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THE IMPORTANCE OF CASH AND A SWOT ANALYSIS OF THE LIMITS ON CASH PAYMENTS

ZNACZENIE GOTÓWKI ORAZ ANALIZA SWOT OBOWIĄZYWANIA LIMITÓW DLA PŁATNOŚCI GOTÓWKOWYCH

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Abstract

Subject and purpose of the study: The subject of the study was the characteristics of cash payments, their role in the payment system and the changing preferences of consumers toward cash and non-cash transactions. The purpose of the research was to gain knowledge about the importance of cash payments in everyday transactions, to assess their advantages and disadvantages compared to non-cash payments, and the effects of cash payment limits on the economy and society. The following research hypothesis was formulated: cash payments, despite the growing popularity of non-cash transactions, still play an important role in everyday transactions, and the introduction of cash payment limits, while it may contribute to increasing financial transparency and reducing the shadow economy, comes with challenges, such as digital exclusion and limiting consumers' freedom of choice.

Materials and methods: Statistical data mainly from reports of the National Bank of Poland and the European Central Bank on cash and non-cash transactions in Poland and the European Union were analyzed. A SWOT analysis was used to assess the consequences of introducing cash payment limits. A literature study was also conducted and the results of an empirical study by the NBP, based on diaries recording consumers' daily transactions, were presented.

Results: The results of the study showed that despite the growing popularity of non-cash transactions, cash payments remain an important part of the payment system, especially in low-value transactions. Seasonal changes in the number of cash transactions are associated with the holiday and Christmas seasons. Cash is characterized by high accessibility, immediacy and anonymity, which is valued by consumers.

Conclusions: Limits on cash payments contribute to improving financial transparency and reducing the risk of financial crime and the shadow economy, among other things, but they also come with challenges, such as digital exclusion and potential data privacy issues. Decisions on the introduction of limits should take into account both potential benefits and risks to ensure the sustainability of the payment system. The proposed SWOT analysis is a versatile tool that can support various actors in evaluating and optimizing financial policies at different levels, both nationally and internationally.

Keywords: Cash Payments, Cash Payment Limits, Shadow Economy, SWOT Analysis

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Streszczenie

Przedmiot i cel pracy: Przedmiotem badań były cechy płatności gotówkowych, ich rola w systemie płatniczym oraz zmieniające się preferencje konsumentów względem transakcji gotówkowych i bezgotówkowych. Celem badań było uzyskanie wiedzy na temat znaczenia płatności gotówkowych w codziennych transakcjach, ocena ich zalet i wad w porównaniu z płatnościami bezgotówkowymi, oraz skutków oddziaływania limitów płatności gotówkowych na gospodarkę i społeczeństwo. Sformułowano następującą hipotezę badawczą: płatności gotówkowe, mimo rosnącej popularności transakcji bezgotówkowych, nadal odgrywają istotną rolę w codziennych transakcjach, a wprowadzenie limitów płatności gotówkowych, choć może przyczynić się do zwiększenia transparentności finansowej i ograniczenia szarej strefy, wiąże się z wyzwaniami, takimi jak wykluczenie cyfrowe i ograniczenie swobody wyboru konsumentów.

Materiały i metody: Dokonano analizy danych statystycznych pochodzących głównie z raportów Narodowego Banku Polskiego oraz Europejskiego Banku Centralnego dotyczących transakcji gotówkowych i bezgotówkowych w Polsce i Unii Europejskiej. Do oceny konsekwencji wprowadzenia limitów płatności gotówkowych zastosowano analizę SWOT. Przeprowadzono także studia literaturowe oraz zaprezentowano wyniki badań empirycznych NBP, oparte na dziennikach rejestrujących codzienne transakcje konsumentów.

Wyniki: Wyniki badań wykazały, że mimo rosnącej popularności transakcji bezgotówkowych, płatności gotówkowe pozostają istotnym elementem systemu płatniczego, szczególnie w transakcjach o niskiej wartości. Sezonowe zmiany w liczbie transakcji gotówkowych są związane z okresem wakacyjnym i świątecznym. Gotówka cechuje się wysoką dostępnością, bezpośredniością oraz anonimowością, co jest cenione przez konsumentów.

Wnioski: Limity dla płatności gotówkowych przyczyniają się m.in. do poprawy transparentności finansowej i zmniejszenia ryzyka przestępczości finansowej oraz szarej strefy, ale wiążą się także z wyzwaniami, takimi jak wykluczenie cyfrowe i potencjalne problemy z prywatnością danych. Decyzje dotyczące wprowadzania limitów powinny uwzględniać zarówno potencjalne korzyści, jak i zagrożenia, aby zapewnić zrównoważony rozwój systemu płatniczego. Proponowana analiza SWOT jest uniwersalnym narzędziem, które może wspierać różne podmioty w ocenie i optymalizacji polityk finansowych na różnych szczeblach, zarówno krajowych jak i międzynarodowych.

