Вивас Т. К. К., Рохас С.М., Матиас М. Эволюция международной валютной системы, криптовалюты - следующее изменение? // Международный журнал информационных технологий и энергоэффективности. – 2022. –
Т. 7 № 3(25) ч.1 с. 88–98

Международный журнал информационных технологий и энергоэффективности

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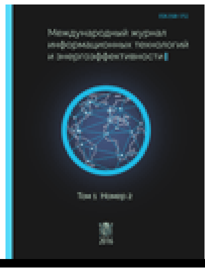

УДК 004

ЭВОЛЮЦИЯ МЕЖДУНАРОДНОЙ ВАЛЮТНОЙ СИСТЕМЫ, КРИПТОВАЛЮТЫ - СЛЕДУЮЩЕЕ ИЗМЕНЕНИЕ?

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В статье делается попытка охватить различные темы, от международных валютных систем до криптовалют, где речь идет о понимании того, станет ли это валютой будущего.

Ключевые слова: Международная валютная система, криптовалюты, экономика, эволюция.

THE EVOLUTION OF THE INTERNATIONAL MONETARY SYSTEM, CRYPTOCURRENCY – THE NEXT CHANGE?

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The article attempts to cover a variety of topics, from international monetary systems to cryptocurrencies, where it is about understanding whether this will become the currency of the future.

Keywords: International monetary system, cryptocurrencies, economy, evolution.

International Monetary System

Over the past three decades, the world has undergone many changes in its economic activity and in the nature of its economy. The countries are becoming more closely linked through international trade and finance: a country that used to be a creditor large, United States, is now the largest debtor country in the world; many of the developing countries face continuing development problems and relatively large amounts of external debt.

In response to the changing nature of economic problems there is evidence that both bilateral trade agreements between large trading partners and trends towards regional trade agreements have increased. With the emergence of a Europe is larger and integrated, on the one hand, of economic integration initiatives in the western hemisphere and of greater weight of the countries on the other hand, the evolution towards a commercial system is evident world dominated by three major trading blocs: the American, the European and Asian.

This trend could impede recent efforts towards freer international exchange and could diminish the world's welfare more than in other situations. Indeed, this trend has implications problems for the periphery (the Third World countries), which, by and large, are not members of these regional trade blocs.

For countries to participate effectively in the exchange of goods, services and assets, an international monetary system that facilitate economic transactions [1].

For example, if a shortage of foreign exchange reserves hinders the ability to import goods, countries will tend to impose tariffs, quotas and other trade-restricting mechanisms in order to conserve their currencies. In addition, a country with limited reserves could impose controls on the outflow of private capital or restrictions on the ability of its citizens to travel abroad.

In order to effectively facilitate the movement of goods, services and assets, an international monetary system is needed to serve as a efficient balance-of-payments adjustment mechanism so that deficits and surpluses are not prolonged but rather eliminated with some ease in a relatively short period.

In addition, unless the system is characterized by completely flexible exchange rates, there must be an adequate amount of liquidity international, that is, the system has on the one hand to provide sufficient reserves for countries with a deficit in their balance of payments to make their payments to surplus countries and, on the other hand, the offer of international liquidity has to be formed from internationally acceptable reserve assets that are expected to maintain their value.

The purpose of this paper e is:

1) to examine the current system of international monetary fund, reconstructing its origins and evaluating,

2) to analyse the possible alternatives to the current system proposed by some of the experts in this field, examining the advantages and disadvantages of each alternative [2].

System origins

Historically, international monetary systems have had very varied characteristics. Go on in they are mainly the differences in the degree of flexibility change. About a hundred years ago, the predominant international monetary system was the international gold standard (1880-1914). In this system, gold was the reserve asset international and its value was set with the parities that countries specified. This decision to support currencies with an internationally acceptable reserve asset (gold) helped to encourage both the exchange relatively free as payments.

With the beginning of World War I, the international gold standard collapsed. In the 1920s, countries allowed a great deal of exchange rate flexibility, although the frequent fluctuations in exchange rates change closely followed the expected purchasing power parities. In the middle of the decade, the Britain (then the financial center of the world economy) tried to restore the gold standard, adopting pound parity before the war. This parity it heavily overvalued the pound and caused payment problems for England. In addition, with the huge decline in economic activity over the years thirty, many countries had payment difficulties. The multiple attempts to restore some stability in countries ' exchange rates soon yielded to a sequence of competitive devaluations.

