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REMARKS ON THE DIRECTION OF CHANGES IN THE FORMS OF MONEY

Summary

The article analyses the evolution of forms of money, focusing on the transition from material to dematerialized forms, such as digital money. The author emphasizes that money is a system of organizing information about exchange, which has evolved towards "pure" information. New forms of money, such as cashless and digital money, are a natural result of this evolution, supported by the development of information technology and computerization.

In the context of this evolution, the author positively reinterprets Gresham-Copernicus's Law, which traditionally states that "bad money drives out good." The author argues that this law actually reflects the process of dematerialization of money, where more efficient forms of exchange replace less efficient ones. Thus, the history of money is seen as a process of development, rather than degradation of the monetary system.

The author proposes that true cashless money should be considered as one that has completely detached from its material form, although it may be expressed in current paper money units. Examples of such forms include artificial currency units like SDR or Trade Dollar, and other autonomous digital money systems. These forms of money differ in construction, scope, and motivation for their creation, but they share the absence of a physical form.

Keywords: talent management, knowledge-based organization, management model talents in a knowledge-based organization, efficiency of talent management.

UWAGI NA TEMAT KIERUNKU PRZEMIAN FORM PIENIĄDZA

Streszczenie

Artykuł analizuje ewolucję form pieniądza, skupiając się na przejściu od form materialnych do zdematerializowanych, takich jak pieniądz cyfrowy. Autor podkreśla, że pieniądz jest systemem organizacji informacji o wymianie, który ewoluował w kierunku „czystej" informacji. Nowe formy pieniądza, takie jak pieniądz bezgotówkowy i cyfrowy, są naturalnym wynikiem tej ewolucji, wspieranej przez rozwój technologii informacyjnej i komputeryzacji.

W kontekście tej ewolucji autor pozytywnie reinterpretuje prawo Greshama-Kopernika, które tradycyjnie stwierdza, że „zły pieniądz wypiera dobry". Autor twierdzi, że prawo to w rzeczywistości odzwierciedla proces dematerializacji pieniądza, w którym bardziej wydajne formy wymiany zastępują mniej wydajne. Tak więc historię pieniądza postrzega się jako proces rozwoju, a nie degradacji systemu pieniężnego.

Autor proponuje, aby prawdziwy pieniądz bezgotówkowy był uważany za taki, który całkowicie oderwał się od swojej formy materialnej, chociaż może być wyrażony w obecnych jednostkach pieniądza papierowego. Przykłady takich form obejmują sztuczne jednostki walutowe, takie jak SDR lub dolar handlowy, i inne autonomiczne systemy pieniądza cyfrowego. Te formy pieniądza różnią się konstrukcją, zakresem i motywacją ich powstania, ale ich wspólną cechą jest brak formy fizycznej.

Słowa kluczowe: zarządzanie talentami, organizacja oparta na wiedzy, model zarządzania talentami w organizacji opartej na wiedzy, efektywność zarządzania talentami.

Introduction

For the purposes of this article, metaeconomic studies of the forms of money and their transformations were conducted, including studies of substitute money and its historical examples. The concept of new form of money used in the article refers to new ways of organizing information about exchange, which are based on so-called real non-cash money (this is another concept), i.e. money that does not appear in any cash form. Money, which is in fact a system of organizing information about exchange, evolved through its successive material forms precisely towards a creation of pure information about exchange. Hence, new immaterial forms of money – non-cash money, and in particular digital money – are a direct consequence of this evolution. The history of money can therefore be read as a process of liberation of information from the various material forms that money has taken. It is worth being aware that it is only today that we can fully perceive the nature of this process – armed with the language of cybernetics and information theory and with computers that help store information. It is therefore not surprising that the emergence of such information forms of money is linked to the development of mass computerization.

The aim of the paper is to positively reinterpret (in the context of the logic of the transformation of forms of money) the Gresham-Copernicus law, which in its colloquial wording: "better money is forced out of circulation by worse money", is misleading, because it may give the impression that in the course of the evolution of money we are constantly dealing with the degradation of money, not its development.

Due to the reference to the history of money, the literature used for this purpose is also necessarily historical. The main method was literature studies and synthesis of the collected material. The literature consisted of existing scientific and numismatic studies devoted to money[1].