Słowa kluczowe: płatności gotówkowe, limity płatności gotówkowych, szara strefa, analiza SWOT

Introduction

Cash payments play a fundamental role in payment systems around the world, being the oldest and most common form of value exchange. Despite the rapid development of financial technologies and the growing popularity of cashless payments, cash still remains an important payment instrument, especially in retail and person-to-person (P2P, C2C) transactions. Against the backdrop of global trends, the introduction of cash payment limits in some European Union member states and, from 2027, in all countries of the Community, as well as changing consumer preferences, have a huge impact on the economy and society.

The purpose of this article was to determine the importance of cash payments in everyday transactions, to evaluate their advantages and disadvantages compared to non-cash payments, and to assess the impact of establishing limits on cash payments on the economy and society. The article uses an original approach to the analyzed problem – a SWOT analysis, which allows a comprehensive look at the topic, taking into account both positive and negative aspects of the introduction of limits on cash payments.

The SWOT analysis has practical implications. It can be helpful to businesses, consumers and policymakers in understanding the potential benefits and risks of the existence of limits on cash payments and the soon-to-be-applicable limits in all EU member states, which can influence their decisions and strategies.

Use of cash in retail transactions

Cash circulation alongside non-cash circulation is an important part of the payment system. It has existed since the invention of cash money and is a much older way of making payments than non-cash circulation, which emerged with the creation of banks and the bank accounts they maintain. Cash money includes money in physical form, which includes banknotes, usually issued by central banks, and coins, usually issued by central banks and, in some countries, by governments (Tochmański, 2013). In a payment transaction, cash money occurs in the following situations (Kisiel, 2014):

- At the stage of payment initiation and settlement (e.g., cash deposit at the cash register, cash withdrawal from the cash register, postal money order),
- only at the stage of payment initiation, and settlement takes place in a non-cash form (e.g., cash payment to a bank account).

Cash payments are also made using cashier's checks, traveler's checks when depositing into a bank account, and using payment cards, i.e. withdrawing money from an ATM or during a store withdrawal (cash back) (Ślażyńska-Kluczek, Gawryszewska, 2022). The cash back service, which has been available in Poland since 2006, allows cardholders to withdraw cash at a merchant at the same time as making a non-cash payment (of any value). In September 2022, the payment organizations Visa and Mastercard increased the limit of such a withdrawal to PLN 1 000, while previously the limit was PLN 300 for Visa cards and PLN 500 for Mastercard cards (NBP, 2024).

Table 1 summarizes the number and value of ATM transactions, i.e. cash withdrawals and cash deposits, and the number and value of transactions using the cash back service.

Table1. Number and value of ATM cash withdrawal transactions and number and value of store withdrawals from Q3 2019 to Q1 2024. [in millions and billions of zlotys].

Quarter, year	Number of transactions at ATMs [million units]	Value of transactions at ATMs [billion PLN]	Number of store withdrawals [million units]	Value of store withdrawals [billion PLN]
Q3 2019	162.3	90.6	4.6	0.6
Q4 2019	155.0	88.9	4.7	0.7
Q1 2020	133.4	83.2	4.3	0.6
Q2 2020	112.1	75.7	3.5	0.5
Q3 2020	136.5	85.4	4.4	0.6
Q4 2020	118.8	81.4	4.0	0.6
Q1 2021	109.7	74.6	4.2	0.6
Q2 2021	124.9	86.4	5.3	0.7
Q3 2021	131.5	91.1	5.6	0.7
Q4 2021	122.5	90.4	5.4	0.8
Q1 2022	113.8	90.6	5.2	0.8
Q2 2022	127.8	95.3	5.7	0.8
Q3 2022	130.4	99.0	5.5	0.8
Q4 2022	122.4	94.2	5.4	0.9
Q1 2023	129.6	100.6	5.6	0.9
Q2 2023	136.1	101.9	6.3	1.0
Q3 2023	127.5	102.9	6.4	1.1
Q4 2023	122.3	101.5	6.2	1.1
Q1 2024	114.5	96.5	6.2	1.1

Source: Own compilation based on: *Informacja o kartach płatniczych – IV kwartał 2020 r.*, NBP, Warszawa 2021, pp. 25, 31-32; *Informacja o kartach płatniczych – II kwartał 2023 r.*, NBP, Warszawa 2023, pp. 14, 17; *Informacja o kartach płatniczych – I kwartał 2024 r.*, op. cit., pp. 14, 18.

