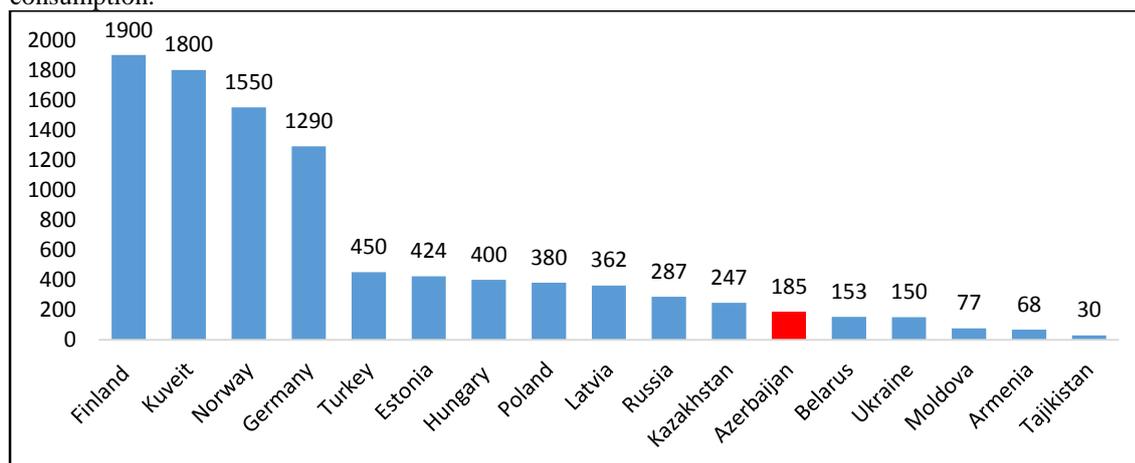


Diagram 5. Monthly average pension (2014)

Source: calculated and created by the authors according to the data from ASSC, ILO and Organisation for Economic Co-operation and Development (OECD).

As can be seen from Diagram 6 and 7, most of the income of population is spent to the purpose of consumption. Nearly half of the consumption expenditure is for food and it is mostly spent in the unorganised markets.

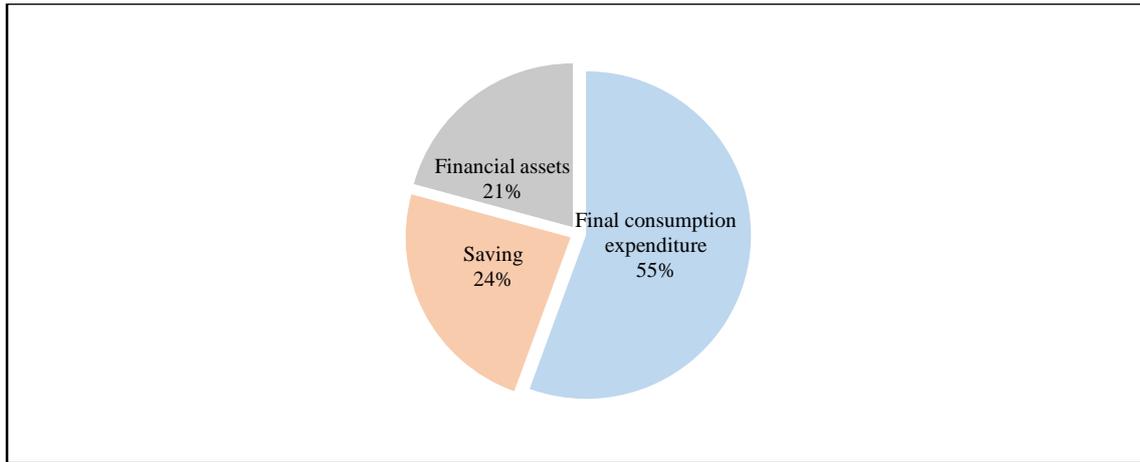


Diagram 6. The usage structure of the population incomes (2013)

Source: calculated and created by the authors on the basis of data from ASS.

