



## The evolution of payment instruments

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### ABSTRACT

The aim of this article is to characterize the changes in the market for payment services in Poland due to high regulatory activity in this area at the EU level. The concept of payment instruments has been characterized in regard to the current Polish and global market of banking services. The legal aspects of payment instruments have also been described, along with the presentation of the current situation on the market and the factors determining the development of payment instruments.

**Keywords:** payment system, regulation of payment instruments

### 1. INTRODUCTION

The development of retail payments, as well as many of the innovations occurring in this area, entails legal changes which are necessary to cover the regulation and supervision of the newly created payment services. So far, the market for payment services has been approached differently in various European countries, especially in the case of services provided by non-banking sector (eg. online payment)<sup>1</sup>.

In recent times, high activity in the regulatory area of payment services can be seen on both the EU and national levels. This activity is due to the expansion of European integration through the strengthening of institutions of the common market, standardization and ordering of legal principles in the provision of payment services in all countries of the European Union

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<sup>1</sup> M. Polasik, K. Maciejewski, *Innowacyjne usługi płatnicze w Polsce i na świecie*, Materiały i Studia, Zeszyt nr 241, Warszawa 2009, Wydawnictwo Narodowy Bank Polski Departament Edukacji i Wydawnictw, s. 15.

(EU) and the introduction of regulations, which are designed to protect the interests of the consumers. In terms of regulation of the payment system statute of the European Central Bank (ECB) authorizes this institution to issue regulations that support the stability and efficiency of payment systems in the euro area<sup>2</sup>.

These ideas were reflected in the issuance of normative acts and other documents took the form of the first so-called EMD Directive of the European Parliament and Council Directive 2000/46/EC of 18 September 2000 regarding undertaking and conducting business of electronic money institutions and the prudential supervision of the business (*Electronic Money Directive I - EMD I*). In this way, the EU implemented the principle of free movement of capital, while supporting directly or indirectly, the principle of free movement of services, goods and people.

At that time, the area of payment services also lived up to see new regulations: the Directive of the European Parliament and of the Council 2007/64/EC<sup>3</sup> of 13 November 2007 on payment services in the internal market (*Payment Services Directive I – PSD I*) which sorted out issues related to the provision of transfer of money and consolidated requirements for payment service providers.

Legal regulations, in addition to the desired effects, have hampered the development of new systems of money and, at the same time, raised doubts about interpretation which led to a different definition of payment instruments in different countries of the community. An attempt to remove the imperfections of Directive 2000/64/EC was made by introducing the Directive of the European Parliament and Council Directive 2009/110/EC<sup>4</sup> of 16 September 2009 on the undertaking and conducting business of electronic money institutions and the prudential supervision of the business (*Electronic Money Directive II - EMD II*) which, together with the Directive on forming the market for payment services, laid the foundation for the regulation of electronic money.

An adjustment to changes resulting from the development of the market for payment services, in particular those resulting from the rapid technological development in the field of electronic and mobile payments, along with the emergence of new types of payment services, was the main reason behind the publication of the new EU Directive of the European Parliament and of the Council (EU) 2015/2366<sup>5</sup> of 25 November 2015 on payment services in the internal market (*Payment Services Directive II - PSD II*). The provisions of the PSD II will affect mainly the activities of banks, payment institutions or companies offering various types of cards (shops, fuel, etc.)<sup>6</sup>.

Since their introduction to the Republic of Poland's free market economy, the Directives were subjected to gradual implementation into the Polish law. One of the main reasons for the introduction of EU regulations was to ensure proper protection of those involved in the process of payment. The protection concerned primarily the holders (users) of payment instruments such as, for example, credit cards, due to their weaker economic position. Extra attention was given to the need to protect enterprises accepting payment by

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<sup>2</sup> A. Iivarinen, H. Leinonen, M. Lukka, V. Saarinen, *Regulation and Control of Payment System Risks – a Finnish Perspective*, Bank of Finland Studies, 2003, s. 17.

<sup>3</sup> Dz. Urz. UE L 319/1 z dnia 5.12.2007.

<sup>4</sup> Dz. Urz. UE L 267/7 z dnia 10.10.2009.

<sup>5</sup> Dz. Urz. UE L 337/35 z dnia 23.12.2015.

<sup>6</sup> R. Bujalski, *UE unowocześnia regulację rynku usług płatniczych*, <http://www.lex.pl/czytaj/-/artykul/ue-unowoczesnia-regulacje-rynku-uslug-platniczych>, (03.07.2016).

payment instruments, eg. using payment cards (merchants), along with the terms of legal and competitive aspect<sup>7</sup>.

