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The use of payment cards by students in Poland

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Abstract. This paper presents the scale of non-cash transactions carried out in the Polish economy with payment cards and the analysis of the research on the use of payment cards for young people who are students, entering the financial market.

Keywords: non cash payments, payment cards, clearings, cash turnover

Introduction

Most students in Poland are 20-25 years old. Many of them during their studies starts in gainful employment. From the first year of their study students often become banks clients, because they used a personal account to receive a scholarship and to receive financial support from their parents. Banks expect their loyal customers to continue this cooperation also after graduation so they strive to offer customized personal accounts to meet clients' needs by facilitating their access to settlement products, as well as insurance and even investment.

The aim of this work is to analyze the preferences of young Polish people for realizing payments by cash or cashless with the use of payment cards against the background of the payment card market in Poland.

1. The role of cash turnover in economy

The cash turnover in the economy involves certain costs. They result from the need to secure both the interests of the parties in the transaction and of the operation itself. These costs may be considered in terms of macroeconomics, from the point of view of economy as a whole, as well as in terms of microeconomics – from the perspective of particular parties in the payment transaction.

In the case of cash turnover, ensuring liquidity in the economy requires a particular care about a proper amount of means of payments whose print and transport across the country determine incurring relevant expenditure. Cash money is often withdrawn from the circulation by households and enterprises so as to return onto the market at a more convenient moment for them.

The rapid, unexpected changes in the amount of accessible money which arise in this way, make it difficult for the banks to control its value. This, in turn, brings uncontrollable fluctuations of inflation and exchange rates. Such a situation might encourage speculators to influence the monetary market in a deliberate and unfavorable way. The difficulty in determining the optimal size of money issuance by the central bank in relation to the rate of its trade for ensuring payment liquidity in economy was broadly discussed by such economists as M. Friedman i J.M. Keynes.[1].

The costs incurred by the parties in the cash transaction result from the necessity of holding banknotes and coins of proper value, which in case of big amounts arises certain difficulty. With small amounts, to raise a certain amount of money does not constitute a problem, while with bigger transactions some earlier actions have to be taken which involves raising cash. Here appears an alternative cost, namely the time of the payer, and quite often also extra costs which include:

- the duty to advise the bank of withdrawals which are in excess of the determined earlier limit, low as a rule,
- the risk connected with holding and transporting cash
- the necessity to secure the received cash which often involves visiting the bank and making a payment into the account (it may involve paying commission the bank charges for such a remittance),
- cash money is not durable and is often susceptible to damage (hence more and more countries launch into circulation polymer money which is more expensive in production but more durable and more difficult to be counterfeited. In Europe such banknotes function in Romania and Switzerland, while the UK is considering its introduction)
- while accepting banknotes and coins one risks receiving counterfeits.[5]

With the technological advances money issuers and participants of financial transactions seek to reduce costs of issuance, holding money and a transaction itself. Hence, there is a desire, first of all on the part of banks and public authorities, to increase the volume of cashless transactions, and transactions with electronic money in particular .

All the more so, because the fact of recording cashless transactions helps eliminate shadow economy. However, private persons are more conservative about money in a form of cash, because paper payment instruments rather than payment online give them a deeper sense of privacy.[8] Cashless transactions can be performed by cheques, clearings in a form of a transfer or pay order and with the use of electronic money. Then cash and electronic money offer to the parties to transaction instant clearings, while clearing by cashless money are usually delayed and the time of their realization is dependent on the effectiveness of the payment system. [1] Therefore in modern economies one can observed the growth in popularity of cashless money and the shorter existence of cash outside the banking system [2], though the share of cash in transactions is still high. It is estimated that 80% of direct transactions in the European Union are performed by cash. [3] In the most pro-cash Scandinavian countries it remains at the level of 50%. [4]

2. A credit card as an electronic payment instrument

In 2002 Poland, through adopting a law on electronic payment instruments, implemented the provisions of the Directive 2000/46/WE on running activities by institution of electronic money. According to law an electronic payment instrument (eip) is *every payment instrument, including the access to funds at the distance, allowing the*

holder to perform operations via data storage media or electronic identification of the holder necessary to perform a transaction, a payment card or an instrument of electronic money in particular. [6]

