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Article

The development and renewal of money and transactions

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Abstract: In this article, we examine the history of the development of money and the importance and expansion of economic transactions, as well as two of the many currencies used in the European Union, the official currency of the EU, the euro, and the money of Hungary, the Hungarian forint. Money as an essential condition for material well-being. Money is the driving force of mankind. Money ensnares, keeps in motion, operates our world. Wherever we look, whatever we want to do, directly or indirectly, we will come into contact with money. The development of money, the market and banks is a series of events taking place in parallel.

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INTRODUCTION

The antecedent conditions of transactions

The most important condition for material well-being in today's modern world is financial innovation (Ferguson, 2009). In a few centuries, it went from mere subsistence to the development of the Internet, space adventures, self-driving cars and artificial intelligence. The presence and use of money had an impact on the development of all mankind, on our thinking, our relationships, our attitude, our world view, our emotions, our way of life, our everyday life.

Why are pieces of papers, bank cards or checks worth so much? Today they have no intrinsic value, they are mere objects, yet we invest them with enormous power and use them regularly. The value of these instruments lies in the fact that the receiving party can be sure that they will be accepted from somebody in the future, a kind of claim is created to satisfy later needs (Mankiw, 2017). However, money alone is not enough, we need a centralized place where transactions can be conducted under suitable conditions, we call this a market (Borgula, 2007).

According to Darwinism or evolutionary theory, the development of humanity has been a rather long process until now, and we must realize that the process does not stop, the current situation is only a temporary state, the development is uninterruptible (Ferguson, 2009).

After many centuries of collecting, fishing, hunting, and wandering lifestyles, the humanity of that time settled down. Stationary life demanded new inventions and techniques. Domestication and farming appeared. Our ancestors lived a self-sufficient lifestyle for a long time. Due to the difficulties and inconveniences of self-sufficiency, our early ancestors had to find other solutions, and this is where economic transactions begin.

The first economic transactions

As humanity continued to develop and began to think more consciously, it realized that voluntary exchange had enormous potential. However, all parties had to accept, know, observe and apply the most important conditions and rules of the exchange. These are simple things, but they are vital to the success of the exchange, and later bartering. The exchange must be carried out by both parties of their own free will, they must accept the means of exchange given by the other party, the amount of the exchange must be agreed upon, proper communication is necessary, after the exchange has taken place, both parties must be better off, that is, they will be in a better position than the exchange of their previous situation (Ferguson, 2009).

In practice, this worked effectively and still works today, although it faced and still faces many rather serious obstacles. Since one of the rules of exchange is that both parties must accept the product offered by the other party, countless exchanges have failed simply because one party did not need the other party's product. The next problem is determining the quantities, that is, the exchange rate.

If we go back in time, just think about how, for example, a baker who needed shoes could reach an agreement with the shoemaker? How many loaves and bread did he have to give for a pair of shoes? Since the exchange rates were not defined in an organized manner, the main reason for this was that it would have been impossible to express all the products in some other product, the volume of the exchange depended only on the attitude and behavior of the two parties. After a while, this system did not adequately serve the needs in terms of efficiency. Another solution had to be found. The solution is called money (Bánfi, 2015).

In most economics books, in which the history of the development of money is discussed, three stages are distinguished. The very first is the era of commodity money, the developed version of which is the concurrent use of precious metals and money substitutes, followed by the era of modern money, which is still used today. In the next subsection, we review the very first transactions related to money.

The first money transactions in history

The history of transactions related to money dates back to 3rd millenium BC. The main condition for the development of these transactions is the appearance of one of humanity's great inventions, writing. Management, due to the limitations of human qualities (e.g. memory), is an unsolvable problem without administration (Hungarian National Bank, 2018).