1. A synthetic approach to the direction of money transformation

Describing the history of money seems almost redundant at present, mainly because of the large number of existing studies. That is why contemporary issues are coming very often to the fore. This can be easily observed in the example of many textbooks and monographs devoted to the subject of money – the history of money usually takes up a small percentage of the text in them. In the preface to his enormous study of the history of money, G. Davies suggests that the difficulties of scientific experimentation on monetary phenomena mean that it is history that provides us with this "laboratory" or "guide to more or less adequate alternatives" (1996, XVII). People

[1] In relation to the principles of citation, some explanations are needed. If author quote a work published in Polish, the quote is in his own translation. The work was first created in Polish – the translation was done with support of Google Translator.

have struggled with various contemporary problems in the area of money in the past and tried to solve them with greater or lesser success. In this context, history is a mine of examples showing how these problems have been dealt with so far. It is also a great lesson showing that the institution of money does not necessarily have to function only in the way it functions today[2].

Looking at the history of money, one more issue becomes extremely important. It is not only about the anthology of cases that happened in the past, but above all about the logic of changes that occurred over long periods of time in the construction and functioning of money[3]. These changes result directly from the essence of money and this essence can be read from their course.

Following the formulation of the Gresham-Copernicus law that better money is forced out of circulation by worse money and applying it to long-term processes[4], one could say that the best money was the one that was used the longest time ago and was replaced by worse forms of money in the course of history. So, the best money, in such a case, would be, for example, commodity money, and we would be dealing with a systematic degradation of money all the time. Is this really the case? Intuition itself suggests that over time we are dealing with a rationalization rather than a degradation of the money system. This rationalization is manifested in the fact that the money system, thanks to the successive forms of money, becomes more effective, i.e. making an exchange becomes easier, costs less effort and time. So where does the misunderstanding come from?

The misunderstanding lies in the very formulation of the Gresham-Copernicus principle[5]. "This law states that worse money drives better money out of circulation" (Kaźmierczak, 1992, p. 14). There are errors in the terms used. Firstly, but perhaps not most importantly, one can start a discussion about the concepts of "better" and "worse" used to describe successive forms of money, which are evaluative concepts and for this reason alone can distort the description. Secondly – and this is the cause of all the confusion – the above adjectives were wrongly assigned to money. According to the Gresham-Copernicus law, this law is about the relationship between better

[2] Significant examples of stubbornness and conservatism in the field of views on money from the period when gold was considered the most perfect money are presented by, among others, J.K. Galbraith in his monograph: *Pieniądz. Pochodzenie i losy*, J.K. Galbraith, 1982, Warszawa: PWE.

[3] Of course, as G. Simmel claims in the preface to his work on the philosophy of money, the immanent meaning and significance of money are not exhausted solely in its historical forms and how they have changed throughout history. "Meaning and significance come from elements of a conceptual, psychological, ethical nature (…). Historical forces are indeed responsible for their realization" (*Filozofia pieniądza*, G. Simmel, 1997, Poznań: Wydawnictwo Fundacji Humaniora, p. 10).

[4] D. Kinley similarly extends the Gresham-Copernicus law to a more general principle, which states: "when a community in which there is free and intelligent competition has a choice between different means of payment, it will use the cheapest means that will do its job under the existing conditions. Or still more generally: In a community in which there is free and intelligent competition, there is a constant effort to perform each economic service by the means that gives the best net result" (*Money. A Study of the Theory of the Medium of Exchange*, D. Kinley, 1904, New York, London: The MacMillan Company, p. 58).

[5] For example, A. Krzyżanowski, who conducts his considerations in great detail, when discussing the Gresham-Copernicus law – although he notices certain inaccuracies, especially in terminology – is satisfied with general statements (*Nauka o pieniądzu i kredycie*, A. Krzyżanowski, 1922, Warszawa, Kraków: Nakładem księgarni J. Czarneckiego, wyd. II, p. 40). Finally, he regards the cases of the Gresham-Copernicus law as exceptions to the more general opposite trend, which causes better money to remain in circulation (*Pieniądz*, A. Krzyżanowski, 1911, Kraków: Akademia Umiejętności, pp. VII-VIII).

money and worse money. Meanwhile, and this is obvious, it is of course about a better or worse commodity in the role of money[6]. The better product with a higher non-monetary use value (e.g. a coin with a higher metal content) is retained (hoarded) and worse products remain in circulation, with a lower non-monetary use value, which no one currently wants to accumulate, but which still have the power to be an intermediary of exchange. In light of this, the Gresham-Copernicus law should be formulated as follows (already sticking to the terms better and worse, and referring in particular to the conditions that provoked its creation): a better product in the role of money is forced out of circulation by worse products in this role[7]. And it is not only about the possible conflict between the treasure gathering function and the function of enabling the exchange of goods[8].