An electronic money instrument is understood as an electronic device where electronic money is stored, and an electronic card in particular, which allows to submit the account and a hard disk drive.[7]

So, every payment card is an electronic payment instrument which is defined by the law on payment services

as a card allowing cash withdrawals or enabling lodging a payment order through the acceptor or transfer agent, accepted by the acceptor in order to receive means due to him. [9]

Originally the definition of the credit card was included in the law on Bank Law [10], however, further amendments to its content and the place of publication were the consequence of adopting by Poland the Directive 2009/110/WE [11]. Payment cards functioning in the economy may be classified by different criteria Table 1.

Table 1

Payment cards classification [12]

Criteria for classification	Type
A number of entities involved in the payment process	Two-sided, three-sided four-sided;
Technology used	embossed, magnetic, microprocessor, hybrid, virtual;
Issuer Status	consumer, bank, non-banking
Additional benefits	ordinary, gold, platinum
Card holder	basic, additional, personal to bearer,
Source of funds to cover transaction	credit, debit, charge, guaranteed
Range	local, domestic, international

3. The Polish payment card market against the background of the European Union

By the Polish National Bank's data, at the end of 2Q 2013 there were 34,4m payment cards issued, 80,7% of which were debit cards, 18,4% credit cards, and 0,9% charge cards. Payments cards with the function of cash withdrawals from the cash dispenser accounted for 98,8% of the total. With regard to the type of security, the large part of cards on the market are hybrid cards, i.e. cards equipped both with a magnetic stripe and a microprocessor. These cards account for 87,39% of the cards functioning in Poland and they effectively replace the cards secured with only a magnetic stripe, which remain at the level of 12,2%. Only 0,36% (approx. 124 000) account for virtual cards. [13]

According to the study by World Bank FINDEX in 2011, 90,52% of citizens of the Euro zone aged 15 and onwards were holders of a bank account. For Poland this percentage was 70,19%. Comparing it with the percentage for the developing countries of Europe and Central Asia which is 44,93%, one may conclude that the level of banking for Poles is high and in the subsequent years it is going to get the level of well developed countries of the Euro zone.

The situation looks different, when the analysis takes into consideration a number of cards held by the citizens. Undoubtedly, one should consider the specificity of particular countries in respect of technological advancement of the payment system and diversified preferences of the society for using cash and cashless payment instruments which stems from sociological and cultural factors. [14]

In 2011 in Europe, in the countries of the Euro zone 36,64% of citizens aged over 15 held at least one credit card, and 68,28% - a debit card. At the same time in Poland in the same age group there were 17,68% of citizens holding a credit card and 37,34% of citizens - a debit card. Slightly higher rates refer to persons over 25 years old with at least secondary education domiciled in the urban areas.

A lot of persons hold more than one card. While considering an average number of payment cards per citizen, Poland is ranked much lower than the EU average.

In 2011 the rate for Poland was 0,84, while for the EU countries 1,44 per citizen. The citizens of Sweden and the UK hold more than two cards per person, and for Luxembourg this rate is 3,27. In 2011 of all the countries in the EU, the lower rates than in Poland were only in Romania. Not all card holders make use of their cards. As mentioned before, the use of cards for performing cash payments often depends on sociological and cultural factors. Thus, a bigger discrepancy in the results, than in the average number of cards per citizen, is in the case of the average number of transactions performed with these cards. In 2011 an average Pole carried out 26,9 cashless transactions by payment cards. At that time the average for the EU was 73,9, while the lower results than in Poland were noticed in Italy, the Czech republic, Hungary, Greece, Romania and Bulgaria. In Scandinavian countries (Denmark, Sweden, Finland) citizens use a card on average over 200 times a year. In Luxembourg the average number of transactions performed with a card by one citizen was 137,7 which ranks the country as seven, although the citizens there hold the highest number of cards. [15].

