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## THE INVESTMENT CHARACTERISTICS OF ELECTRONIC MONEY IN THE FINANCIAL MARKET

The financial market is an environment, marketplace, where money market operations occur such as trading of financial instruments and financial services, while simultaneously applying the latest information and telecommunication technologies.

**Keywords:** financial market, financial system, cutting-edge technologies, electronic money (e-money), information security, information systems, e-wallet, virtual currency.

During the recent years of the banks' and payment settlement organizations' operation, in the international financial market applying information technologies, they have started providing customers with payment and settlement services on digital platforms and issue electronic money.

**E-money service means** the implementation of e-money transactions (service provision) and related calculations, as a result of which the customer is able to replenish the account and (or) cash out the existing e-money, or transfer it to other users registered in the digital system and (or) pay for services rendered by the service providers in exchange for the goods sold [1].

E-money may differ according to the electronic value transfer mechanism. Some e-money schemes allow transferring e-value from one client to another, without the third party (issuer) [2]. However, more common is the transfer of e-value from the customer to the seller, and the latter must bear the transferred value (for example, at the end of the day sellers transfer the whole value to their bank, which then credits their bank account). The value of the e-money schemes is mainly in national currency. However, it is possible to keep accounts and make payments in several different currencies.

The issuer may, depending on the technology used, issue the following types of e-money [3]:

- **card based e-money (e-wallet)**- cash value (prepaid e-value) contained in a microprocessor (chip) inserted in a card or other device, which allows the user, through an appropriate infrastructure, to operate in the services provided in the digital system, while the cash value stored in the microprocessor (chip) is reduced or added in real time. At the same time, the transaction information is transmitted to the issuer,

- **computerized e-money (virtual / network money)**- cash value (pre-paid e-value) stored in the issuer's computer or other electronic device, either through an operating system or with a special software (a centralized issuer's data base); which

allows the user through the appropriate network or the Internet to operate in the services provided in the system.

As a result of numerous studies and discussions by the European Central Bank (ECB), the European Commission (EC) and the International Bank for Reconstruction (BIS) [4], the following definition of electronic money has been given: "E-money monetary value as represented by a claim on the issuer which is used for the purposes of making payment transactions and stored electronically (computer or micro-chip)." According to this, e-money can be:

**1. Plastic cards** which give the user access to very handy, micro-processor chip cards (smart cards). A special operating system and software are installed in the card during the production. The customer purchases a card with a certain e-value and is able to make retail purchases both on-line and off-line. During each transaction, when the card is inserted into a special device (POS), the electronic value is reduced [5]. At present, Europe has more than 25 different e-money card schemes, which are provided by financial institutions. Some card schemes allow payments through the Internet as well. In fact, transactions with card-based e-money make up to 0.2% of the European Union's non-cash payments. They are more common in Belgium and Luxembourg.

Examples of credit card e-money schemes are: Proton (Belgium), Moneo (France), Mondex, GeldKarte (Germany), MiniCASH (Luxembourg) and Chipknip (Netherlands), Chipper (Netherlands, Australia), Avant CLIP (global spread), Visa Cash (Australia, Brazil, Canada, Colombia, Hong Kong, Iceland, Japan, Japan), Belcard (Greece), Carta facile (Italy), Cash (Sweden) Mexico, the United States and Europe).

**2. Computer-based** e-money enables the user to make transactions via a computer network or the Internet through the operating system and the corresponding software installed on the computer. It is mainly intended for online shopping. The advantage of computer-based e-money over the card is that its variable costs are lower, the geographical area is not limited (spread across the globe) and there are a series of other advantages [6].

Examples of computer electronic money circuits include ecash, CyberCash, NetCash, Internetnet (US), DuoCash (USA), AMADIGI (Great Britain), Virtual Cash (Spain), Cyber-tarjeta (Spain), Cartio Micropayments (Netherlands and the whole world), Digi Gold (global), Safetrader (whole world), and more.

