Legal Regulation of Electronic Money Turnover: Global Trends

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Abstract

[Purpose] To analyse the existing trends in the turnover of electronic money, and their relationship with the conventional cash turnover on the territory of the Eurasian Economic Union (EEU), in particular, in the legal system of the Republic of Kazakhstan (RK).

[Methodology/Approach/Design] Deduction, content analysis, comparative analysis, and other general and special research methods were used.

[Findings] As a result, the existing problems in the functioning of the type of money considered in this study were analysed. The study includes recommended measures to introduce amendments to legislation aimed at removing barriers to the functioning and circulation of electronic money, which will benefit the economic system of the given state.

[Practical Implications] The information presented in this article can be useful material for representatives of public authorities in the implementation of reforms to modernise the economic system, for a wide range of readers interested in the development of digital

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technologies and their impact on the commercial activities of subjects of the economic life of society.


**INTRODUCTION**

Electronic money is a *de facto* prepaid payment product, which is positioned as a payment service with limited functions. Electronic money performs many functions, namely: this type of money acts as a starting financial product for people who previously had no access to financial services; electronic money is needed to increase the availability of financial services due to a lower entry threshold (that is, reduced requirements for customer identification and their level of financial literacy); it performs the role of infrastructure and is the basis for other innovative projects, which include, for example, the issuance of cards (banking or transport), and online lending (NEKHAICHUK et al., 2019; POIER et al., 2022).

Electronic money can be characterised as a relatively new phenomenon present in the financial market. The consequence of this is the fact that the supervision of their turnover is still in the process of development. The above can be evidenced, for example, by the fact that there is no single, generally accepted definition of the phenomenon considered in the article, namely electronic money. Nevertheless, in modern conditions, the role of this type of money is becoming increasingly important since it is one of the unique forms of money evolution in the digital economy (PANOVA, 2018; PATASHKOVA et al., 2021). Based on the results of examining the information scope from various studies, it can be stated that, in the scientific literature, the issue of electronic money has been considered sufficiently. Notably, the previous studies were aimed at considering the purely technical aspects of the functioning of electronic money, while the aspects of legislative, and legal regulation of electronic money were not fully covered. Furthermore, a more detailed consideration of the history of the development and legislative consolidation of the functioning of this type of money in the context of the Eurasian Economic Union (EAEU), in particular in the legal system of the Republic of Kazakhstan (RK) has not been conducted (AYUDYA and WIDOWO, 2018; VOZNIUK et al., 2020).

To address these shortcomings, within the framework of this study, the main emphasis is placed on the analysis of the role of electronic money in the EAEU member states, in particular, the history of the development, functioning, and legislative consolidation of electronic money in the Republic of Kazakhstan will be covered. The theoretical consideration of the studied phenomenon is also included, identifying the most important and key features of electronic money circulation, and correlating it with classical, cash circulation. In the course of
transferring the analysis to the state level, the regulatory framework of the Republic of Kazakhstan is considered in the framework of the study, in particular, specific laws regulating the sphere of functioning of electronic money systems are provided. Furthermore, the study identifies reasons for the insufficient distribution of this type of money in the Republic of Kazakhstan, based on which practical recommendations will be developed for the introduction of many adjustments to the current Kazakh legislation and the economic policy of the state to provide wider opportunities for the functioning of electronic payment systems. The above will increase the activity in the field of online commerce, resulting in the improvement of the economy and the creation of a more developed economic system (LASME and MAKOTO, 2020; SARSEMBAYEV, 2021; BLAHUTA et al., 2019).

The purpose of the article is to analyse the existing trends in the turnover of electronic money, and their relationship with the conventional cash turnover on the territory of the Eurasian Economic Union. Firstly, attention will be focused on the Republic of Kazakhstan.