We can say that the evolution of payment systems is still going on. Still, there are new forms thereof. The variable is also a kind of and how to use them in particular countries. It depends on the tradition of the data groups of the willingness to borrowing or depositing cash for future expenses. It is a decisive factor in choosing a credit card or debit card. A significant role is played by regulations restricting access to participation payment systems, the cost of telecommunications connections and the number of the users of this type of payment methods<sup>8</sup>.

## **2. EU REGULATIONS IN THE FIELD OF PAYMENT INSTRUMENTS**

The legislative activity of the EU in the field of payment instruments includes the involvement of many institutions, as well as a wide range of used instruments. The European Commission can be seen as the leading institution which acts as the author or initiator of the regulations. Banking institutions, including commercial banks, central banks, the European Central Bank (ECB) and the Bank for International Settlements<sup>9</sup> also play a vital role in indicating the direction of the regulations.

The ECB defines a payment instrument as a tool or set of procedures to transfer funds from the payer to the recipient. D. Rambure and A. Nacamuli they show and that payment instruments are agreed between the seller and recipient<sup>10</sup>. These instruments are the "raw material" of payment systems. They develop in response to the demands of simplicity to use, cost reduction, safety and more information, as well as a result of technological development.

According to Directive 2007/64/EC a payment instrument is "any personalized device or any set of procedures agreed by both the user and payment service provider in order to initiate a payment order". Cash is also a payment instrument, which apart from the possibility of being paid with, represents a certain monetary value in itself. The basic payment instruments include: credit transfer, direct debit, credit cards, checks and cash settlement<sup>11</sup>.

The most important EU acts regulating the sphere of payment include<sup>12</sup>:

- Directive of the European Parliament and of the Council 2007/64/EC of 13 November 2007 on payment services in the internal market amending Directives 97/7/EC, 2002/65/EC, 2005/60/EC and 2006/48/EC and repealing Directive 97/5/EC,
- Directive of the European Parliament and of the Council 2009/110/EC of 16 September 2009 on undertaking and conducting business of electronic money

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<sup>7</sup> M. Grabowski, *Instrumenty płatnicze w prawie polskim*,

<https://depotuw.ceon.pl/bitstream/handle/item/327/Instrumenty%20P%C5%82atnicze%20w%20prawie%20polskim.pdf?sequence=1>, (03.07.2016).

<sup>8</sup> R. Mann, *Credit Cards and Debit Cards in the United States and Japan*, *Vanderbit Law Review* 2002, No. 55, s. 8.

<sup>9</sup> M. Grabowski, *Instrumenty płatnicze w prawie polskim* ..., op. cit.

<sup>10</sup> D. Rambure, A. Nacamuli, *Payment Systems. From the Salt Mines to the Board Room*, Palgrave Macmillan 2008, s. 23 i n.

<sup>11</sup> A. Iwańczuk-Kaliska, *Przemiany systemów płatniczych i ich konsekwencje dla banków centralnych*, Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu, Poznań 2014, s. 28.

<sup>12</sup> W. Góralczyk (red.), *Problemy współczesnej bankowości. Zagadnienia prawne*. Wydawnictwo LEX a Wolters Kluwer business, Warszawa 2014, s. 260.

institutions and the prudential supervision of the business, amending Directive 2005/60/EC and 2006/48/EC and repealing Directive 2000/46/EC,

- regulation of the European Parliament and Council Regulation (EC) No 924/2009 of 16 September 2009 on cross-border payments in the Community and repealing regulation (EC) No 2560/2001,
- regulation of the European Parliament and of the Council (EU) No 260/2012 of 14 March 2012 establishing technical and business requirements for credit transfers and direct debits in euro and amending Regulation (EC) No 924/2009 (commonly called SEPA *end-date regulation*),
- Directive of the European Parliament and of the Council (EU) 2015/2366 of 25 November 2015 on payment services in the internal market amending Directives 2002/65/EC, 2009/110/EC, 2013/36/EC and Regulation (EU) No 1093/2010 and repealing Directive 2007/64/EC.

The premise of Directive 2007/64/EC was to standardize and systemize legal norms in the area of provision of payment services in the area of all the EU countries with the implementation of regulations aimed at protecting the interests of consumers m. al. by improving the transparency of the provision of payment services and charged for these services fees<sup>13</sup>.