As time progressed, thanks to development, contracts, loans, financial and commercial transactions appeared primarily in Mesopotamia. At that time, these were scratched on clay tablets. The coins appeared BC. As a result of commercial innovations, production also had to develop. Trade and financial transactions developed in parallel. It started in Asia Minor, which can be dated to the 7th century, and then spread throughout the world over time. After the appearance of the coins, the money was loaned in many cases, and the right to use it was transferred. This gave rise to the interest rate (Hungarian National Bank, 2018). The credit system developed in Mesopotamia can be said to be based on the credibility of the payment system (Ferguson, 2009). Later in the BC. by the middle of the 1st millennium in Hellas, that is, in the Greek Empire, Athens became the financial center of the world. This was followed by the Roman Empire, which with its regulated, binding legal system gave free space to trade and the entrepreneurs of the time, the economy revived, and the circulation of money grew rapidly. Banks were founded, a workforce specialized specifically for this activity developed, and then social strata differentiated. The Middle Ages represented a decline compared to ancient culture. Ancient banks could not survive barbarian conquests, migrations and wars, so for a long time their only function remained, namely money exchange (Botos and Bódy, 2010). In other words, financial operations in the 11th century were limited to currency exchange only (Hungarian National Bank, 2018). During their studies, most people come into contact with major events in history, instructors and teachers teach them, analyze the events, attach dates to them, and pass on facts. However, very few people are able to see that behind the great historical events (the fall of the Roman Empire, the Crusades, the discovery of America, marriages, the creation and disappearance of empires, the fall of Napoleon, the world wars) money was always present, and because of this these events unfolded as we learned them.

The Roman numeral system, which survived as a legacy of the Roman Empire, proved to be unsuitable for performing more complex mathematical operations (Ferguson, 2009). A solution to the problem had to be found. The son of the emissary of Pisa, whose name has survived to posterity as Fibonacci, imported the Arabic numerals from the east into Italy, which are in use today and correspond to their function.

With the discovery of America, trade relations were radically transformed. Here we can start talking about world trade. In the 17th century, the Netherlands and then Great Britain became the center. It was at this time that the first state banks and stock exchanges were established. The consequence of this was the industrial revolution, as the power of industrial capital increased significantly (Hungarian National Bank, 2018). After the financial operations, we review the development of the paper money that is still used today, since the money supply in some countries at that time was made up of paper money as well as coins.

The emergence of paper money

One of the strongholds of Eastern culture, China has given the world many valuable and useful inventions. The first paper money was issued in China in the middle of the 7th century. At this time, China was ruled by the Tang Dynasty and copper money was in circulation. Copper coins were of low value, so a large number of coins had to be available to conduct a large-scale transaction. The more affluent class assigned special people to guard the huge amount of copper coins. Since the storage itself was inconvenient and difficult, other factors also necessitated the introduction of the first paper money. Such was the delivery, the payment, and in addition to all this, it took a lot of time and inconvenience to count the coins (Ferguson, 2009).

To overcome these difficulties, the Pao-Csao was issued, which is paper money with a face value of 10,000. More precisely, its value was given by the trust that later in the 19-20. century European banknotes for a relatively long time, according to which they can be exchanged for metal-based coins. People developed such confidence that in many cases they no longer wanted to cash in their paper money, but used it to conduct their business activities and accumulate wealth. Thanks to this, paper money with no intrinsic value began to function as real money. It became an alternative to precious metal-based money, but at the same time they complemented each other perfectly. We can discover a contradiction in the interpretation of Pao-Csao, since the value of paper money without intrinsic value was ten thousand times more than that of coins that actually had intrinsic value. We can see that in the course of our history, as time progresses, there is a decreasing trend in the behavior of using paper money we exchange it for metal. The culmination of this process is the so-called Gold Standard era.

The Gold Standard Era

The so-called gold standard appeared at the beginning of the 19th century. Several countries introduced it, which meant that banknotes could be exchanged for gold. The given countries had to determine the value of their currency by law, and then this had to be equal to the fixed amount of gold (Forman, 2013). The conversion of national currencies, exchange rates and convertibility were defined. This system resulted in price stability, but the room for maneuver of the countries' monetary policy became limited. In addition, central banks undertook to provide unlimited convertibility between banknotes and gold, assuming a constant exchange rate. There were two main ideas regarding the operation of the gold standard.