Table 1 shows that the number of ATM transactions was generally lower in the first and second quarters, while it increased in the third and fourth quarters of a given year. For example, in Q1 2021 it was close to 110 million transactions, while at the end of Q3 2021 – 131,5 million transactions, or in Q2 2020. – 112.1 million transactions, while at the end of Q3 2020 it was close to 137 million transactions. The fluctuations in these indicators are seasonal in nature and are due to the higher activity of payment card users in these months, first during the holiday season and then during the Christmas and New Year holidays. This activity translates into a higher value of transactions made at ATMs. At the end of the fourth quarter of 2023, it was 101,5 billion zlotys, compared to 7,3 billion zlotys less in the same quarter a year

earlier. The number of store withdrawals compared to the number of ATM transactions was small. In the first quarter of 2024, the number of cash back transactions was 6.2 million, and thus turned out to be about 18 times smaller than the number of transactions. A similar trend was observed for the value of cash withdrawal transactions in stores. From Q3 2023 to Q1 2024, it was at a constant level of PLN 1,1 billion, while the value of ATM transactions oscillated around PLN 100 billion. The reason for the lower use of the cash back service is that the cash back service is generally used by customers in emergencies, on an ad hoc basis to replenish their cash reserves, as well as a lack of knowledge about the possibility of using such an option. The advantage of the cash back service is the lack of transaction costs, as most Polish banks do not charge commissions on the indicated service.

Cash payments mostly involve low-value transactions (with the higher the value of the transaction, the less important this payment instrument becomes) between individuals (P2P, C2C) or between an individual and a business entity (C2B) (Bagnall et al., 2016; Klee, 2008; Cohen, Rysman, 2013). The number of these payments is significant, but their value is relatively small in contrast to non-cash payments. On the other hand, it is worth noting that, according to the report "Public opinion survey on cash signs in circulation" (2023). 28,2% of surveyed Poles who use cash declared a preference for making payments in cash regardless of the amount of the transaction, down 3 percentage points 2022. Nearly two-thirds of this group are aged 65 and older. However, there were no significant differences in the amounts preferred for cash payments based on the demographic characteristics of survey participants. In addition, 27,5% of the respondents said that the amount of the transaction does not affect the way they make transactions. The NBP survey on the payment habits of Poles (2021b) showed that cash payments are preferred by people with primary, junior high school or no formal education, as well as those with vocational education – in these groups, cash payments were preferred by 82.9% and 48.8% of respondents, respectively. In an opinion poll commissioned by the NBP (2024b), more than half of the surveyed respondents (55.3%) asked about the reasons for choosing cash payments, most often indicated that it was not possible to pay everywhere with a payment instrument other than cash.

Direct cash payment is an immediate and final transfer of value due to the fact that cash is both a payment instrument and money in itself. Another difference between cash and non-cash transactions is that cash is the official means of payment and is widely accepted. In addition, cash received as a result of a payment can be used immediately to make another payment transaction, while cashless money requires an intermediary device or service, i.e. a cashless payment instrument (Tochmański, 2013)

The World Cash Report, which was produced with the help of London-based UK security services company G4S, highlighted the following attributes of cash (World Cash Report, 2018):

- Convenience - this concept means simplicity and low requirements in terms of technology to make payments.
- Directness, i.e., the ability to make payments without involving third parties. The transaction completed with the transfer of cash to the recipient allows it to be used immediately for other purposes.
- Anonymity – the lack of control of transactions by banks and government authorities. The aspect of anonymity is highly valued by consumers when making everyday purchases.
- Accessibility – considered in the context of whether payment with a particular payment instrument is reachable by the general public. Lack of required infrastructure for cash payments, as opposed to payment cards, where POS terminals are required.
- Reliability – is closely related to availability, but more often defined in terms of efficiency or uptime of the complex infrastructure supporting the payment transaction. Cash transactions are perceived as more reliable in contrast to non-cash transactions. When cash uptime is estimated at 100%, the uptime of electronic payment systems is estimated to be extended. This feature particularly speaks in favor of cash in the event of crisis phenomena, such as the inability to access funds stored in a personal account.
- Reserve – cash is the only payment instrument that is characterized by the ability to perform a reserve function. It is of particular importance in emergency situations, such as a power outage in a store that deprives the ability to make payments electronically. Not only national banks, but also government authorities rely on this function assigned to cash.

- **Tangibility** – this feature allows consumers to stay in control of their spending and manage their personal finances more responsibly, as they can control at any time how much physical cash they have and how much they can spend on purchasing goods and services.
- **Security** – owning cash involves the risk of counterfeiting it despite increasingly sophisticated security measures, and the risk of theft, which can have a particularly negative impact on a personal and emotional level. Both retailers and consumers can fall victim to crime. The insecurity of cash largely depends on the security offered by alternative payment instruments. The security aspect is particularly important for electronic transactions that require authorization, authentication. In the case of cash, the security aspect takes on a different dimension, as cash expresses direct value, hence can easily attract criminals. Security of payment transactions is a challenge for banks, public transportation companies, retailers and consumers alike.
- **Efficiency** – this is defined in terms of cost efficiency, usually measured as the total cost of handling the complex processing of a payment instrument, followed by the unit cost or cost per transaction. While the cost per transaction varies significantly from country to country, the costs associated with cash are lower in almost all countries (AGIS Consulting, 2015).