In relation to money, we can notice the following: worse goods are better suited to fulfilling the symbolic functions of money[9] (money that symbolizes exchange, certifies it and enables further participation in exchange). The term: worse goods requires explanation. The point is that better money is money that is more money and less a commodity, i.e. it has greater value as money than as a commodity at a given moment. Throughout history, we are dealing with the process of decommodification of money, up to forms such as paper or electronic money (money-information). A. Kaźmierczak calls this process dematerialization of money (1992, p. 29), while Z. Grabowski uses the term desubstantialization to describe the process of occurrence of dematerialization of the forms of money (1975, p. 65)[10]. The process of dematerialization of money is essentially an attempt to reduce the costs of producing money itself and to increase the efficiency of exchange by reducing the costs of transactions.

2. The essence of money

The historicity of the forms of money (its transformations throughout history: both in terms of the material structure with which we most often identify money, as well as in terms of the functions it fulfills and the role it played in the life of societies) causes researchers of monetary phenomena to refrain from attempting a uniform approach to the essence of money. It is difficult to come across definitions of money in the literature devoted to it, and if they are, they are usually tautological in nature[11],

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[6] The already quoted A. Kaźmierczak writes, for example, "...silver was a better money. It gradually disappeared from circulation in individual countries" (*Pieniądz i bank w kapitalizmie. Zarys problematyki*, A. Kaźmierczak, 1992, Warszawa: PWN, p. 14). Although everyone knows what this is about, it is worth asking the question at such a moment: what is this better money that is disappearing from circulation?

[7] Of course, such a formulation cannot be left without comment. This sentence was only about the analogy with the traditional formula of the Gresham-Copernicus law.

[8] An interesting discussion of the Gresham-Copernicus law is presented in the article: *Prawo Kopernika-Greshama: rekonstrukcja metodologiczna*, J. Boruszewski, K. Nowak-Posadzy, 2018, *Ekonomista, 5*, pp. 554-577.

[9] "the lower the substantive value of undervalued money, the greater the chances that it will remain in circulation permanently" (*Wprowadzenie do nauki o pieniądzu*, Z. Grabowski, 1975, Warszawa: PWE, p. 97).

[10] T.H. Greco, in turn, writes that with the passage of time, forms of money become "less substantial and more ethereal", meaning precisely this reduction in the materiality of money, down to the form of accounting records or magnetic impulses (*New Money for Healthy Communities*, T.H. Greco, T.H. Greco, Jr., 1994 Publisher USA, p. 7. The explanation of the term "ethereal" can be found on p. 2 in footnote 4 of the cited work). K. Studentowicz mentions the discussion on the displacement of "commodity money" from circulation by "credit money" (*Aktualna dyskusja na reformą światowego systemu walutowego*, K. Studentowicz, 1969, Warszawa: Instytut Finansów, p. 4).

[11] K. Olivecrona draws special attention to the tautological nature of the definition of money (even functional definitions) in his book *The Problem of Monetary Unit*, K. Olivecrona, 1957, New York: The MacMillan Company.

as for example in J.K. Galbraith's statement that money is what we usually consider to be money (1982, 27 for example)[12]. The fact that the first historical form of money was commodity money influences the understanding of money as a commodity that is universally accepted in exchange to this day – this is how, for example, the authors of one of the contemporary economics textbooks define money (1994, p. 94). D. Begg, S. Fisher and R. Dornbusch do this even though a few sentences later they state that the essence of money is the social contract, not the physical substance in the form in which it occurs.