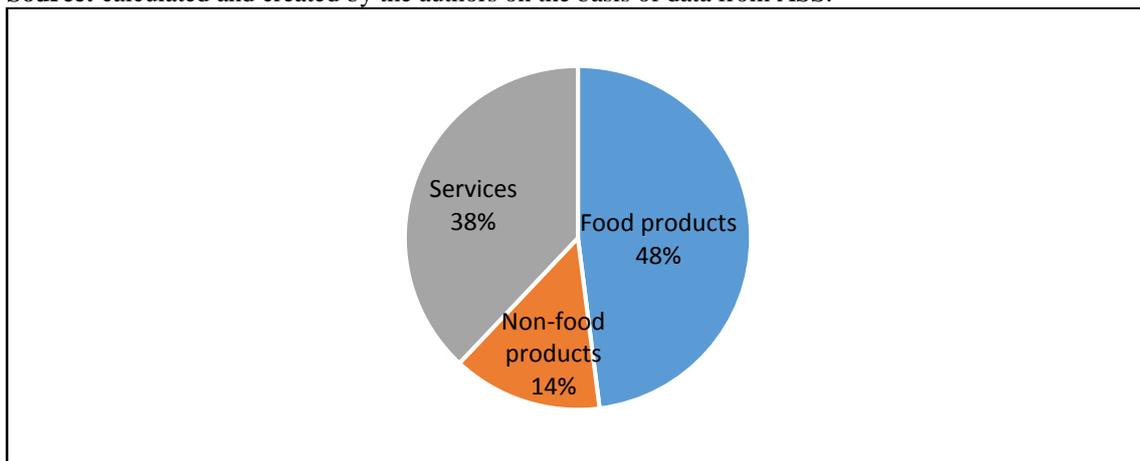


Diagram 7. Distribution of the final consumption expenditures (2013)

Source: calculated and created by the authors on the basis of data from ASSC.

Non-controlled commerce is another important factor that influence on the value of electronic payments. The value of retail commerce circulation is 22.6 billion dollar (205 dollars per person) and only 1.96 billion dollar (8.7%) of it is paid by payment cards (econometric calculations are made on the basis of these figures in the next chapter). It must be mentioned that the half of the value of retail business circulation fall into the share of Baku. As can be seen from Diagram 8, although 8 years passed, fair and agriculture are the major parts in retail commerce circulation and the business in there is disorganised.

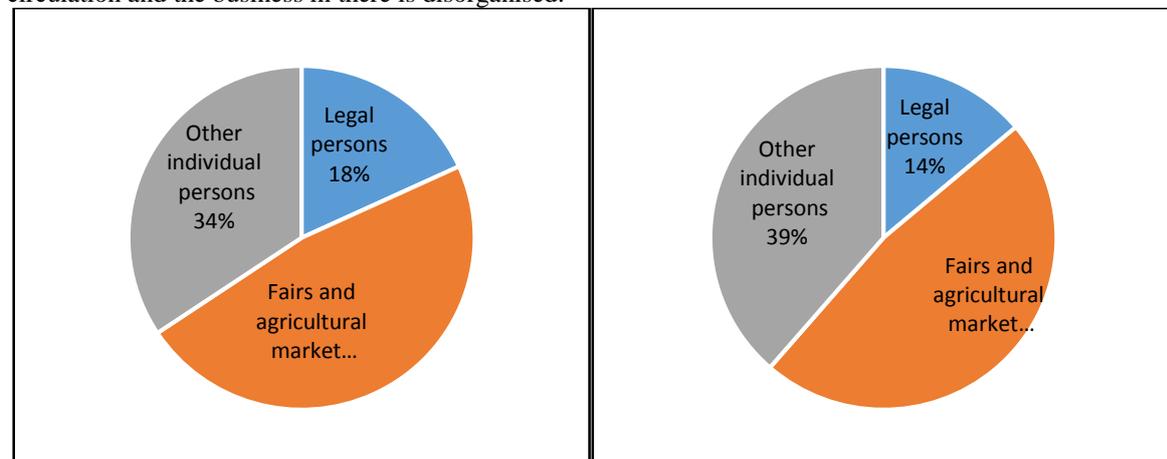


Diagram 8. Retail payments (with %) in 2005 (left) and 2014 (right)

Source: calculated and created by the authors according to the data of ASSC.