One is the Currency school and the Banking school. The main idea of the Currency school is that the quantity of gold and the redeemable cash issued should be in harmony. In other words, the issued cash must be backed by gold. Only as much cash can be issued as the bank can cover with gold. The advantage is that the central bank can adjust the amount of banknotes at will and inflation will cease. The main idea of the Banking school is that the quantity of gold and the redeemable cash issued do not have to correspond. According to this view, convertibility into gold is only important because of trust, banknotes function as money, just like gold. According to them, the important thing is the flow of money, which is required the actors of the economy are capable of creating money independently. The countries ensured the conversion until World War I, then refused to cover war costs. Between the world wars, there were efforts to restore the gold standard, which, however, never fully succeeded again. The main reasons are that the countries paid their war expenses in gold, which meant, especially for the losing countries, that the gold reserves were almost exhausted. But inflation and the 1929-33 economic crisis also played a role. After all this, the United States of America curbed its lending and investments abroad. The II. After World War II, the so-called gold-currency system, or the Bretton Woods system, followed. The essence of this is that the United States of America guarantees the unlimited convertibility of the American dollar to gold, subject to certain conditions. Such a condition is the fixed exchange rate, other countries tie the value of their currency to the dollar. (Sági, 2007)

The system operated until 1971. After that, most countries developed a floating currency system. In the second half of the 20th century, the Cold War, which was accompanied by many international tensions, also had positive effects. The Cold War meant a strong rivalry between the two superpowers, the United States of America and the Soviet Union. Like many other fields of science, computing has developed at an amazing rate. The positive returns of this development are also significant in the economy and in finance, and this is when modern money, or digital money as it is also called, began to develop. After reviewing the history of money, the following chapter will introduce the second most used currency in the world, the euro, which was created less than 25 years ago and can be said to be still young.

The dominant currency of the world and Europe, the euro

The currency code for the euro is EUR, while its symbol is €. The euro sign refers to the Greek epsilon character, the initial letter of the continent, and the two horizontally parallel lines to price stability (Europa.eu, 2023a). It is the official currency of the European Union, currently used by 20 of the 27 member states and by the institutions of the European Union. These 20 countries are usually called the EU-20 or the Eurozone. The euro is the only legal tender in the eurozone. Some European Union countries (e.g. Hungary) have not yet introduced the euro, while other countries (e.g. Denmark) have decided, exercising the right to remain outside, that they do not wish to use the euro as a means of payment (Marján and Hetényi, 2005). 175 million people around the world use currencies tied to the euro, approximately 150 million of them in Africa. More than 40 years of preparatory work preceded its introduction. Since its introduction in 1999, it has been the world's largest currency in terms of total value, the world's second most important reserve currency, and the second most traded currency behind the US dollar. When treating the Eurozone as a unified whole, it is the second largest economy in the world. The common currency was named the euro at the Madrid summit in 1995. It was introduced as settlement money from January 1. 1999, replacing the European currency unit in a 1:1 ratio. Real euro coins and euro banknotes entered circulation three years later, on 1 January 2002. The joint task of the European Central Bank and the European Commission is to preserve the price stability and value of the euro, and these two institutions determine the performance criteria necessary for the accession of countries wishing to join the eurozone. These are the so-called convergence criteria. The Maastricht Treaty, signed in 1992, provides for these mandatory economic and legal conditions, which is why they are also called the Maastricht criteria. In the European Union, with the exception of Denmark, all countries must adopt the euro if the criteria are met.

The EU accession treaty does not set a specific date when the euro must be introduced. The member states can develop and determine the pace at which they wish to meet the criteria for the introduction of the euro within their own jurisdiction. In the Eurozone, approx. 340 million people use it. The European Union countries that use the euro (EU-20): Austria, Belgium, Croatia, Cyprus, Estonia, Finland, France, Germany, Greece, the Netherlands, Ireland, Latvia, Lithuania, Luxembourg, Malta, Italy, Portugal, Spain, Slovakia and Slovenia.