**MATERIALS AND METHODS**

In reviewing the existing and functioning electronic money circulation system on the territory of the Eurasian Economic Union and the territory of the Republic of Kazakhstan, in the development of methodological recommendations for the modernisation of the legislative framework of the republic and its economic policy, many general and special research methods were applied. With the use of a set of methods in this study, it was possible to identify the key provisions that determine the scientific perception of electronic money, to discover the main characteristics of approaches to building regulatory mechanisms for this type of financial transaction, which is especially important when creating a scientific-theoretical, legal foundation on which, in the future, the actions of individual states will be based on, regarding the creation and implementation of national legislation or other mechanisms that will be aimed at preventing and countering crimes that have already been committed in the field of electronic money circulation by certain criminal entities. The development of electronic money in the legislative field was also disclosed, the ratio of classical, cash, and electronic money turnover was considered, the main areas of the development and functioning of the phenomenon considered in the framework of the study were identified, synthetic conclusions were formulated, together with the prospects of further research.

For example, upon using the deduction method, a description of existing, in particular in the legislative system of the Republic of Kazakhstan, adopted, and relevant regulations that introduce electronic payment systems into the legal field
was compiled, while the inductive method allowed structuring and generalising the publicly available scope of information directly related to electronic money. It should also be noted that other research methods were used in the course of the study. For example, the use of content analysis in the framework of this study allowed identifying key conclusions regarding the further recommended area of implementation of reforms. The use of comparative analysis allowed identifying the differences in the existing fundamental approaches to the definition of electronic money, considering how to fully fulfil one of the key advantages of the type of money under consideration, namely, very high competitiveness due to the expansion of the number of entities directly connected and interacting with electronic money.

The methodology generalisation used in the framework of this study allowed the creation of the most complete picture, which represents, firstly, modern and relevant features of the functioning of electronic money systems on the territory of the EAEU member states and the territory of the Republic of Kazakhstan, drawing conclusions regarding the prospects for the use of these technologies, formulating effective and usable methods of modernisation of the economic system and financial policy of this state. This study was conducted in three stages. In the first stage, guided by the scientific literature and the theoretical achievements formulated in it, the issues of the establishment and development of electronic payment systems on a global scale and the scale of the EAEU member states, the main approaches to scientific comprehension and perception of the phenomenon considered in the framework of the study were disclosed. In the second stage, a descriptive characteristic of the currently implemented economic and legal policy regarding electronic money circulation at the national level (in particular, in the Republic of Kazakhstan) is formed, and an analysis of current regulations in this area is also conducted. In the third stage, the recommended measures that, if implemented, can remove barriers to the full functioning of electronic money, which will have a very beneficial effect on the national economy of Kazakhstan are offered.

**RESULTS**

Money, acting as a payment instrument, determines the development of the economy at the international level and on the scale of a separate state, the society living on its territory. They provide for universal exchange between owners of a variety of goods and services to ensure the operation of the credit and financial systems of the state (WULANDARI et al., 2016). Regarding the history of the development of electronic payment systems at the modern level, the following should be noted. After computers began to gain popularity, the first area of application of new computing power was the conversion of calculations and
accounting into electronic format. Interbank settlements, which previously required direct physical transportation of banknotes, are now almost totally carried out electronically. Electronic payment instruments, which include card payments and electronic bank transfers, have gradually replaced cash and paper checks in retail payments, even though paper money is still in large circulation as, in some cases, a convenient means of paying for small-volume settlements and services. In the 1990s, there was a surge in the power of electronic computing machines (computers), moreover, new generations of computer technologies allowed investing in personal computers. The development of the Internet has also created a demand for the exchange of intangible goods and services in electronic form (KOVALENKO and SHERNIN, 2018; BLAHUTA et al., 2020). This trend has led to the emergence of a new payment instrument, namely electronic money.