It applies to electronic payments - in particular credit transfer, direct debit, as well as payments made with payment cards and through other electronic channels (eg. mobile payments). The Directive has made payments faster and more secure. Complementation to Directive 2007/64/EC is comprised of<sup>14</sup>:

- regulation (EU) No 924/2009<sup>15</sup> which eliminated variable payment charges paid by the users of payment services for domestic and cross-border payments in euro within the EU. The regulation applies to all payments processed electronically,
- regulation (EU) No 260/2012<sup>16</sup> on the date of migration to SEPA system which constitutes another step, establishing deadlines for migration to system-wide credit transfers and direct debits, replacing the ones applied by individual state systems of domestic and cross-border payments in euro within the EU (February 1, 2014 year for the euro area countries). Supplements to the regulatory framework include: the jurisprudence of the Court of Justice and the decisions taken by the Commission in the context of competition law in the area of retail payments.

The work on the amendments to the e-money Directive was largely dictated by the need to ensure coherence between the Directive 2007/64/EC and the law regulating issues related to electronic money. The result of this work was Directive 2009/110/EC<sup>17</sup>, whose primary aim is to remove barriers of entry for parties interested in the e-money market and to facilitate

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<sup>13</sup> F. A. Schäfer, V. Lang, *Die aufsichtsrechtliche Umsetzung der Zahlungsdiensterichtlinie und die Einführung des Zahlungsinstituts*, BKR 1/2009, s. 11.

<sup>14</sup> Komisja Europejska, *Wniosek*, Dyrektywa Parlamentu Europejskiego i Rady w sprawie usług płatniczych w ramach rynku wewnętrznego oraz zmieniająca dyrektywy 2002/65/WE, 2013/36/UE i 2009/110/WE i uchylająca dyrektywę 2007/64/WE, file:///C:/Users/Justyna/Downloads/COM\_2013\_547\_PL\_ACTE\_f.pdf, (04.07.2016).

<sup>15</sup> Dz. Urz. UE L 266/11 z dnia 9.10.2009.

<sup>16</sup> Dz. Urz. UE L 94/22 z dnia 30.3.2012.

<sup>17</sup> I. Pyka, J. Cichy (red.), *Innowacje w bankowości i finansach*, Zeszyty Naukowe Wydziałowe 173, Wydawnictwo Uniwersytetu Ekonomicznego w Katowicach, Katowice 2013, s. 232.

the taking up and conducting business of issuing electronic money in order to ensure a level playing field for all payment service providers<sup>18</sup>.

Since the adoption of Directive 2007/64/EC on the retail payments market, significant changes have occurred in terms of technological innovation, visible in the rapid growth of electronic payments and payments made via mobile devices and the appearance of new types of payment services on the market. The existing legal framework failed to keep pace with these changes, and therefore, created the need to replace Directive 2007/64/EC - the new regulation<sup>19</sup>.

In November 2015, the European Parliament and the Council (EU) adopted Directive 2015/2366 on payment services in the internal market, which will replace the existing Directive 2007/64/EC. Deadline for implementation of the Directive by the EU Member States expires on January 13, 2018.

Using the EU Directive 2015/2366 the legislator wants to strengthen and facilitate the development of e-economy by lowering transaction costs and increase the security of transactions through:

- the protection of consumer's interests, including the regulation and supervision of the acquisition of new payment services,
- standardization of payments, particularly on an international level,
- the usage and enhancement of the development of new online and mobile payment technologies,
- increasing competitiveness by allowing new entrants and regulation of their activities.

Directive 2015/2366 introduces the emergence of a new category of service providers in the market for payment services. In addition to banks, payment institutions and postal operators, new institutions called TPP (*Third Party Provider* - TPP) will emerge and will be able to provide two types of new services. Strong authentication of clients will be introduced; in order to initiate payment, identification of the customer will be required by means of at least two independent authentication methods - eg. via SMS code and biometric solutions. Additional charges for consumer credit card payment will be prohibited but surcharge will still be allowed for the use of business cards. Losses caused by unauthorized transactions will be covered by the payment service provider and the customer up to the value of EUR 50 (up till now, this threshold was 150 EUR)<sup>20</sup>.