It is the legal tender of six European countries outside the Eurozone: Andorra, Kosovo, Monaco, Montenegro, San Marino and the Vatican. It is also used in some African countries, e.g. in Zimbabwe (Europa.eu, 2023b).

Its economic significance goes beyond the common market, the flow of free capital, free money and people. An important aspect is the possibility of uniform correction of inflation, which is the basis for the development of internal markets.

The main advantages of a single currency are that it significantly facilitates cross-border trade, improves the performance of the economy, and provides consumers with more opportunities and choices.

One of the main proofs of European integration is the euro. Since 2002, the banknotes have been jointly issued by the central banks of the eurozone countries. The production of the coins is the responsibility of the governments of the euro area countries (Europa.eu, 2023c).

When the euro was introduced in 2002, 7 types of paper money and 8 types of coins were issued. Banknotes look uniformly the same in all countries, while one side of the coins is also uniform, but the other side shows a pattern specific to each country.

After introducing the euro will be presented in the next subsection the hungarian forint, the official currency of our home country.

The official currency of Hungary is the Hungarian forint

Coinage and the appearance of money in Hungary date back to the establishment of the independent Christian Hungarian kingdom. At this time, at the beginning of the 11th century, the appearance of money was not only an economic aspect in all cases, but also a means of expressing sovereignty (Pallos et al., 2017). According to archaeological sources, the first Hungarian money may have been minted by our King Szent István I, which was the silver denar. In the course of Hungarian and international history, it can also be observed that empires, countries, and kingdoms initially minted very valuable gold, silver, or possibly copper coins. The size, shape, design and value for money were also constantly changing. The rulers realized that in times of scarcity, they could generate huge revenues by recalling, melting down, and re-issuing the issued money in a different form. This was possible because the content of the precious metal was reduced, and its size was mostly shrunk. By the 13th century, coinage had become common in Europe.

The euro, as I presented in the previous section is used in a large part of the world and especially in Europe. Some countries, on the other hand, have not yet economically fulfilled the level and conditions required for the transition to this currency, so they have their own national currency in circulation. Our country, Hungary, is like that. The Hungarian forint has a history of more than half a century. The sign of the Hungarian forint is Ft, its ISO code is HUF. During several periods of Hungarian history, the forint was the currency of the country. Róbert Károly was the first to introduce the gold-based coin forint in the 14th century, then also during the reign of King Matthias, until the middle of the 16th century, although always in a different form, it depended on the ruler, but the forint was in circulation. Later in the 18th century, Maria Theresa minted a silver-based forint, which was the first legal tender of the Austro-Hungarian Monarchy. It was then that the first paper-based forint, the bank note appeared. During the freedom struggle of 1848-49, despite the ban, Lajos Kossuth minted an independent Hungarian paper currency, the forint, with which he wanted to stabilize the country's economy. His name is still preserved on these banknotes, the Kossuth banknotes. After the Compromise, the Austro-Hungarian forint was introduced in the Monarchy, which was based on silver, and was in circulation until 1892, when the gold currency-based koruna was introduced.

Today's Hungarian forint has been the official means of payment and official currency of Hungary since August 1. 1946. It was introduced after the hyperinflation of 1945-46, which replaced the pengő. When it was introduced, it was still based on gold, and its value was established in comparison to the pengő of 1927, that is, 1 pengő was worth 3.4 forints, 1 HUF = 0.0757575 grams of gold, 1 kg of gold = 13,210 HUF. The change money of the forint is the fillér, the coins of which were permanently withdrawn from circulation in 1999, just like the 1 and 2 forint coins in 2008. The history of the 200 HUF coin and banknote is interesting. It was in circulation between 1992 and 1998 as a coin, then as a banknote until 2009, then again as a coin.

Since February 26, 2008, the forint has been floating freely in a flexible exchange rate system. Coins currently in use are 5, 10, 20, 50, 100, 200 HUF, while banknotes are in circulation in denominations of 500, 1000, 2000, 5000, 10,000, 20,000 HUF.