Despite the relatively recent entry into the daily life of electronic money, the active and dynamic development of this area of economic activity can be observed. The “electronic money” in the framework of this study refers to a variety of payment instruments that are based on innovative technological and digital developments. Currently, it can be stated that there is no single, practically supported, and stable definition of this phenomenon. Regarding the currency, a number of its fundamental features and the duties that it must fulfil can be outlined. Thus, for example, they include the need to make payments (i.e., to facilitate the circulation of the money supply within the state and internationally), to serve as a recognised equivalent of value, and to be used as a unit of account for certain economic transactions (LESKOVA, 2017). It is possible to distinguish two main characteristics inherent directly in electronic money, the presence of which allows asserting that electronic payment systems belong to electronic money. In particular, electronic payment systems are capable of performing the function of money, serving as an alternative to conventional currency instruments, moreover, existing in electronic form, electronic money differs from conventional bank accounts and securities.

An important factor, which, depending on its state, hinders or stimulates the development of electronic money circulation in the state economy, is the technical subsystems and the level of informatisation of the state under consideration. As an opportunity for modernisation, in this case, attention should be paid to the prospects for the implementation of the functions of the international payment system operating on the territory of the EAEU member states (KHACATURYAN, 2016). Even though the functions of the international payment systems on the territory of different countries and the mechanisms of turnover of the countries of the Eurasian Economic Union are approximately the same, the volume of services provided by the international payment system will depend on the technical capabilities of each country. The lack of high-quality
Internet communication in all regions of the Eurasian Economic Union may pose a real threat to the mechanisms considered in the study. It seems that without proper development of electronic interaction channels, it is impossible to ensure acceptable interaction of financial and commercial organisations, their clients, and government agencies within national economic systems or a single integrated platform. Regarding the above, the Kyrgyz development of 2020 deserves consideration. A draft concept for the development of digital payment technologies in the period 2020-2022 has been formed in the Kyrgyz Republic (AMNAZHOLOVA, 2018).

As an opportunity to open prospects for the development of electronic payment system mechanisms, the possibility of using simplified customer identification mechanisms within the state economy should be considered. The absence of these platforms in the EAEU space may limit the number of commercial business enterprises that can be maintained through existing remote service channels. The National Bank, which is the main body and an important part of the national mechanism of circulation of electronic payment systems, is interested in promoting the development of electronic money circulation and payment methods. Considering the above, national regulatory authorities should be interested in stimulating the development of the national economy and, as a result, integrating the mechanisms of circulation of electronic payment systems. It seems that for the effective and safe development and functioning of the digital payment space, coordination measures are required at the level of all participants along with supervision corresponding to the modern technologies by national central banks, which are the main body of the electronic payment system turnover mechanism. On the one hand, it will maintain the stability of the payment system, and protect the rights and interests of consumers, on the other hand, it will contribute to the development and introduction of digital innovations.

**DISCUSSION**

The imperfect legal framework of the EAEU member states (especially the Central Asian states) in terms of using innovative digital payment technologies and products and the lag in the adoption of regulations for innovative payment technologies and products on the territory of the EAEU member states directly hinder the development of electronic payments (AFANASYEVA, 2020). Therewith, the introduction and improvement of measures aimed at coordinating the elements of the electronic payment system turnover mechanism provide the EAEU member states with additional opportunities for the development of these systems. The low level of use of digital channels by customers should be considered a threat when interacting with the participants of the payment system. This threat is caused by the lack of a high-quality Internet connection and a low
level of financial awareness of consumers of payment services. Thus, despite the
presence of certain theoretical developments aimed at modernising the legislative
framework in the field of functioning of the phenomenon under consideration, the
level of development and use of this tool in such states as Belarus, Kyrgyzstan,
Armenia, and Kazakhstan is still at a low level (ABRAMOVA et al., 2020).