The use of cash in retail transactions made in physical retail outlets is best reflected by diary surveys, in which respondents record all the transactions they make. Although such surveys have some imperfections, due to sampling issues or respondent error, they are considered to provide a realistic picture of how retail transactions are carried out. The National Bank of Poland has so far conducted four such surveys, i.e. in late 2011 and early 2012, as well as in 2016, 2020 and 2023. These surveys are costly and time-consuming, they are rarely implemented. The results of these studies are shown in Table 2.

Table 2. Share of cash and non-cash transactions in the number and value of total retail transactions at physical retail outlets in 2011-2023

Type of share of transactions in the number and value of total transactions at physical retail outlets	2011/2012	2016	2020	2023
Share of cash transactions in the total number of transactions	81.8%	53.9%	46.4%	40.2%
Share of non-cash transactions in the total number of transactions	18.2%	46.1%	53.6%	59.8%
Share of cash transactions in total value of transactions	63.7%	40.7%	29.3%	28.1%
Share of non-cash transactions in the total value of transactions	36.3%	59.3%	70.7%	71.9%

Source: Own compilation based on: NBP, *Zwyczaje płatnicze w Polsce w 2023 r.*, Warszawa 2024, pp. 18-19.

The NBP survey shows that the share of cash transactions in the total number and value of transactions at physical retail outlets, respectively, showed a downward trend in favor of non-cash transactions. Between 2011 and 2020, the share of cash transactions declined from 81.8% to 46.4% (down 35.4 p.p.), and in 2023 – to 40.2%. On the other hand, the share of transaction value declined from 63.7% to 29.3% (down 34.4 p.p.) in the same period, and to 28.1% in 2023 – to 28.1%. The decline in cash in retail transactions was influenced, among other things, by a change in consumers' shopping habits, e.g., in 2020, more frequent online purchases instead of traditional stores as a result of fear of Sars-Cov-2 virus transmission during cash exchanges between buyers and sellers (Wiśniewski, Polasik, Kotkowski, Moro, 2021; Huterska, Piotrowska, Szalacha-Jarmużek, 2021).

In EU countries, surveys on the use of cash in retail transactions are periodically carried out by the European Central Bank. The results of the survey for selected EU countries 2019-2020 are presented in Figure 1, which shows the share of cash transactions in the overall number and value of completed retail transactions.

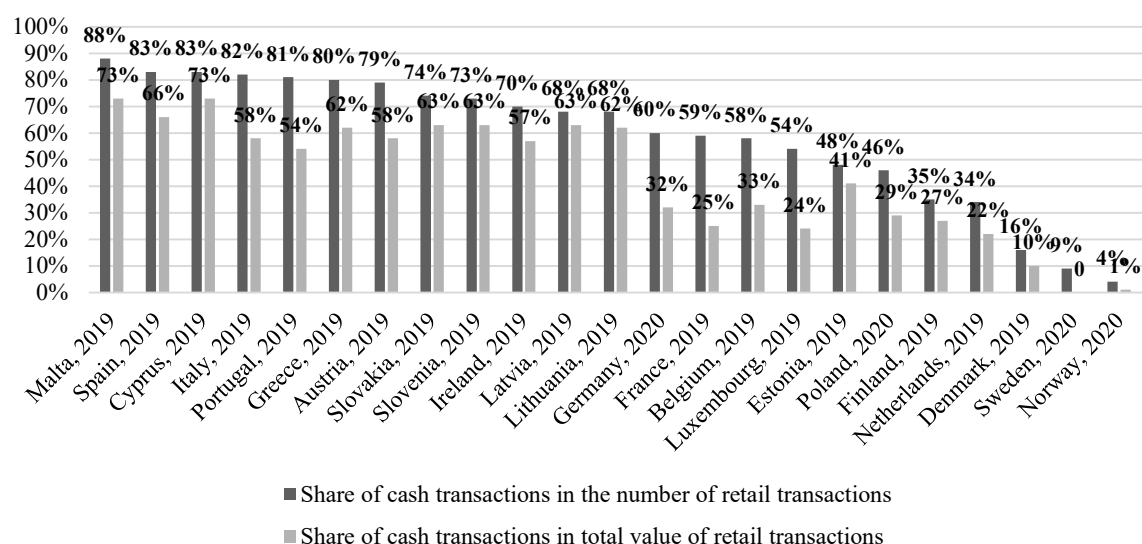


Figure 1. Share of cash transactions in the number and value of total retail transactions in 2019-2020

Source: Own compilation based on: ECB, *Study on the payment attitudes of consumers in the euro area (SPACE)*, December 2020.