Moreover, it must be taken into account commerce sector and cash flow as well. As can be seen from Diagrams 9 and 10, the main part of the income (41.5 billion dollar) and expenditure (44.2 billion AZN) of banks' **cashboxes**

is commerce. Shadow economy is high when the most part of the expenditure is for commerce. There is more expenditure than income in construction sector as well.

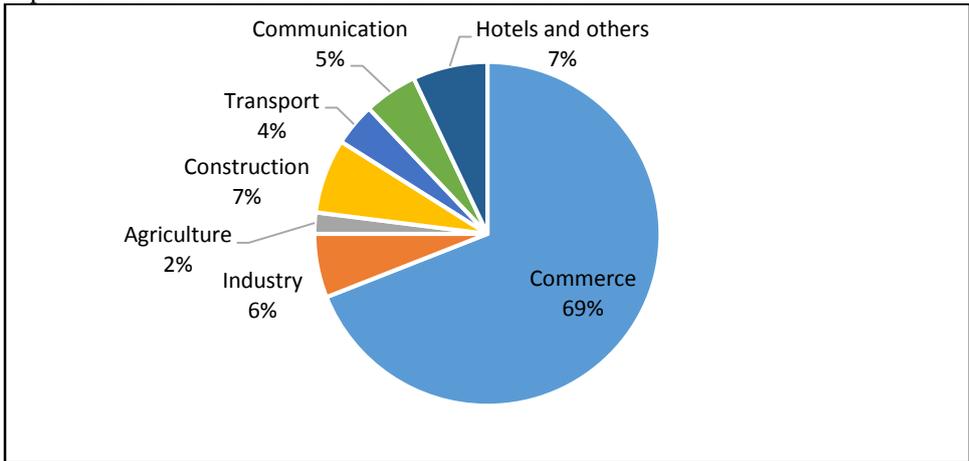


Diagram 9. Cash income (2014)

Source: calculated and created by the authors according to the data of ASSC.

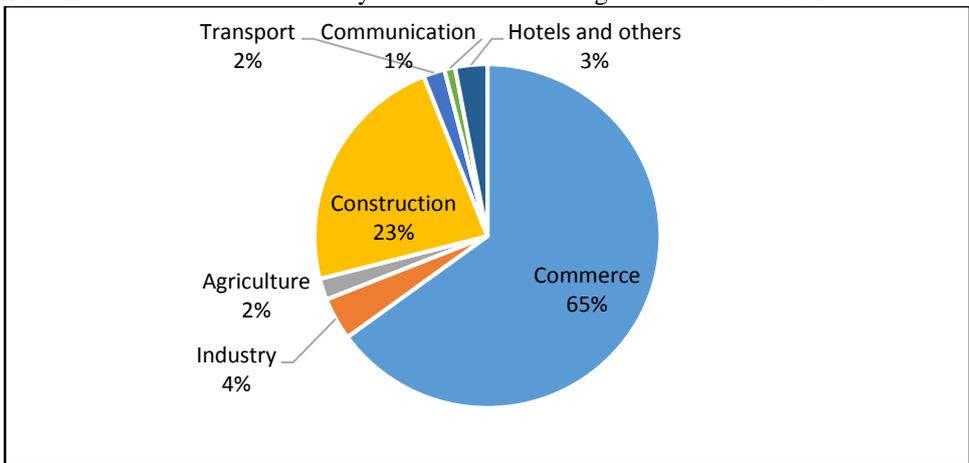


Diagram 10. Cash expenditures (2014)

Source: calculated and created by the authors according to the data of ASSC.

The availability of infrastructure facilities and development of technological level are crucial features of improvement of cashless payments volume. In diagram 11, the evolution of cashless payment infrastructure improvement in the world and the future perspectives on this way is visually described.