In addition, the functioning of electronic payment systems should be
considered to resolve the existing problem of creating a collective, single
currency, which is relevant for the countries of the Eurasian space. All decisions
of the financial authorities of these countries emphasise the need to use their
national currencies for interaction between the countries of the Eurasian
Economic Union. Even though the Eurasian Economic Union is currently working
on the introduction of a single currency, the question of which currency should be
introduced into the EAEU as a single currency has not yet been resolved. Among
the available options, the possibility of using the Russian rouble as the strongest
currency in the region is being considered (the alternative is to create a new
currency). Thus, international experience shows that the development of
electronic payments, especially electronic money, reduces the cost of cash
turnover and, as a result, accelerates economic growth. Electronic money can also
contribute to the development of new sectors of the economy and e-commerce.
However, the development of the electronic money market largely depends on
legal supervision (DOSTOV et al., 2020). If the relevant rules are not flexible
enough, innovations in the field of electronic payments cannot be implemented at
a high level.

With the adoption of the Law of the Republic of Kazakhstan No. 466-IV “On
amendments and additions to certain legislative acts of the Republic of
Kazakhstan on electronic money issues” (2011), electronic money was recognised
at the legislative level as a legal instrument for payments and settlements.
Furthermore, this concept was introduced into circulation from the Law of the
Republic of Kazakhstan No. 11-VI “On payments and payment systems” (2016).
The pioneer of issuing electronic currency in Kazakhstan is the joint-stock
company “Eximbank Kazakhstan”, which became the first issuer of electronic
currency “e-kzt” in 2012, in its activities this bank relies on the Kazakhstan
Interbank Settlement Centre of the National Bank of the Republic of Kazakhstan.
The introduction of electronic money is aimed at developing alternative methods
of non-cash payments. Electronic money, in its essence, is similar to paper money,
yet payments are made in a non-cash form. This is how ordinary people perceive
electronic money in everyday life. Nevertheless, this does not seem quite correct.
Upon analysing the legislative framework, many differences in electronic money
can be observed, the most important of which will be discussed below. The first
considerable difference between electronic money and paper money is the form
of issue. According to Law of the Republic of Kazakhstan No. 11-VI “On payments and payment systems” (2016), the currency of Kazakhstan can exist in cash (in the form of paper money and coins) and in non-cash form (in the form of bank account records), therewith, the type of money in question can exist only in electronic form, not in the form of a bank account record (AYUDYA and WIBOWO, 2018).

Thus, the fundamental difference between electronic money and currency is in the form of existence. The form of non-cash currency is a type of bank account, its concept and exhaustive classification are determined by the legislation of Kazakhstan (DZHAKSYBEKOVA and NAMZHUDINOVA, 2020). Bank accounts cannot be a form of electronic money, that is, an unconditional and irrevocable monetary obligation of electronic money issuer, which is stored in electronic form and accepted by others as a means of payment in electronic money. This is due to many differences between electronic money and paper money, which are a condition for issuing money. For example, according to Law of the Republic of Kazakhstan No. 2155 “On the National Bank of the Republic of Kazakhstan” (1995), the issue of banknotes and coins, the organisation of their circulation, and withdrawal from circulation in the Republic of Kazakhstan is carried out only by the National Bank of the Republic of Kazakhstan. Following the provisions of the legislation of the Republic of Kazakhstan on payments, only second-tier banks can issue electronic money on the territory of the country. The following directly arises from the above-mentioned difference. For example, since the issuer of ordinary currency is the National Bank of the Republic of Kazakhstan, which is an affiliate of the country, the obligations on money issued by the National Bank of the Republic of Kazakhstan are guaranteed by the assets of the National Bank of the Republic of Kazakhstan (ZHIENDINOVA, 2016). Therefore, in any case, the person who owns paper money has the right to make claims to the state under the authority of the National Bank of the Republic of Kazakhstan in respect of this type of money, while the obligations on electronic money are secured solely by the issuer of specified electronic money.