Many authors – following economic practices – do not bother with theoretical nuances and build the definition of money based on what is currently classified as financial resources. In this way, aggregates of the type M1, M2... etc. are created, which of course – apart from being useful for economic practice, for constructing statistics – do not contribute particularly to understanding the essence of money[13]. In fact, this type of reasoning is again limiting considerations to forms of money and additionally sometimes narrowing down in the historical sense only to the present. Additionally, the category of liquidity included in the description of phenomena related to money causes us to start looking at various financial resources in terms of how much they are money – so something like the degree of being money appears (Duwendag et al., 1995, p. 46)[14]. Many authors follow the functional approach in defining the essence of money[15] and define money as a medium of exchange, a unit of account, a means of storing value, etc. Meanwhile, for obvious reasons, this does not tell us anything about what money is, but what it does (what functions it performs) (Greco, 1994, p. 5).

Z. Grabowski in his book *Wprowadzenie do nauki o pieniądzu* wrote: "The attempt to include an exhaustive definition of contemporary money and that from thousands of years ago in one definition sins against the principle of historical understanding of phenomena" (1975, p. 7)[16]. This is true as long as we consider the material form in which it always appeared to be the essence of money. However, the physical form alone does not make money (Olivercrona, 1975, p. 10). Considering money only from this perspective would exclude from our considerations non-cash money, which does not take any physical form and can even exist only in the minds of those who use it (author is omitting here the discussion on whether information and its carrier itself do not always require some material form).

[12] The reader will find an excellent review of theoretical positions that mostly avoid defining money in: *Pieniądz*, A. Krzyżanowski, 1911, Kraków: Akademia Umiejętności.
[13] This is, for example, how the considerations in the German textbook *Teoria pieniądza i polityka pieniężna* are constructed, where it is said that money "should be viewed as part of financial resources" (*Teoria pieniądza i polityka pieniężna*, D. Duwendag, K.H. Ketterer, W. Kösters, R. Pohl, D.B. Simmert, 1995, Warszawa: Poltext, p. 39).
[14] Some people talk about the degree of being money (moneyness) due to the fact that money fulfills several functions and individual objects fulfill each of these functions in different ways and to different degrees – so from this point of view these objects are money to different degrees. Such reasoning is presented, for example, in: "Artificial Currency Units: The Formation of Functional Currency Areas", J. Aschheim, Y.S. Park, *Essays in International Finance, 114*, April 1976, Princeton, New Jersey: Princeton University, p. 1.
[15] Money "in contemporary economic science is most often defined (...) functionally" ("Pieniądz", Z. Fedorowicz, 1995, in: *Encyklopedia Biznesu*, W. Pomykało (ed.), t. 1, Warszawa: Fundacja Innowacja, p. 596).
[16] However, what is important from his considerations is that he believes that in the course of the development of money forms, its true essence emerges (*Wprowadzenie do nauki o pieniądzu*, Z. Grabowski, 1975, Warszawa: PWE, pp. 42-43).

Even such a perceptive mind as M. Friedman defined money as a form that is accepted in exchange: "money is something that finds universal acceptance and is exchanged for goods and services" (Friedman, 1994, p. 22). This "something" is an expression of Friedman's capitulation in going further towards defining the essence of money. In his definition, the form does not necessarily have to be material, but money is only a certain form. Perhaps shifting the emphasis from this "something" to "universal acceptance" could advance Friedman's reasoning. This way of approaching the problem is quite common, for example in J. Hawthorne's textbook *Theory and Practice of Money* one can find a similar formulation: "money is anything commonly acceptable in payment debt" (1981, p. 4). The situation changes when we try to touch the essence of money and go beyond the physical forms of its occurrence. The essence of phenomena is not of a material nature, but belongs to the world of concepts. We are looking for the essence of what a piece of silver, a brick of tobacco, cowrie shells, a printed rectangle of paper or a digital record on a bank account are at the same time when we use them in economic exchange.

We are brought closer to the essence of money by such phrases as: "money is a convenient <u>tool</u> used for centuries" (Galbraith, 1982, p. 28) or "It is a <u>machinery</u>" (Hawthorne, 1981, p. 13) (author's emphasis). They seem to suggest that money is a certain structure, a system. It remains to define the nature of this system in more detail. Following Michael Linton, author adopts the following definition, which, in my opinion, perfectly captures the nature of money: "Money is an information system we use to deploy human effort" (Greco, 1994, pp. 5-6). The phrase "information system" is key here.