4. The use of payments cards by students a. The number of cards held

Young people who only now enter onto the financial market are specific clients for banks. This generation is referred to as Generation Y. These are persons for whom the access to technology is vital. They feel at ease while using digital media and new technologies. Many of these persons regularly use social networks. They are prospective and at the same time difficult clients for banks. In December 2012 there was research carried out on a sample of 420 students which aimed at analyzing the attitudes of these persons towards cash and card payments. There were 257 females and 162 males in the group (one person did not mark the gender), and 92,8% of the respondents were at the ages 19-26. Almost 77% of the respondents were full-time students, and for 75,5% of them their studies were free of charge. As for their domicile 26,9% of the respondents pointed at the country, and 41,9% - a city with the population over 200 thousand people. The rest pointed at smaller towns. About a half of the respondents

declared that the average balance in their bank accounts do not exceed PLN 1000-1500.

Among the respondents, 33 persons declared they do not hold any payment card at all, 61,7% hold one debit card, and 9,3% - two or more. 17 persons (4% of the respondents) hold virtual cards, with 2 persons hold more than one card of this kind. 24,3% of the respondents hold one credit card, and 1,7% hold two such cards. 7 persons (1,7% of the respondents) declared holding a pre-paid card.

No significant differences were noticed in the number of cards held with regard to the classification of the respondents in terms of gender, domicile and faculty they studied. However, it may be stated that the number of cards held in a group of young persons is much above the average. These persons are frequently more willing to agree to receive a card attached to the account and they have no problems with using them as payment instruments.

Taking into account the system, in which cards operate, 5,7% of the respondents used Visa cards, 34,45-Mastercard, and 5% - both of them. Moreover, 4 persons pointed out they held American Express cards, 9% of the respondents either hold no card or they did not provide any answer to the question. This structure is similar to the share the two main card issuers have in the Polish market. By the end of 1Q 2013 the share of Visa in Poland was 60,3%, and the share of MasterCard -38,3%. [16]

b. The reasons for holding/not holding payment cards

The use of payment cards is dependent, among others, on access to payment terminals, cash machines and the ease of access to instruments themselves. Equally important is the attitude of clients themselves to holding and using cards. By the end of March 2013 there were 18 665 cash machines in operation and their number is systematically growing. The average value of one transaction was zł.370, and the total value of the operations performed was zł.

67,4bn. Apart from the fact that the number of cash machines is growing, their functionality is growing, too. Currently these devices allow to view the account balance, order transfers, recharge pre-paid mobiles, and are often equipped with the function of a cash deposit machine. The number of points of sale which accept card payments, despite some fluctuations, is also growing steadily. At the end of 1Q2013 it was 243,1 thousand, and the number of devices through which payments are received was 298,3 thousand. In many points of sale more than one POS terminal or another device is used. About 30 thousand points of sale enable the payment card holders to make use of cash-back service which lies in withdrawing cash up to zł.200 at the cash desk of the point of sale while paying by card for shopping. [16] In spite of the relatively well developed infrastructure, still over 70% of entrepreneurs think cash is cheaper, safer and more convenient. [17]. This is the reason why they do not take any action to propagate cashless payments for products and services they offer.

In the research young people (students) were asked about the factors which favor holding a payment card. Of 372 holders of various cards, it was most often declared that credit cards are more convenient (62,9%) and safer (48,3%) than cash. Over 40% of the respondents also pointed out that a card was a product sold by the bank together with the current account. The lowest number of the respondents acknowledged that the reason why they hold a card may be the possibility of a differed payment which is mostly related to credit cards. Although the majority of the students of full-time studies do not have any employment, and there is a large group of the unemployed among the extramural students, it turned out that the parents supporting a student are rarely the source of providing them with a payment card. Less than 10% of the debit card holders and only 2,95% of credit card holders indicated they received a payment card from their parents.

Table 2.