### **3. THE REGULATIONS OF MARKET FOR PAYMENT SERVICES IN POLAND**

Poland has been an EU member since 2004. The harmonization and integration measures taken at EU level have had a direct impact on our country. Unified internal market of the EU, ensuring free movement of goods, services, labor and capital must be based on an integrated payment market. EU directives require transposing into law state, but the regulation

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<sup>18</sup> M. Drażyk, *Uzasadnienie*, <https://legislacja.rcl.gov.pl/docs//2/24838/24870/dokument64607.pdf>, (05.07.2016).

<sup>19</sup> A. Jankowska-Galińska, *PSD2 zmieni rynek nowoczesnych usług płatniczych*, <http://www2.deloitte.com/pl/pl/pages/doradztwo-prawne/articles/alerty-prawne/psd2-platnosci-nowoczesne.html>, (05.07.2016).

<sup>20</sup> *Wszystko, co chciałbyś wiedzieć o PSD2 ...*, <http://www.bluemedia.pl/pressroom/blog-fintech/wszystko-co-chcialabys-wiedziec-o-psd2>, (06.07.2016).

is applied directly after the announcement across the EU and does not require implementation<sup>21</sup>.

On the basis of the Act of 12 September 2002 on electronic payment instruments, Polish law was introduced to the concept of electronic payment instruments. The science of law two contradictory interpretations of this concept were present. The main area of concern was the classification of the so-called electronic banking into electronic payment instruments in addition to the payment cards and electronic money.

Until the third quarter of 2011 in Poland there were no regulations governing payment services or supervising the payment services market. The lack of regulation of brokers offering payment services resulted in, among others, the fact that parties could form and carry out their activities under the general business regulations. This situation led to a variety of consequences, (including negative ones) and showed the need for regulation of this part of the financial market<sup>22</sup>.

The presented evidence led to the adoption of the 19 August 2011 Act Payment Services which regulates the activities of all payment service providers in Poland. The Act came into force on 24 October 2011. According to this law, activities in respect to payment services can only be conducted by payment service providers. The legislation has introduced two new terms of intermediaries providing payment services: the national payment institutions and payment services office. The Act sets out the conditions for payment services, and the right and obligations of market participants. The anticipated new regulations have proved insufficient. We started work on amending the Act Payment Services as early as 2012. The purpose of which was introduce the changes in joining single legislative regulations for the market for payment services, including regulations concerning the issue of card payments.

The Act of 12 July 2013 on the amendment of the Law on payment services and certain other acts was published on 6 September 2013. The amendment implemented the so-called. Second Council Directive 2009/110/EC of the EMD into national law. The amendment of the Act introduced new regulations the issuance, redemption and distribution of electronic money and the creation, organization and operation of electronic money institutions and the supervision of these entities<sup>23</sup>.

Amendments to the Act of 12 July 2013 have proven to be inadequate, because over the course of its announcement, another change has already been enacted, ie. The Act of August 30, 2013 on the amendment of the Law on Payment Services<sup>24</sup>. The purpose of this amendment was to regulate the basic principles of functioning of the national payment transactions using payment cards. The amendment introduced and defined new concepts of key importance to the market of domestic card transactions. The definition of interchange fees is of major significance, ie. the fee charged for transactions with payment cards by the card issuers from merchants through acquirers<sup>25</sup>. The primary change is to determine the maximum rate of the interchange fee in the amount of 0.5% of the transaction value. The legislature

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<sup>21</sup> J. Górka, *Efektywność instrumentów płatniczych w Polsce*, Wydawnictwo Naukowe Wydziału Zarządzania Uniwersytetu Warszawskiego, Warszawa 2013, s. 36.

<sup>22</sup> G. T. Woźniewska, *Problemy rynku usług płatniczych w Polsce po zmianach regulacyjnych*, file:///C:/Users/Justyna/Downloads/743-6656-1-PB.pdf, (06.07.2016).

<sup>23</sup> Ibidem

<sup>24</sup> Por. Dz. U. 2013, poz. 1271. Ustawa obowiązuje od 1 stycznia 2014 r.

<sup>25</sup> M. Verdier, *Interchange fees and incentives to Invest in payment card systems*, "International Journal of Industrial Organization", Vol. 28, No. 5, September 2010, s. 539-554.

intended that this prevention of the use of excessive interchange fees will contribute to increase of the availability of non-cash payment method<sup>26</sup>.

Another amendment to the law on payment services<sup>27</sup>, which entered into force January 29, 2015, introduced the definition of debit and credit card, the term "merchant fee" which consists of: the interchange fee, margin settlement agent and payment system (ie. the fee for the payment transaction performed using a payment card which is the revenue of the organization of card). The amendment reduced the rate of the interchange fee of 0.5% of the payment transaction to 0.2% of the value of transactions made using a debit card, or 0.3% of the value of transactions made by credit card<sup>28</sup>.