What is common to all these material and immaterial forms of money that have appeared throughout history? Namely, that all of these forms were carriers of information necessary for making exchanges – information that the owner of money has provided a certain value to the community or has received money from someone else who has provided this value (Greco, 1994, pp. 5-6; see also: Brzeski, 1928, p. 14). Of course, the fact of universal consent to accept a specific information carrier in exchange (to accept a specific organization of the exchange information system) is extremely important – in fact, thanks to this consent, certain objects changed from a potentially useful information carrier into currently used money (Greco, 1994, p. 9)[17].

The question that arises is the question of the quality of information that the money system is supposed to provide. Each time, the choice of the form of money often very strongly determines what information the money will convey. If it is not appropriate, it means that the money is not appropriate. "From the point of view of social justice and economic efficiency, it is necessary for money to serve the community and not paralyze and destroy it" (Hawthorne, 1981, p. 13). T.H. Greco repeatedly emphasizes that the information flowing from the contemporary organization of the monetary system is inadequate and misleading, that this system should be organized differently – first

[17] T.H. Greco quotes here the words of E.C. Riegel from the book *Flight From Inflation. The Monetary Alternative*. This was already expressed earlier by the state theory of money announced by G.F. Knapp in 1905. According to it, the essence of money does not lie in its "commodity" material, but its value and itself is a product of law. It follows that at the moment when money is created, its content is separated from the value of the precious metal ("Teorie pieniądza niezależnego i ich zastosowanie", Z. Knakiewicz, 1981, *Zeszyty Naukowe Akademii Ekonomicznej w Poznaniu, 70*, Poznań: Wydawnictwo Akademii Ekonomicznej w Poznaniu, p. 65). J. Law expressed a similar opinion on this subject, considering money to be a "token of transfer" (50).

of all, according to him, the issuance of money should be demonopolized and depoliticized, because already at the source, i.e. during the issuance of money, there is a distortion of the information that money should carry. J. Aschheim and Y.S. Park emphasize that the appearance of artificial currency units – such as SDR (Special Drawing Rights) – resulted mainly from the need to rationalize economic calculations and more rational transmission of economic information (Aschheim, Park, 1976, p. 2)[18]. Since money is an information system, this system should be carefully planned and constantly improved to the extent possible – currently, we are most often improving something that we had not planned before, something that – one could say – happened by itself[19]. This can be seen as a call for a kind of postmodern deconstruction of money and, on this basis, the creation and synthesis of a new being that would be as closely adapted to our needs as possible.

3. The direction of change of money

The history of money can be divided into several periods, which are characterized by the fact that during each of them a specific, characteristic form of money functioned – the exchange information system had a relatively uniform character. These periods are: 1) barter, 2) commodity money, 3) bullion money, 4) paper money, 5) non-cash money[20].

Only the first of these periods seems not to take its name from the form of money that was characteristic of it, but this is only apparent. Since money is a system of information about exchange, then in a situation where information about exchange is not separated from the exchange itself, and this is precisely the case in barter, or direct exchange, then these two names (barter and direct exchange) are simultaneously the name of the form of money. It is usually said that within direct exchange we do not deal with money, but we can look at it in such a way that in every commodity accepted for exchange we see money, or some information about exchange. At the moment when this information about exchange begins to be embodied in only some goods, which take on the role of an intermediary in exchange, i.e. *de facto* this information is separated from the act of exchange itself, we are already dealing with another form of money, namely the form of commodity money.

Commodity money is characterized by the fact that some goods begin to function in a new role and become useful not only because they are goods, but also because they fulfill the symbolic role of money. Often, their consumer value temporarily decreases in favour of their monetary value. This is reflected, for example, in such shaping of the form of various goods that play the role of money that they even cease to be suitable for consumption and practical use (e.g. metal axes of unnatural dimensions that exclude their practical use). Commodity money – which is easy to deduce – therefore evolves towards using goods as money, in the case of which it is less necessary to give up the

[18] J. Aschheim and Y. S. Park list the following artificial currency units in order of appearance (date in parentheses): EUA – European Unit of Account (1961), SDR (1970), ECU – European Currency Unit (1970), Eurco (1973), Barclays-Unit (1974), Arcru (1974), AMU – Asian Monetary Unit (1974) and IFU (1975). The cited work is from 1976, so the examples provided end there (Aschheim, Park, 1976, p. 4). They claim that artificial currency units are "the wave of future" in the international monetary system (Ibidem, pp. 26-27).