Factors which favour holding payment card by respondents (N=372)
(Source: the author's own study)

	debit card (number of respondents)	debit card (% of respondents)	credit card (number of respondents)	credit card (% of respondents)
It is more convenient than cash	234	62,90	81	21,777
It is safer than cash	180	48,38	53	14,25
It was attached to my personal account	163	43,82	52	13,98
The current trend is to hold a card	56	15,05	22	5,918
It gives possibility of the differed payment	25	6,72	23	6,188
It gives possibility to make use of promotions	46	12,36	34	9,14
Received from parents	34	9,14	11	2,96
Travel abroad	44	11,83	25	6,72
Others	1	0,27	3	0,81

It results in part from the structure of the contract of a bank account itself. At present, to open a current account one does not have to declare regular incomes, and banks give a debit card "offhand" while opening this account. For credit cards banks have special promotion offers which promise a free of charge usage for a year if a stu-

dent meets all the specified terms. Poles appear to have a high esteem for cash which is proved by the answers provided by the respondents who do not hold a payment card. The fact that they are used to cash was indicated as the most important reason.

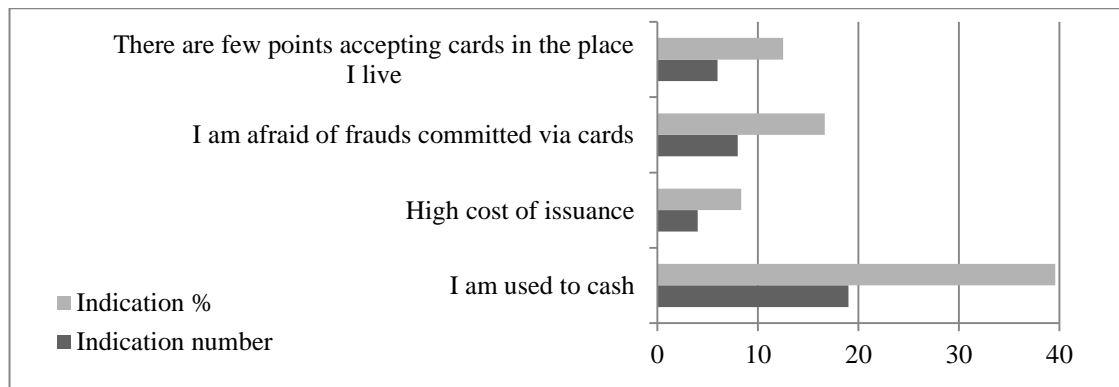


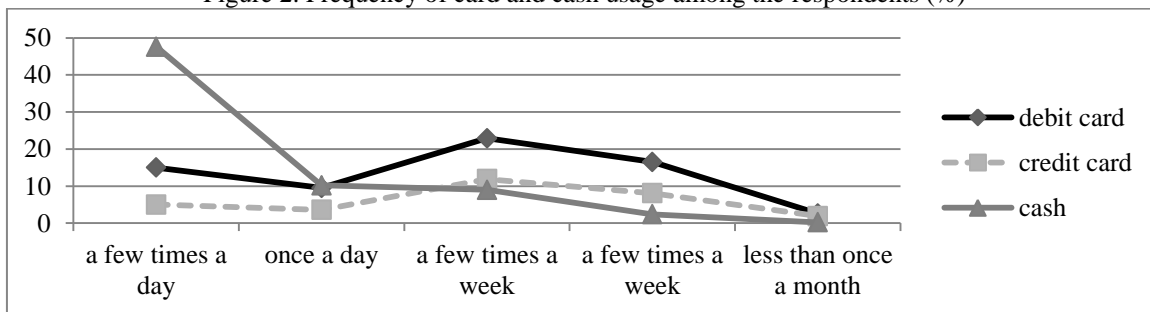
Figure 1. Reasons for not to possess a payment card (N=48)
(Source: the author's own study)

Some further positions in the ranking were taken by a fear of security and a low number of acceptance points in the domicile of a respondent. A fear of secure usage of a card is the least justified. The research of the European Central Bank carried out in July 2012 and published in "Report on card fraud" showed that the share of fraud transactions in the total number of transactions performed with cards in Poland is the lowest compared with other countries of the EU. [15]

Poles compared with the citizens of the European Union demonstrate a high esteem for cash. It is confirmed by the analysis of a group of students, although it is evident they are willing to perform cashless clearings more by a payment card than an average Pole. Cash is mostly used by the respondents to settle payments for every day shopping which entails using it a few times per day. More than 47,5% of the respondents declared the use of cash a few times a day, and 45,3% using it while paying for shopping every day.