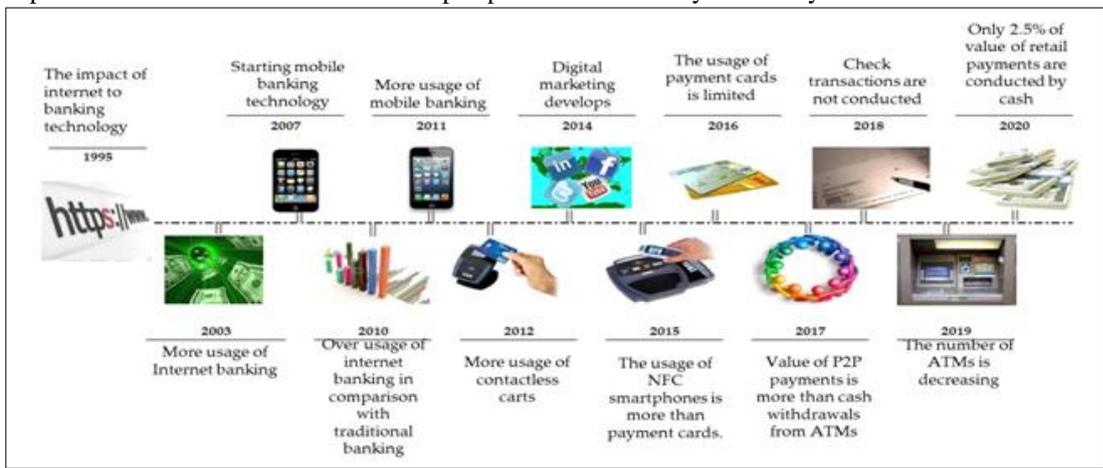


Diagram 11. The evolution of the electronic payments

Source: created by the authors on the basis of data from https://www.usaid.gov/sites/default/files/documents/15396/USAID_NetHope_ePayment_Toolkit.pdf and <http://visual.ly/evolution-electronic-payments>

Payment culture and financial literacy are the main aspects that impact positively on the extension of cashless payments scope.

As can be seen from Diagrams 12 and 13, according to the result of survey about financial literacy done by World Bank in Azerbaijan the people live in Baku which is capital city have greater knowledge about elementary math than the people live in rural areas and moreover, more than half of the respondents answered correctly to the question. Furthermore, it has been discovered that the most part of the population have very low information about cashless payments and they nearly do not use cashless payments. In fact, there is a positive correlation between financial literacy of the population and the demand on innovative products that offered by the financial institutions, because if a customer does not know how to use internet, does not know the functionality of a payment card and uninformed about an offered product, then in that case it is impossible that the transactions done by this customer could be in cashless form.

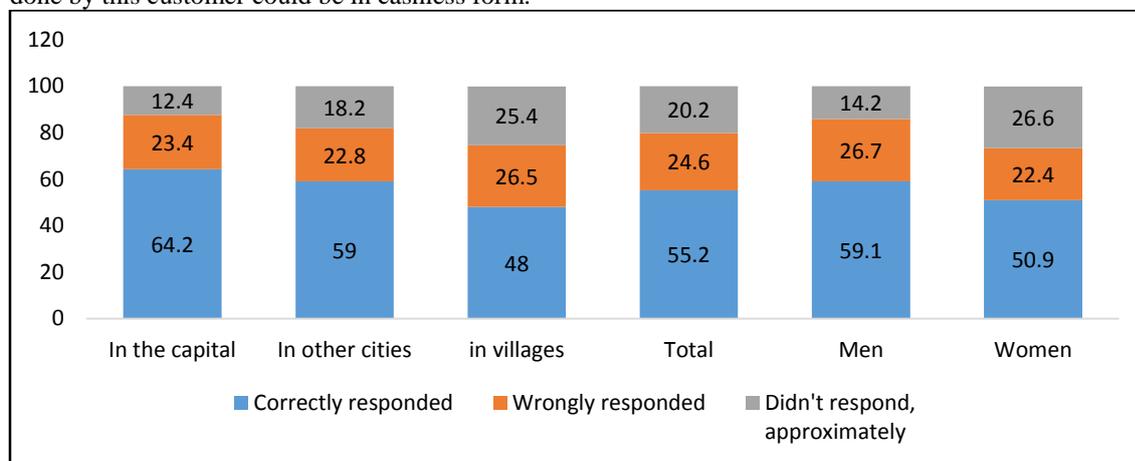


Diagram 12. Elementary math knowledge of the country's population according to the survey done by World Bank (average figure - %) - 2009

Source: calculated and created by the authors according to the survey done by World Bank.