#### **4. CONCLUSIONS**

Both at the EU and national levels in recent times can be observed high activity in the regulatory area of payment instruments. A set of legal acts related to the amendment of the EU Directive on payment services, the so-called. Directive 2015/2366 and amendment of existing national legislation (act on payment services) are changing the European and domestic market for payment services.

Payment instruments are a component of non-cash payments, they play a very important role in both Polish and global banking market. The use of modern information and communication technologies is constantly increasing, which is reflected in the increasingly innovative solutions in the field of e-payments. It is expected that banks will continue to grow and improve the most popular distribution channels of their services.

The process of modernization of payment instruments is a major challenge for policy makers and practitioners, as it includes both the tasks relating to the formulation of strategic plans to introduce new regulations, the development of common standards and the use of modern technologies<sup>29</sup>. Payment instruments form the main infrastructure of the financial market and support the management of the economy.

#### **References**

- [1] M. Verdier, Interchange fees and incentives to Invest in payment card systems. *International Journal of Industrial Organization*, Vol. 28, No. 5, September 2010, 539-554.
- [2] T. Khiaonarong, J. Liebenen, *Banking on Innovation. Modernisation of Payment Systems*, Springer Company 2009, 1.
- [3] A. Iivarinen, H. Leinonen, M. Lukka, V. Saarinen, Regulation and Control of Payment System Risks – a Finnish Perspective, *Bank of Finland Studies*, 2003, 17.

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<sup>26</sup> G. T. Woźniewska, *Problemy rynku usług płatniczych w Polsce po zmianach regulacyjnych ...*, op. cit.

<sup>27</sup> Por. Dz. U. 2014, poz. 1916. Nowelizacja ustawy o usługach płatniczych uchwalona w dniu 28 listopada 2014 r. została ogłoszona w Dzienniku Ustaw w dniu 29 grudnia 2014 r.

<sup>28</sup> G. T. Woźniewska, *Problemy rynku usług płatniczych w Polsce po zmianach regulacyjnych ...*, op. cit.

<sup>29</sup> T. Khiaonarong, J. Liebenen, *Banking on Innovation. Modernisation of Payment Systems*, Springer Company, 2009, s. 1.

- [4] R. Mann, Credit Cards and Debit Cards in the United States and Japan. *Vanderbit Law Review* 2002, No. 55, 8.
- [5] D. Rambure, A. Nacamuli, Payment Systems. From the Salt Mines to the Board Room, Palgrave MacMillan 2008, 23.
- [6] D. Orrell, R. Chlupatý, The evolution of money, Columbia University Press, 2016, 60.
- [7] J. B. Howcroft & John Lavis. Evolution of the Payment Systems of London Clearing Banks. *The Service Industries Journal* Volume 7, 1987 - Issue 2, 176-194
- [8] Bell, T. 1980. Cheque Truncation - Flight of Fancy or Force Majeure?. *Bankers' Magazine*, 224(1632): 10–12
- [9] Edwards, J. 1983. Overcoming Obstacles to Cheque Truncation. *Bankers' Magazine (USA)*, 166(4): 11–12
- [10] Harry Scarbrough, Ronnie Lannon. (1989) The management of innovation in the financial services sector: A case study. *Journal of Marketing Management* 5: 1, pages 51-62
- [11] Keith Pond. (1989) Cheque Truncation - A Legal and Practical Perspective. *The Service Industries Journal* 9: 1, pages 110-126
- [12] Nicholas J. Ashill, Kevin M. Davies, Ian W. Thompson. (2003) Characteristics of marketing organisation in the New Zealand financial services sector. *International Journal of Bank Marketing* 21: 2, pages 80-93
- [13] David B. Humphrey. Replacement of cash by cards in US consumer payments. *Journal of Economics and Business* Volume 56, Issue 3, May–June 2004, Pages 211-225
- [14] Jeffrey M. Lacker, John A. Weinberg. Payment economics: studying the mechanics of exchange. *Journal of Monetary Economics* Volume 50, Issue 2, March 2003, Pages 381-387
- [15] Jeffrey M. Lacker. Clearing, settlement and monetary policy. *Journal of Monetary Economics* Volume 40, Issue 2, October 1997, Pages 347-381

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