c. The way and frequency of using payment cards compared with cash

Figure 2. Frequency of card and cash usage among the respondents (%)



Source: the author's own study

In turn, the largest group of respondents use both debit and credit cards a few times a week. (Fig. 2) mainly to pay for larger or occasional purchases. Young people also use payment cards for online purchases, but many people

prefer to use other forms of non-cash payments in the internet. More than 3% of respondents indicated that they shop online for paying credit transfer or direct transfer from their bank accounts. (Fig. 3)

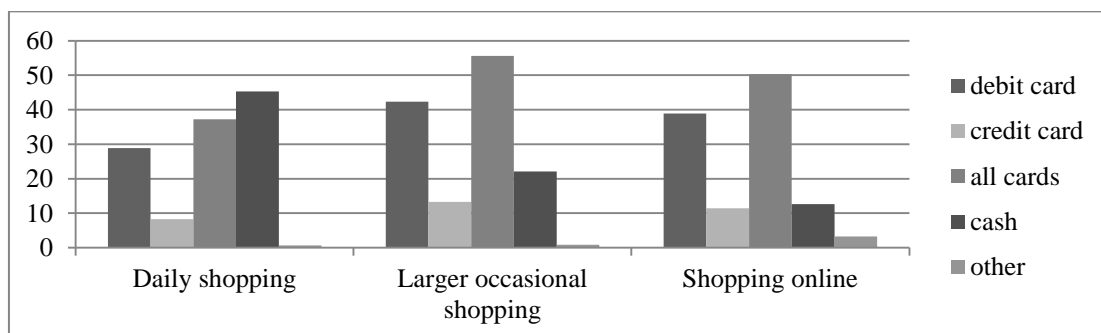


Figure 3. Reasons for card and cash usage by respondents (%)
(Source: the author's own study)

Given the course of study, the lowest percentage (about 88%) of cardholders is in the group of students of humanities and social studies (excluding students in eco-

nomics). In the other groups, the students of economics, technical and physical sciences and life sciences, the percentage of cardholders is higher than 92%.

Analyzing the place of living declared by the student, we can conclude that the smallest group of cardholders is among residents of rural areas, which is much likely due to a poor need to have a card and which might be associated with a lower than in urban areas availability of POS terminals and other devices that accept card payments.

Summary

Young people have a relatively high protechnology attitude, so as evidenced from the research, they are more

likely than the average adult citizen to use cashless payment instruments such as debit and credit cards. Due to the low income and security for the loan, they have relatively fewer credit cards than people holding regular employment.

Analyzing the preferences of young people for the use of the card one should expect a rapid development of non-cash payments in Poland as they become more and more popular with those generations of payment instruments who are entering the financial market.

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Корженьовска А. Использование платежных карточек студентами в Польше

Аннотация. Польская система платежей очень развита. Она предлагает широкую гамму современных платежных продуктов. К сожалению, банковскими продуктами жители Польши пользуются мало. Количество Поляков, пользующихся личными счетами или платежными карточками – основных банковских продуктов – гораздо ниже, чем среднее количество для ЕС, хотя инфраструктура, позволяющая использование платежных карточек развита и развивается и улучшается дальше. Например, в конце марта 2013 года на территории Польши было 18 665 банкоматов в эксплуатации. Эта ситуация может измениться, когда очередные поколения будут входить на финансовый рынок. Целью настоящей работы является анализ предпочтений молодых Поляков относительно осуществления платежей наличными или по безналичному расчету при использовании платежных карточек на фоне платежных карточек в Польше. Исследования показывают, что молодые люди, которые были студентами во время проведения исследований, абсолютно убеждены в том, что платить карточкой удобнее, чем наличными. Почти половина опрошенных считает, что карточки более безопасны, чем наличные. Но, они в своей повседневной жизни, привыкли пользоваться наличными. Роль банков – переубедить молодых людей, которые в будущем станут их ключевыми клиентами, пользоваться платежными карточками, а также пользоваться другими безналичными платежными продуктами, настолько часто, насколько это возможно, вместо, до сих пор применяемой формы наличных.