Figure 1 shows that cash is a popular settlement method for retail payments in EU countries. The share of cash transactions in total retail transactions was highest at 80% and above in six countries: Malta, Spain, Cyprus, Italy, Portugal and Greece, while it was between 50% and 79% in ten countries. On the other hand, the lowest was in the Nordic countries (Norway, Sweden, Denmark) and took values in the range from 4% to 16%. Taking into account the value of realized cash transactions among total transactions, the share above 50% occurred in twelve countries. Poland's position compared to the other EU countries in the ranking in terms of the use of cash in payments was quite distant, both in terms of the number and value of cash transactions among total retail transactions, which meant that it was among the countries with a significant use of non-cash payment instruments, which displaced cash. Countries with a higher share of non-cash transactions included Norway (where about 3% of the number and 2% of the value of all retail transactions are cash transactions), the United States (19% and 6%, respectively) and Switzerland (43% and 24%). On the other hand, according to the 2022 survey, among European Union countries, cash in retail transactions was mainly preferred in the following countries: Malta (77%), Slovenia (73%), Austria (70%), Italy (69%) and Spain (66%), France (50%). The largest decrease in the share of cash payments in 2022 compared to the 2019 survey was recorded in Cyprus - by 23 percentage points, and an increase in the value of the share of cash transactions - in France (by 10 percentage points) (NBP, 2023b). In contrast, the relatively lowest demand for cash in 2022 among EU countries was in Denmark, among others - only 12% of POS payments there were made via cash (Danmarks Nationalbank, 2022). The Netherlands is also seen as a largely cashless country. The Dutch used cell phones or other devices that can be used for contactless payment (e.g. smartwatches – De Nederlandsche Bank, 2023) at POS terminals in retail transactions in 2022 in similar proportions to cash. The share of cash payments there in 2022 was about 2%. Cashless countries also include Sweden and Norway. In Sweden, the share of the population using cash in payments was 8%. It should also be noted that more than half of the Swedes surveyed over the age of 65 were negative about the decline in the use of cash in transactions. In contrast, according to a Central Bank of Norway survey of households, cash there accounted for only 3% of total payments and POS payments, and 4% in transactions between individuals (NBP, 2023b).

In recent years, due to the increasing popularity of new technological solutions, there has been a trend away from cash to cashless transactions. This trend has been reinforced since March 2020 amid fears of the risk of infection with the Sars-CoV-2 virus and consequent hygienic safety considerations. The imposed restrictions have created fear and uncertainty among people, causing the public to withdraw cash on a massive scale. According to a survey commissioned by the National Bank of Poland, 51,3% of surveyed Poles who prefer non-cash forms of payment on a daily basis withdrew cash after the outbreak

of war in Ukraine, while 27,9% of respondents withdrew more cash than usual in 2022. The increased demand for cash, however, was not due to its transactional nature. Most of the withdrawals were for precautionary, i.e. as a precaution (37,8%) or out of fear of losing funds held in the bank (6,7%) (NBP, 2023b). Due to excessive demand for cash, some bank branches introduced restrictions, as well as imposed limits on the amount of cash withdrawn from the payment account (Luczuk, 2021).

Limits for cash payments

The introduction of restrictions on cash payments is currently being widely discussed in the context of fiscal policy and the fight against financial crime in European Union countries. Limiting cash transactions plays a key role in preventing money laundering, tax evasion and countering the financing of terrorism. In different EU member states, these limits vary for transactions between individuals (C2C), between individuals and businesses (C2B) or between businesses (B2B), reflecting the specific economic, cultural and legal conditions of each member state (see Table 3).

Table 3. Cash payment limits in force in the EU-27 countries

Lp.	Country	Limit for cash payments [EUR].
1	Greece	1 500 euros (C2B) 3 000 euros (B2B)
2	France	1 000 euros for tax residents (debtors) - C2B and B2B 15 000 euros for tax non-residents (debtors) - C2B and B2B
3	Portugal	3 000 euros for residents (C2B and B2B) 10 000 euros for individuals, non-residents, non-businesses (C2B and B2B)
5	Spain	1 000 euros for residents 15 000 euros if the payer is an individual, non-resident, and the payment is not related to his or her profit-making activity (C2B and B2B)
4	Italy	3 000 euros (C2B and B2B). 15 000 euros for payments in which the payer is a non-resident consumer
8	Bulgaria	10 000 BGN (C2B, B2B, C2C)
6	Belgium	3 000 euros (C2B and B2B).
7	Poland	3 300 (15,000 PLN) - B2B
9	Croatia	HRK 105 000 (about €24,500) for natural persons - residents 15 000 euros if the natural person, party to the transaction is a non-resident B2B 5 000 HRK (about 650 euros) for residents 15 000 euros if the legal entity, party to the transaction is a non-resident
11	Czech Republic	270 000 CZK per day (B2B and C2B).
12	Romania	50 000 RON - C2C 5 000/10 000 RON - B2B, C2B
13	Slovakia	5 000 euros for individuals (B2B, C2B) 15 000 euros for entrepreneurs (C2C)
10	Cyprus	no limit
14	Luxembourg	no limit
15	Austria	no limit
16	Netherlands	no limit
17	Ireland	no limit
18	Germany	no limit
19	Dishes	Formally no limit In practice, limitations: 75 000 DKK 50 000 DKK 10 000 DKK
20	Sweden	no limit