Payment settlement organizations have a considerable role in the Armenian field of e-money application. The issue of e-money through them has created the necessary conditions for the development of Armenia's IT sector, in particular, a stimulus for e-commerce development. The mission of Payment Settlement Organizations is to promote e-commerce and online payments in Armenia, new qualitative changes in the field of international money transfers, as well as raise the

level of Internet significance in Armenia from the information resource to the e-commerce tool. The number of active e-money accounts, volume and quantity of e-money account deposits, withdrawals and transactions (Appendix 1) in RA allows to consider that the coming years will be years of fundamental development and establishment for the e-money [7].

Table

The e-money transactions in RA, Q1FY2022 - Q2FY2023

	Number of active e-money accounts	E-money account deposits		E-money withdrawals		E-money transactions	
		Volume (million AMD)	Quantity	Volume (million AMD)	Quantity	Volume (million AMD)	Quantity
<b>I - 2022</b>	1,001,676	188,494	17,439,996	71,198	2,767,916	148,501	24,728,445
<b>II - 2022</b>	1,006,064	181,271	16,427,751	70,676	2,876,392	142,080	22,911,737
<b>III - 2022</b>	965,101	162,323	15,568,751	62,097	2,297,960	117,178	19,635,453
<b>IV - 2022</b>	930,215	175,440	16,982,228	75,716	3,774,560	125,786	18,995,846
<b>I - 2023</b>	820,606	143,314	14,556,927	86,067	7,545,068	81,853	10,086,681
<b>II - 2023</b>	675,033	157,923	16,120,178	99,041	8,245,573	84,658	11,244,324

The beneficiary, after obtaining the e-money, cannot use it again, but should send it back to the issuer for the repurchase (closed circuit of e-money). However, in some cases, the re-use of e-money (open circulation of e-money) is possible. Naturally, the e-money circulation is more convenient for the user.

It can be stated that for spreading electronic money it is necessary for all parties, issuers, buyers and sellers of the deal be interested in using it. The interest of the issuer lies in the revenues generated by all customers and sellers, from reducing money circulation costs and investing negative balances. In case of cards, the bank has to cover the negative balance at its expense (for example, overdraft). The demand for e-money depends on its security and confidentiality, convenience, acceptance by the vendors as a payment instrument, and the commissions charged by the issuer compared to other forms of payment. The seller's interest depends on the issuers' fees, the cost of the terminals, the likelihood of attracting new customers, and the reduction of money circulation costs.

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### Ա.Ս. ԱՔԵԼՅԱՆ

#### ԷԼԵԿՏՐՈՆԱՅԻՆ ՓՈՂԵՐԻ ՆԵՐԴՐՄԱՆ ԱՌԱՆՁՆԱՀԱՏԿՈՒԹՅՈՒՆՆԵՐԸ ՖԻՆԱՆՍԱԿԱՆ ՇՈՒԿԱՅՈՒՄ

Դիտարկվում է ֆինանսական շուկան՝ այն միջավայրը, որտեղ իրականացվում են փողային գործառնություններ՝ կապված ֆինանսական գործիքների և ֆինանսական ծառայությունների ձեռքբերման կամ վաճառքի հետ՝ միաժամանակ կիրառելով տեղեկատվական և հեռահաղորդակցման նորագույն տեխնոլոգիաներ:

**Առանցքային բաներ.** ֆինանսական շուկա, ֆինանսական համակարգ, նորագույն տեխնոլոգիաներ, էլեկտրոնային փողեր, տեղեկատվական անվտանգություն, տեղեկատվական համակարգեր, էլեկտրոնային քսակ, վիրտուալ փող:

### А.С. АКЕЛЯН

#### ИНВЕСТИЦИОННЫЕ ХАРАКТЕРИСТИКИ ЭЛЕКТРОННЫХ ДЕНЕГ НА ФИНАНСОВОМ РЫНКЕ

Рассмотрен финансовый рынок - среда, в которой осуществляются денежные операции в связи с приобретением или продажей финансовых инструментов, при этом используются новейшие информационные и телекоммуникационные технологии.

**Ключевые слова:** финансовый рынок, финансовая система, передовые технологии, электронные деньги, информационная безопасность, информационные системы, электронный кошелек, виртуальная валюта.