[19] Monetary systems emerged as a result of spontaneous evolution ("An Agenda for Monetary Reform", T. de Vries, *Essays in International Finance, 95*, September 1972, Princeton, New Jersey: Princeton University, p. 1).

[20] These periods can be presented as one after another, but also as separate situations that lend themselves to separate descriptions. That is why author does not limit them to any time frame.

fulfillment of their consumption function by these goods. Metals systematically begin to dominate in exchange. The direct use of metal can be postponed to an indefinite future. A new form of money emerges: bullion money.

Bullion money differs from commodity money in that its function as an intermediary in exchange is even more symbolic, because it does not come at the expense of satisfying urgent human needs. Bullion as money is more abstract than, for example, cattle or fish used for the same purpose. And complete symbolization occurs when a coin appears, then a coin with an incomplete content of bullion, and finally dematerialized bullion money in paper form. Dematerialized bullion money, i.e. false paper money, is already the beginning of another form of money.

Paper money is already a completely symbolic representation of the values exchanged. After it is deprived of its connection with precious metals, its value is based on a social contract, most often supported by legal regulations. There is a danger that issuing authorities will abuse the possibility of printing an unjustified amount of currency. There is a need for precise regulations that would prevent such moves. The exchange information system is starting to become complicated. One of the next simplifications is cashless money circulation. The content of bank deposits (information) is becoming a potential new form of money.

We are dealing with non-cash money in the strict sense when it is autonomous, does not exist in cash form, although it can be expressed in cash currency units. We are observing attempts to operate such money systems based on artificial currency units (both internationally and locally)[21].

4. Advantages and disadvantages of the main forms of money in servicing exchange in the modern market economy

The functioning of the modern market economy is based on paper money and cashless money (mainly non real cashless money, i.e. only dematerialized paper money still exchangeable for paper cash – according to the terminology used in this article). It seems that with the invention of money, direct exchange (barter) has moved to the margins of economic life – it is still used in isolated communities and, for example, in the exchange of neighbourly services, where mutual help is somehow cancelled out, but it is no longer a classic direct exchange. The model of exchange organized on the model of barter is, in some sense, useful today in the construction of such exchange organization systems as clearing agencies[22], LETS systems (Local Exchange Trading Systems) or – of lesser importance for the entire economy – neighbourhood childcare clubs – but they are based in fact on real cashless money (money as information). With the complication of economic life, the effectiveness of barter as the main instrument of exchange has been exhausted – it is no longer possible to imagine a modern economy organized on the principle of direct exchange. The same applies to commodity money and bullion money (which is its more specialized and symbolic variety). It is hard to imagine that suddenly human society will devote resources of certain goods to serve the exchange of other goods and services. The same applies to precious metals. Precious

[21] Author described the functioning of this type of local exchange systems in his publications (eg.: Reichel, 2007a, 2007b, 1997).

[22] A specific example from Poland is the existence of a system for exchanging production surpluses (but not only) based on virtual money, the so-called "Green" ("Zielony") (https://zielony.biz.pl/).

metals, and gold in particular, no longer have monetary significance today – they have become a strategic resource, the reserves of which are a kind of security for the economies of those countries that possess it. Certainly, as in the case of direct exchange, from time to time on a very limited scale people refer and will probably refer to commodity money and bullion money as an intermediary in exchange – nevertheless, they most often appear only as a means of treasure gathering. In the case of commodity money, it is most often temporary hoarding, while in the case of precious metals – as already mentioned – of strategic significance.

For everyday economic life, and in particular for everyday transactions, we currently use paper money, which seems to be irreplaceable in this role, although of course we are slowly dematerializing this form of money. Always in history, when an exchange could not take place due to the lack of an intermediary in the exchange, symbolic representations of value were resorted to in the form of signs on paper, leather or metal. In times when the system of organizing information about exchange was based on commodity or precious metal money, the desire to make exchange easier, the desire to make it more effective, led in various places and times to the invention of paper money (more generally: symbolic money). These processes already indicate the suitability of such a form of money to handling exchange. However, as reality shows, the paper money system can be organized in various ways. Today, it has taken the form of many national systems, within which the state and banks (credit money) have a monopoly on money creation. Each organization of the money system carries positive and negative consequences, so we can probably expect many more changes and improvements to the form of money. Due to certain inconveniences of using previous forms of money, including paper cash, an even further symbolization of money was introduced – cashless circulation was created and the beginning of a new form of money was created: cashless money (real, autonomous).