Therefore, the owner of electronic money has the right to make requests only to the issuer of electronic money, including for the redemption of the above type of money. The exception is that if the issuer’s functions in the electronic money system are performed by several secondary issuing banks, between which netting agreements have been concluded, then these issuers will be jointly and severally liable for the likely risks. Moreover, in this case, the rules related to the circulation of the corresponding electronic money system and the agreements signed between the issuer and the owner of electronic money should explicitly provide for the possibility of filing a claim against any issuer of the electronic money system. A considerable difference between electronic money and conventional money is in
the sphere of circulation, which is why their versatility and turnover possibilities also differ. An ordinary currency is a universal way of paying for certain economic services. Therefore, the owner of a regular currency can use it to pay for any goods or services in Kazakhstan, and the seller (or supplier) will be obliged to accept the specified currency unconditionally. Electronic money is not as universal as paper money since it can only be used to pay for goods and services presented in the electronic money system in circulation. The Law on Payments provides for the possibility of exchanging electronic money for other types of money, but this also does not violate their universality.

According to Law of the Republic of Kazakhstan No. 11-VI “On payments and payment systems” (2016), the possibility of exchanging electronic money for other electronic money is fixed. However, this does not endow this type of money with universality, since they can be exchanged for electronic money of another system, or they can be used solely to pay for goods and services that are available in a particular system of electronic money circulation. Thus, the electronic currency issued by secondary banks of Kazakhstan is the so-called non-fiduciary currency. According to publicly available information, fiduciary money became widely used after its introduction into scientific circulation at the beginning of the 18th century, in parallel with the Bank of England's issuance of banknotes that were not backed by an equivalent amount of gold. Currently, the term fiat money borrowed from American economists is more commonly used, the meaning of which is determined by the Latin word fiat (that is, decree, order). The literal translation of the word fiat is “let it be done”. Currently, most of the national currency is legal tender, including tenge, rouble, United States dollar (USA), euro, and other currencies. In general, a fiduciary currency is a paper currency, and its solvency is determined by national legislation. When the economic and political power of the state falls, and trust in it decreases, the value of such money in this country will change. Its value depends on nominal value – the number indicated on the banknote, while the production price of paper money and coins is much lower than their nominal value (MAKHALINA and MAKHALIN, 2019).

When issuing such money, the state solved two tasks – to minimise the costs of issuing currency symbol carriers, while protecting it from counterfeiting to the fullest degree. There is also non-fiduciary money, an example of which can be modern units of value, widely used in electronic payment systems on the Internet. Notably, states and their institutions are in no way responsible for the obligations of electronic money on the Internet. Another difference between conventional currency and electronic money is that the regulator has special restrictions on the owner of electronic currency, while there is no such function for owners of conventional currencies. Electronic currency can be used only by individuals for settlements, individual entrepreneurs and legal entities can accept it only as
payment for goods and services that they provide (in the case of services) or sell (in the case of goods). According to the established rules for the issuance, use, and return of electronic money, and the requirements of issuers of electronic money and electronic money systems in the Republic of Kazakhstan, holders of electronic money are divided into two types: identifiable and unidentifiable. Owners of electronic currencies set restrictions on transactions. Unidentified owners of electronic currencies cannot conduct transactions with electronic currencies, which, in terms of their volume, exceed a hundredfold size of the monthly calculation index set for a particular financial year according to the law of the republican budget (ASHTIM and OMAROVA, 2017; GHARAIBEH et al., 2012).

In this case, the issuer is obliged to verify the identity of the specified person following the Law of the Republic of Kazakhstan No. 191-IV “On counteraction of legalisation (laundering) of incomes received by illegal means, and financing of terrorism” (2009). In addition, according to the policy of the regulatory body, in any case, regardless of how much the owner of electronic money owns, they must be of legal age. Therefore, a person under the age of 18 cannot become the owner of electronic money. To conclude, it should be noted that the legal approaches to control the turnover of electronic money are fundamentally different from the approaches to control regular, classical money circulation. In particular, electronic money is not a universal payment method, there are many restrictions for owners and issuers of electronic money, and legislators impose certain obligations on issuers of electronic money to ensure the safety of the electronic money system. It can be stated that the above factors do not contribute to the widespread use of electronic money in the Republic of Kazakhstan. Nevertheless, with the improvement of the legislative framework and the development of online payments, the use of the type of money considered in the framework of this study as a means of payment for goods and services provided will gradually be able to gain the trust of consumers, gain more popularity than now and have a beneficial effect on the economy of the Republic of Kazakhstan.