Lp.	Country	Limit for cash payments [EUR].
21	Hungary	no limit
22	Slovenia	5 000 euros (B2C/C2B) 420 euros (B2B)
23	Malta	no limit
24	Latvia	7 200 euros (B2B and C2B).
25	Lithuania	500 euros (C2C and B2C) B2B - cashless transactions only
26	Estonia	Up to 50 of any denomination
27	Finland	Up to 50 arbitrary denominations (B2B, C2B)

*data as of 22/08/2024.

**Explanation:

(C2B) - "Customer to Business," a settlement between an individual and a business entity,

(B2B) - "Business to Business," mutual settlements between business entities,

(C2C) - "Customer to Customer," mutual settlements between individuals.

Source: Own compilation based on: F. Schneider, *New COVID-related results for estimating the shadow economy in the global economy in 2021 and 2022*, "International Economics and Economic Policy", No.19, 2022, pp. 303–304; Money Matters, *Limity płatności bezgotówkowych w UE*, <https://www.moneymatters.pl/blog/post/limity-platnosci-gotowkowych-w-ue/>, accessed: 22.08.2024, A. Manikowski, *Wpływ wprowadzenia limitów dla transakcji gotówkowych typu B2B w Polsce w 2017 r. na wartość obiegu gotówkowego*, „Studia i Materiały”, no. 1/2021 (34), pp. 30-31.

Based on Table 3, it can be concluded that the lowest limit for cash payments is currently in effect in Lithuania and amounts to EUR 500, while the highest is in the Czech Republic at CZK 270 000 (i.e. about PLN 45 000). In Poland, a limit of about EUR 3 300 has been set, equivalent to PLN 15 000, and it applies only to transactions between businesses, while it does not cover transactions between individuals. Of the 27 EU countries, limits for cash payments were not introduced in 9 countries.

However, it should be noted that among the countries of the Community there are countries where, although no limits have been set, there are regulations that enforce cashless payments. An example of such a country is Germany, where for payments above EUR 10 000 the seller is required to verify the identity of the buyer. Similarly, in Denmark, where formally there are no restrictions on transactions between private individuals, but provided that one of the parties to the transaction is a businessman, the limit is 20 000 Danish kroner, or about EUR 2 700. In addition, the seller is required to accept such a payment only from 6:00 a.m. to 10:00 p.m., while in high-crime areas it is only until 8:00 p.m. In addition, in Denmark there is a ban on the use of €500 bills for, and there are restrictions on coin payments (Bereźnicki).

On 30.05.2024, the Council of the European Union issued an official announcement that, in accordance with the adopted regulations (Parlament Europejski i Rada, 2021), a cash payment limit EUR 10 000, i.e. about PLN 42 000, will be introduced in all EU member states starting in 2027. In practice, any cash transactions in excess of this amount will have to be made exclusively without cash. The introduction of these regulations is a response to the growing challenges of illegal cash flow. The EUR 10 000 limit will apply to transactions between entrepreneurs, i.e. in the B2B segment. Transactions between a businessman and an individual will not be subject to the above regulations. EU regulations also provide for the establishment of an Office for the Prevention of Money Laundering and Terrorist Financing, which will oversee compliance with the set limit for cash payments in the EU and may impose financial penalties on businesses in case of abuse (Rada Unii Europejskiej, 2024).

Research results – SWOT analysis

In order to organize information about the consequences associated with the restrictions currently in place in some countries on cash payments and soon to be in place in all EU member states, as well as to identify the strengths and weaknesses of these regulations and to identify the opportunities and threats

associated with them, a SWOT analysis was conducted for the purpose of this paper. SWOT analysis is an acronym for the first letters of English words (Pierścioneck, 2011):

- Strengths,
- Weaknesses,
- Opportunities,
- Threats.

This technique compares the strengths and weaknesses of an issue with the opportunities and threats emanating from the environment (Daniluk, 2015). Strengths and weaknesses are internal, while opportunities and threats are external, which reside in the environment (Gawroński, 2010). Four categories of factors emerge from the intersection of these two divisions (Gierszewska, Romanowska, 2009):

- external positive – opportunities,
- external negative – threats,
- internal positive – strengths,
- internal negative – weaknesses.

The results of the analysis of the strengths and weaknesses of the establishment of cash payment limits confronted with the opportunities and threats will allow an assessment of the interactions (Żabińska, 1997). The SWOT analysis is presented in Table 4. Polish and foreign articles, reports and websites, among others, were used to prepare the analysis.