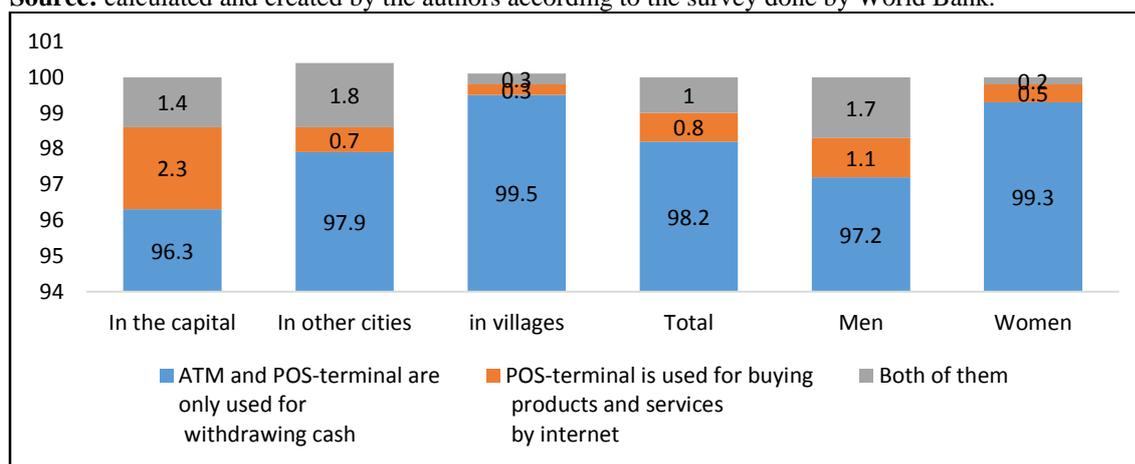


Diagram 13. The purpose of payment cards usage (%) - 2009

Source: calculated and created by the authors according to the survey done by World Bank.

Another important factor that impact positively on the extension of development of cashless payments value is to identify gaps in the legislation and carry out development work in this direction. It must be mentioned that when the new innovative product enters to the market, initially, the legal framework to regulate such product are usually not available. However, after this new innovative product gains market share, controversial circumstances start to arise and therefore, legal framework should be settled.

Realisation of administrative and stimulating policy is the final factor that influence on the electronic payments. Firstly, it must be taken into account international experience in this direction and USA, Argentine, Denmark, Georgia, South Korea, Mexico, Belgium, Czech Republic, Austria, Iceland, Sweden, China and France have great experience in this case. Some of the stimulating actions that applied in these countries are as below [39]:

Tax/fiscal deduction:

- VAT decrease for the payments that made with payment cards;

- Lower VAT rate for cashless payments in the purchase of different products;
- Payback some part of income tax to a business for carrying out transactions with payment cards;
- Lower rate deductions from VAT for each electronic declaration;
- Exemption from custom duties in case of importing ATM and POS;
- Subsidies of terminals to be installed.

Rewarding:

- Rewarding businesses for the value and quality of electronic payments;
- Extension of loyalty programs (collecting points and rewarding for the payments with payment cards);
- Lottery prizes for cardholders and establishment of prize fund with banks and government for that purposes;
- Different rewards and bonus projects for sellers.

Discounted services:

- Applying discounted services package in banks for use of cashless services in several times;
- Minimising interbank commission in settlements with debit cards in National Payment Systems;
- Applying discounts for customers use payment cards in petrol stations;
- Deducting commission in payments with payment cards from current bank accounts.