Cashless settlements supported especially by a computer system perfectly fulfill their role in handling exchange in the modern market economy with its complex economic connections already stretching across the globe. Transporting any cash – even the lightest – over such distances has no chance of competing with electronic impulses, which can be transferred anywhere you want in one moment. Moreover, thanks to computerization, the cashless system creates ideal conditions for the parallel functioning of many (even dozens or hundreds) currencies within a single economic organism, today most often handled by one currency. Signs of the emergence of an increasing amount of such money organized in the most diverse ways can already be observed, also in the form of so called cryptocurrencies. It is difficult to say unequivocally what shape the organization of the exchange information system will take and what processes will dominate in it. However, it seems that there is room in the economy for healthy diversity also in the field of money, room for such systems as central bank digital currencies (CBDC) or such as LETS systems. The very fact that such creations are being created or their introduction is being considered indicates that there is a gap in the money system that they can potentially fill. The fact that many substitute money systems are being created today (organized sometimes in a very traditional and sometimes in a very modern way) may indicate some fundamental flaw in the current money system or some problems that it has encountered or caused. The locality of money, which is the main characteristic of substitute money systems, is also the main advantage of these systems and causes them to be created and to be created almost always and everywhere. It is worth recalling that all the first money systems were local in nature – monopolization actually came only with industrialization. Mass computerization once again creates conditions for the functioning of a certain optimal variety of currencies (a certain number of many local currencies), making their conversion process quick. The symbolism of money (above all) and its locality make the system of organizing information about exchange a system that is adaptable to the needs of society, while the availability of various money systems (competition between them) means that there can be pressure on the efficiency of these systems and, therefore, pressure on their greatest efficiency in handling exchange. In the modern market economy, there is a place for (and a need for) global money, regional money and local money – diversity in this area, as in any other, can be very beneficial. Such diversity has appeared and continues to appear spontaneously (even in periods of dominance of national currencies monopolizing exchange) due to substitute money, which were called into being, especially in difficult situations, out of necessity (and even very often against the law).

Conclusions

The article shows a certain developmental logic of money forms, drawing attention to the fact that the process leading from direct exchange, through commodity money, precious metal money, paper money, to contemporary cashless money, is not accidental. Existing studies on the history of money forms have largely correctly identified and described the above-mentioned forms of money, although they have often presented them in an unordered manner, as an anthology of events. The laws governing these changes were also correctly identified, namely: the drive to dematerialize (decommodify) subsequent forms of money and the Gresham-Copernicus law. In relation to the dematerialization of money the following categories have been introduced: dematerialized paper money, i.e. cashless money that is not real cashless money, and real cashless money i.e. autonomous, i.e. not occurring in cash form, although its value can be expressed in paper money units. In relation to the Gresham-Copernicus law, the concepts used in its formulation were positively reinterpreted and referred to the replacement of previous forms of money with subsequent, more perfect forms throughout history. The reinterpreted Gresham-Copernicus law states that when we have two types of money in circulation, the one that better meets the needs of exchange remains in circulation. Most often, this is the so-called previously worse money, which has less value as a commodity (the better one – as a commodity – is hoarded). This process leads to the creation of increasingly decommodified forms of money, which are ultimately only information about the exchange – such as currently: paper money and even more: cashless money in the form of e.g. digital money.

Presenting the history of the development of forms of money, the author proposes that real cashless money need to be considered as money that has completely separated itself from its material, yet symbolic paper form and does not exist in any material (cash) form. The circulation of such money is autonomous. Therefore, we are talking about real cashless money, and not only dematerialized paper money, when the non-cash form is still freely exchangeable for paper cash, as is the case, for example, with bank deposits today. To some extent, we can adopt a term already functioning in the literature to describe real cashless money (Aschheim, Park, 1976): artificial currency units. Artificial currency units, in addition to such entities as SDR, include, among others, Trade Dollar (or other units of commercial clearing agencies) or autonomous digital money systems, as well as the unit of money in LETS systems. The above-mentioned examples of currently functioning types of autonomous (real) cashless money have, of course, a common structural feature, that as virtual money they do not appear in cash form, however, of course there are differences between them in terms of their construction (their circulation system is organized differently), differences in scope (these systems serve other entities and areas of economic life) and differences regarding the motive for establishing them.

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