Table 4. SWOT analysis of the establishment of cash payment limits

Opportunities: <ul style="list-style-type: none"> • International cooperation - improving integration with international financial systems • Improving the efficiency of tax systems • Displacing cash from the market in favor of cashless payments • Development of cashless payment technology: opportunity for innovative payment solutions • Increased confidence in the financial system 	Threats: <ul style="list-style-type: none"> • The risk of executing transactions outside the EU or in the shadow economy, making them difficult to control • The possibility of alternative, illegal sources of payment • Restricting the freedom of contract the European Union and the freedom of consumers to decide how they want to pay for their chosen service • Social inequality - potential widening of inequalities between those who have access to technology and those who do not • Risk of personal data privacy breaches • Risk of cyber attacks • Possibility of digital exclusion of some social groups • Potential problems with social acceptance • Social resistance - the possibility of opposition from those attached to cash, e.g. in Poland the risk of protests by the Union of Entrepreneurs and Employers
Strengths: <ul style="list-style-type: none"> • Greater transparency of financial transactions in settlements between their participants • Reduce the risk of theft (e.g., due to a reduction in the amount of cash in store checkouts) and fraud • Reducing the size of the shadow economy • Reducing financial crime • Facilitate monitoring of transactions and anti-money laundering, resulting in better control over the flow of money • Benefits for businesses: reduced risk of cash theft, increase their creditworthiness, eliminate dishonest taxpayers, which increases the security of transactions • Promoting modern payment methods: encouraging the use of payment cards and electronic payments 	Weaknesses: <ul style="list-style-type: none"> • Potential difficulties for small businesses • Potential costs of implementing cashless payment systems • Restricting consumers' freedom of choice • Making the activities of micro and small entrepreneurs more difficult due to the restriction of their liquidity and the imposition of additional formal and legal obligations • Decrease in the share of paper money in circulation, which will affect the gradual disappearance of this form of payment as well as the entire infrastructure needed to support it • A challenge for the elderly, the less tech-savvy and those with low digital skills - it will be difficult for them to adapt to the growing trend of digitization of payments

Source: Own study.

The establishment of cash payment limits raises a lot of controversy between their supporters and opponents. The experience of applying cash payment limits in European Union countries varies and depends on the specific regulations in place in each member state. Proponents of their use claim that they are introduced to combat money laundering, avoid taxation and fight the shadow economy (Kowal-Pawul, Lichota, 2024). A 2018 study by the European Commission (2017) noted that cash payment limits can also reduce criminal activity and improve the efficiency of tax systems, with minimal negative effects on legitimate transactions. According to F. Schneider, when is reduced or a cash limit is, the following results are achieved: reduction of the shadow economy, reduction of corruption and reduction of crime (Schneider, 2019). In addition, the establishment of limits on cash payments opens space for the emergence of innovative solutions for cashless payments (Oliver Wyman Forum, 2023). Closely linked to the aforementioned factors is trust in the financial system. As a result of the limits on cash, users of cashless payments must trust third parties responsible for all settlement procedures, as well as rely on the security of the system itself to prevent data theft during the transfer process (Treiblmaier, Pinterits, Floh, 2008).

In addition to combating the shadow economy, other benefits to the Treasury such as (Szymanek, 2022) are seen as a result of the reduction of cash trade in favor of cashless trade:

- greater transparency of settlements between the parties to the transaction,
- leaving traces on bank accounts to facilitate inspection activities by tax authorities,
- international business facilitation,
- Enabling effective enforcement proceedings, for example, in tax enforcement.

According to a survey of consumer attitudes conducted by the EC, a significant proportion of consumers prefer to keep cash reserves at home or in safes, driven by a precautionary motive, in case of need for immediate access to funds and to ensure a sense of security (European Commission, 2017). Setting a relatively high limit on cash payments at €10,000 can be read as respecting the payment preferences of citizens of EU member states while strengthening the security of the financial system.

In addition, limiting cash circulation can have positive effects on the business entities themselves in the form of (Ćwiakła-Małys, Piotrowska, 2017):

- to eliminate rogue taxpayers from the market,
- to increase the security of the transactions carried out,
- minimize the risk of cash theft by both third parties and their own employees,
- maintaining high balances on cash accounts, which increases the creditworthiness of business entities.

Attention should also be paid to the risks and weaknesses associated with imposing limits on cash payments. There is a risk that the limits set for cash payments may be counterproductive. This is because the EU authorities, by moving in the direction of limiting non-cash turnover in B2C transactions, may help stimulate the growth of the shadow economy. An example is a situation in which a customer will not be able to make a payment transaction in a non-cash form for various reasons, such as lack of cash in the account or not having a payment account, while an entrepreneur who is not able to accept payment in cash may decide to skip issuing an invoice in order not to lose a customer (Nowy outsourcing). Besides, in the case of a higher-value transaction, a consumer who does not have funds in his or her payment account may ultimately abandon the purchase, and the entrepreneur may thus lose the customer (Fundowicz, Łapiński, Wyżnikiewicz, 2024).