Social programs:

- Social programs in order to encourage people to use electronic payments who involved in shadow economy.

Advocacy/Awareness:

- Carrying out continuous active propaganda between people to refuse use of cash;
- "Tax refunded" campaign, a financial literacy projects.

There is some administrative methods to extend cashless payments in the countries mentioned above and they are as below:

USA

- Mandatory use of payment cards in all business and service institutions;
- Organisations which have cash flow more than \$50 million should declare taxes electronically.

Belgium

- Payments above 15000€ should be carried out cashless;
- Real estate settlements must be done via bank account transfer.

Great Britain

- Electronic declaration of VAT and income tax for businesses have cash flow more than 100000€

France

- Existence of bank account in order to register for a permanent residence;
- Maximum limit for cash payments for an individual is 3000€ and there is 15000€ fine for breach of this limit (half of the fine is paid by customer and another half is paid by seller);
- Maximum limit for cash payments for a juridical person is 1100€ and there is 5% of the amount fine for breach of the limit.

Germany

- Defining the identity of the person for the cash payments above 15000€.

Denmark

- Payments for government services should be made with e-invoice;
- Restriction for cash payments which is equal or above from 1340€ (project).

Italy

- Restriction for cash payments which is above 1000€;
- There is 1-40% of the amount fine for breach of the limit.

Spain

- Maximum limit for cash payments for a businessman is 2500€;
- If one side is non-resident then the limit is 15000€;
- There is 25% of the amount fine for breach of the limit for both sides.

China

- There is limit equal to \$29.6 thousand for cash payments between businessmen;
- Implementation of corporative cards (travel, business and representation expenses).

Turkey

- The payments above \$4518 (8000 turkish lira) should be made via bank transfer.

Sweden

- Enterprise should have electronic accounts.

Bulgaria

- Restriction for cash payments which is above 7800€ (15000 Bulgarian lev)
- Contract which the value of it is above 7800€ should be carried out in cashless;
- There is 25% and 50% of the amount fine for an individual and juridical person for breach of the limit respectively;
- Compulsory implementation of POS in budget organisations.

Russia

- The limit is \$3316 for cash payments for an individual and juridical person;
- The fine is \$1327 and \$1658 for breach of the limit for payer and payee respectively.

Belarus

- The limit is \$3465 for cash payments between merchants;
- The fine is equal to 100% of the amount for breach of the limit.

Kazakhstan

- The limit is \$11272 for cash payments for a juridical person;
- The fine is equal to 5% of the amount for breach of the limit.

Slovakia

- The limit is 15000€ and 5000€ for cash payments between individuals and between merchants respectively;
- The fine is equal to 10000€ and 15000€ for breach of the limit for individuals and merchants respectively.

Croatia

- The payments above \$18464 for sale of goods, rent, sale of securities, receiving credits and other services should be made with cashless.

Lithuania

- There is limit for cash payments above \$1931 (project).

Greece

- Enterprises should make payments above €3000 via bank accounts or by cheques;
- Payments above 1500€ for products and services should be made with debit or credit cards or cheques.

South Korea

- Auditing of merchants by tax authorities which do not accept payments with cards.

As can be seen from international experience, many economical and administrative methods are applied in the developed countries in order to extend the scope of cashless payments. Therefore, this kind of measures should be taken to improve cashless payments in Azerbaijan as well.

IV. Conclusion

As can be seen from the diagrams used in this study, high scope of shadow economy in Azerbaijan impacts negatively on the development of electronic payments. It means, increase in electronic payments will decrease the size of shadow economy in Azerbaijan correspondingly. Moreover, illegal and low income level, low pension and high consumption, unorganised business, infrastructural possibilities and technological level, payment culture and financial literacy, gaps in legislation and other such factors which impact negatively on the development of cashless payments are analysed and recommendations have been given in this study. In addition to these, international experience has been investigated in terms of administrative and stimulating policies in order to improve cashless payments and recommendations have been made in this direction for Azerbaijan.

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