Above, there was a discussion of the expansion of the use of electronic money in an integral context, that is, as a means of uniting the economic systems of the EAEU member states based on a single currency. It was confirmed that the development of electronic money should be analysed as a factor that creates additional risks for individuals and the entire financial system of the country. The studies mentioned above have shown that the introduction of electronic money systems in economically highly developed countries took place amid two trends in the development of monetary circulation, namely, the reduction of cash turnover and its subsequent replacement with non-cash payments. Moreover, it is necessary to note the replacement of a cash paper loan with a non-cash loan, and
the varieties of the methods of state supervision over electronic money in different countries can be explained by the hope of the management to find the most acceptable solution to the “efficiency/risk” dilemma. Regarding the existing barriers to the full functioning of the turnover of electronic money, many problems can be observed, the elimination of which will entail active development. Notably, the phenomenon considered in the framework of this study should not be considered unique and peculiar to the Kazakh economy exclusively. Firstly, such problems include a low level of trust in electronic money on the part of private consumers and commercial enterprises. Secondly, it is possible to note the existing problems and imperfections of the electronic money systems themselves.

To increase consumer confidence in electronic money and expand its use in Kazakhstan, it is necessary to take a number of the following measures:

(1) It is necessary to supplement the composition of electronic currency issuers with financial organisations that have a license from the National Bank of the Republic of Kazakhstan to use the electronic currency for transactions, since this, undoubtedly, will stimulate competition between issuers and improve the quality of the system and services, which will be facilitated by the spread of electronic money.

(2) In addition to activities for the direct issuance of electronic money, it is necessary to formulate and legislate a list of those operations that can be performed by financial institutions-issuers of electronic money.

(3) It is necessary to carry out minimal, but clear and strict supervision of the issuing institution, which is based on tracking the activities of this type of organisation (namely banks and financial organisations).

(4) It is necessary to increase the transparency of the activities performed by issuers of electronic currencies, for example, to require them to provide a wide range of people with information about the financial condition of the issued electronic currency and the number of obligations assumed, which includes the repayment of electronic money.

(5) To solve the problems arising from the interaction of various electronic money systems, is required to create a single integrator that allows using and accepting electronic money in one system operating in parallel with other systems.
CONCLUSIONS

Electronic money can be characterised as a relatively new phenomenon present in the financial market. The consequence of this is the fact that the supervision of their turnover is still in the process of development. In particular, electronic money considered in the framework of this study is a very promising and actively developing field. Further forecasts regarding the popularisation of the use of this type of finance seem very optimistic, especially considering rapidly developing digital communication technologies and the much higher level of convenience of using electronic money. The consequence of these processes should be considered the growth of online commerce, which will contribute to the development of small and medium-sized businesses, whose activities will have a very favourable and improving effect on the economic system of a particular state, including the economy of the Republic of Kazakhstan considered in the study.

The material offered for review in this article may arouse the interest of specialists in the development of information technologies, for example, to introduce innovations and modern technologies into commercial processes. Furthermore, it will also be of interest to a variety of experts and consultants who, indirectly or personally, influence the decision-making of private or public structures in the field of informatisation of their activities. Notably, many problems were identified during the study. In particular, a very interesting area for further research is to study to what extent different interpretations and definitions of electronic money affect economic processes, and to what extent this factor can influence the growth of this sector in different states. In addition, researchers can focus their attention on further analysis of the generally accepted characteristics of electronic money, which have been considered in this article. In particular, the practical aspect of this issue should be analysed based on unbiased and real statistical information that could illustrate the level of development of the electronic money market in a particular country.

REFERENCES