Upon joining the European Union in 2004, Hungary accepted the conversion of the forint to the euro. However, the date of the changeover to the euro is currently unknown.

Digital money

With the development of information technology, by the 21st century, the history of humanity and money has reached the point where the material appearance of money has become redundant in many cases. Now, the assets of most governments, companies, companies and households are the sums in the accounts of various banks, a series of numbers appearing in records. Their transactions are carried out through transactions between banks. This new era is quite different from past centuries. The previous familiarity has changed, as a new actor has entered alongside the usual cash, coins and banknotes. Money can take countless new forms. It depends on the holder whether he accesses his own money or the bank's money in an application downloaded on a smartphone or on a computer or bank card. In addition, it preserves the rights attributed to cash, even in such circumstances, and even other benefits, such as convenience and security, are derived from it. Until now, security has been ensured by the form, material use and other anti-counterfeit protection devices appearing on cash. In the case of digital money, this is the electronic signature and authentication of the card issuing company and the institution that manages the balance and serves as collateral. Digital money is also beneficial from the perspective of sustainability and economy. The operational costs of digital money are the smallest in terms of the number of transactions (Massi et al., 2019, Vida and Popovics, 2020). The predecessors of today's bank cards appeared in the second half of the 20th century. The first credit card was issued in the United States of America in 1950. While it was only accepted by a few restaurants in New York at the time of issue, within a few months the number of places accepting it increased to thousands. This is the key to the success of bank cards, acceptability, security and continuous operation. Even today, the two most well-known giant companies started issuing their bank cards at this time. Bank of America introduces the Bank Americard card in 1958, the predecessor of Visa. While MasterCard is introduced in 1979, although its predecessor already existed in 1966 under the name Master Charge. Credit cards have been computerized since 1973. Before that, it was more complicated to request a credit line and other transactions-related data retrieval and administration by phone. In the United States of America, Canada, and the United Kingdom, credit cards spread with amazing speed. These countries still have a long tradition of credit rating of private individuals. This so-called credit history has a very big impact on the opportunities of the people living there (renting an apartment, credit limit) in everyday life. In the rest of the world and Europe, mostly debit cards, rather than credit cards, have spread. A debit card is a bank card on which an individual keeps his own money, in contrast to a credit card, where the amount depends on the scheme, but always contains the bank's money. Credit and debit cards are separated internationally. Bank cards have been used in Hungary since 1989. Debit cards are also much more common in Hungary. In our financial culture, sticking to cash is a strong part of it, which is why, according to the MNB's 2008 study, the number of bank cards per person is only 60% compared to the EU average. Using bank cards is safe, transparent and simple. Since development is unbroken, new technologies are constantly breaking into the market. At the beginning of the 2010s, Pay Pass, or contact payment, was such a novelty. By 2016, financial innovation and technology had reached the level where it was possible to settle our debts with a smartphone. Banks and various IT companies are developing their own systems for payments with digital devices, for example the Hungarian OTP Smartbank application or the Apple giant ApplePay application. From 2018, thanks to the PSD2 regulation, new players can enter the payment markets. Instead of the previous two parties (bank clients), it is possible to involve a third party, so-called third-party service providers, who can provide customers with special payment services and solutions. The future of these is still uncertain, but the official regulations make room for innovative payment innovations. From 2020, the instant payment system will also start in Hungary, one of the first countries in the world. In other words, private transfers of less than HUF 10 million must be made within 5 seconds, every day of the week and at any time.

In the first twenty years of the 2000s, other alternative means of payment also appeared, such as the widely known Bitcoin or Dogecoin.

CONCLUSIONS

The basis of today's modern system is money, it appeared thousands of years ago. When we think of money, most people think of the forint, the euro or the American greenbacks. If we went back in time a few hundred years, they would have thought of it quite differently, for example salt, cattle or gold. Money has meant something different to everyone throughout history, and it can still mean something different today. Money, whatever it is, must have value for both the giver of the money and the receiver of the money. Money is a kind of diplomatic agreement between people. Different nations, cultures, ideologies, and religious views examine, manage and use money in a different approach and light.

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