Opposition lawmakers say cash payment restrictions are by no means a panacea that could solve most problems. Citing experience from EU countries with limits, they point to higher levels of shadow banking, corruption, tax evasion and terrorism risk than in countries without them. They cite evidence of cashless, organized crime, while terrorists in Europe typically use small amounts in cash transactions, well below the enacted thresholds. In addition, there is a risk that determined criminals will switch to alternative payment methods and become more sophisticated, creating new problems for state authorities (Passas, 2017).

Besides, as far as businessmen are concerned, it has been observed that restrictions imposed on cash payments are not always effective. It was noted that often illegal activities were transferred from member states with payment restrictions to EU countries where they were not established. In addition, it was found

that some business sectors in countries with restrictions were at a financial disadvantage compared to countries without such restrictions, resulting in inequality in the EU market (ECORYS). Besides, as a result of the spread of cashless methods, there is a high risk of increased attacks on electronic payment systems (Górniewicz, Obczyński, Pstruś, 2014).

Another problem of setting thresholds for cash payments may arise from the fact that limits on cash payments may restrict freedom of contract within the European Union and the freedom of consumers to decide how they want to pay for their chosen service, especially those who are tied to cash, such as pensioners. Vulnerable social groups that do not have access to e-banking due to their inability to understand the technology or lack of internet access as a result of not having enough money to purchase modern electronic equipment, or through deliberate lack of access to banking services will suffer greater negative consequences and be further marginalized (Passas, 2017). In addition, there is a risk that central banks' monetary policies will deliberately move toward negative interest rates, providing an incentive to invest cash assets in riskier investments instead of holding them in deposits, losing value (McAndrews, 2017; Rogoff, 2016).

F. Schneider has demonstrated that reducing cash may not exactly mean fighting crime for the following reasons (Schneider, 2019):

- use of other means of storing and transferring illegally acquired assets without leaving traces, such as prepaid instruments, precious metals, diamonds,
 - using false identities and fake companies,
 - the use of alternative transfer methods, beyond the official banking route and unregistered by financial institutions, such as Hawala banking or private virtual currency programs,
 - the use of cyber money (bitcoin) and other alternative electronic means due to technological advances.
- Besides, the introduction of limits on cash payments may entail additional administrative and technological costs as a result of the spread of cashless payments.

In conclusion, the SWOT analysis of the establishment of limits on cash payments in EU countries points to potential benefits related to improved fiscal supervision and monitoring of transactions, but also to the risk of exclusion of certain social groups and increased risks related to data security. The decision to introduce limits should be well thought out and take into account all the aspects mentioned.

Conclusions

Cash payments in modern payment systems play an important role, despite the development of modern financial technologies. Cash, due to its characteristics such as anonymity, accessibility and tangibility, is still crucial in the daily lives of consumers and in low-value transactions.

The role of cash as a reserve for emergencies and its high acceptability in society are also important, research shows. However, changing shopping habits, especially those related to the growth of online shopping and the development of cashless payment technologies, are influencing a dynamic transformation in the ways in which transactions are made.

The research hypothesis set forth in the paper has been verified positively. The SWOT analysis shows that the introduction of cash payment limits in European Union countries, aimed at preventing financial crime and increasing the transparency of tax systems, is controversial. Its results can serve as a basis for further and more detailed analysis and implementation of limits in all EU-27 member countries from 2027. Despite potential benefits, such as reducing the size of the shadow economy, increasing financial transparency and improving security, the establishment of limits on cash payments carries the risk of negative social and economic consequences, which require taking into account the payment preferences of different social groups and providing alternative payment solutions for the digitally excluded. Restrictions may lead to the relocation of illegal activity to countries without limits or the development of alternative payment methods that are more difficult to track, as well as an increase in the number of forms of unrecorded payments.

In conclusion, in the context of the trend of central bank digital currency (CBDC) payment modifications, the future of payment systems will require skillful balancing between traditional forms of payment and

modern technological solutions. It will be crucial that these transformations take into account the needs of all segments of society and provide access to different forms of payment. The introduction of CBDCs, with a particular focus on the money-dating function, could open up new opportunities for cash management while supporting existing cash systems.

Cash and cashless payments can coexist, complementing each other to maximize the benefits of both forms of monetary transactions. In light of today's challenges and trends, especially those related to digitization and economic dynamism, the flexibility and adaptability of payment systems will be crucial to the future of both global and local economies. Supporting the integration of CBDCs with traditional forms of payment can help build a more sustainable and crisis-proof financial system.

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