Although the devaluation in a single country can stimulate employment and production, when many countries depreciate their currency in retaliation, the expected beneficial results are short-lived or are not they materialize at all. Countries also implemented restrictive trade policies that led to large reductions in the volume and value of international trade. All these measures helped to aggravate the Great Depression and the low level of economic activity persisted for almost the entire decade of the thirties. This level took a leap with the start of World War II, but the conflict diverted attention of countries and prevented an overall assessment and adoption of a new international payment system.

The Bretton Woods system

Towards the end of the Second War World, was held a historic international conference in Bretton Woods, New Hampshire, in 1944. Of these emerged the formation of two international institutions of great prestige that remain very important in the world economy current: The International Bank of Reconstruction and Development (better known as the World Bank) and the International Monetary Fund (IMF). The purpose of the formation of the World Bank was to provide long-term loans for the reconstruction of Europe, in particular to cause of the destruction of the Second World War, but since the fifties, has taken care of giving long-term loans for country projects and programs least developed (LDC).

The IMF was the key institution for the functioning of the international monetary system known as the Bretton Woods System. The IMF is an international institution with several objectives; among them quote two [3-4]:

1) Stabilizing exchange rates; effect, the desire of the main countries of having stable and relatively fixed exchange rates was a reaction to the wide fluctuations, competitive devaluations, trade contraction and instability of the world economy in the 1920s and thirty, in the period between the two wars.

2) Reconciling adjustments to payment imbalances of countries with their national autonomy in macroeconomic policy; concept of the gold standard adjustment mechanism involved, for deficit countries, a fall in wages and prices with departure of these countries: the adjustment mechanism for an increase in interest rates, to attract short-term capital created a problem: the resulting contraction of economic activity could cause a rise in unemployment and a fall in real income. After the Great Depression the thirties, governments did not they were willing to use their monetary policy instruments and fiscal only to achieve external balance; they emerged conflicts between the external objective and the internal objectives of the macroeconomic policy and the IMF he sought to ease those conflicts.

Most economists consider that the Bretton System Woods worked well since the end of the Second World War until mid-sixties. In those years, world trade grew with relative speed and, by 1958, the major European countries had lifted most of its post-war exchange restrictions.

In addition, Europe and Japan recovered from the devastation of World War II and the economy universal grew without any setback or recession of importance.

Criticism of the Bretton system Woods

Despite its apparent success, some major problems arose in the Bretton Woods system:

The international monetary system had a liquidity problem or a problem of sufficiency of reserves: when world trade grows rapidly, the size of payment imbalances is likely to grow in absolute terms, increasing the need for reserves to finance the balance of payments deficit. If reserves do not grow at the same pace as deficits of the balance of payments, there is a danger that countries will use trade and payment restrictions to reduce their deficits, and these policies will diminish the benefits of trade and the growth rate of the world economy. countries use trade and payment restrictions to reduce their deficits, and these policies will diminish the benefits of trade and the growth rate of the world economy.

1. Problem of trust, which is related to the liquidity problem. As the gold supply in power of the central banks grew at a relatively low, the growth of international reserves was forming internationally acceptable national currencies and, therefore, held by the central banks. The two largest national currencies were the pound sterling and the dollar American. If all foreign central banks had tried to convert their dollars into gold, the United States would not i would have had enough reserves of this metal to satisfy all those demands [5].

2. Adjustment problem. Refers to the fact that in the actual operation of the Bretton system Woods, countries experienced prolonged deficit or surplus . This happened in particular in the United States (deficit) and Germany (surplus). Apparently, there was no effective adjustment mechanism because automatic forces did not eliminate imbalances. Countries applied fiscal and monetary policies to achieve internal goals, no external targets and therefore no contraction (expansion) of the money supply occurred that was expected in a deficit (surplus) country.

In 1967, the pound sterling suffered an official devaluation of 14% as a result of a decline in foreign currency reserves due to speculative flows of short-term capital. Importance of this devaluation lay in the fact that the pound and dollar were key currencies in international reserve deposits with central banks. Fact that the value of an international reserve asset had fallen indicated that the exchange rates of Bretton Woods were not sustainable.

In 1968, the main central banks decided to stop gold transactions with individuals and private companies but they continued to do it with each other.

In 1970, a new asset appeared international, special rights (SDR), sometimes called ‘gold paper’. A major event occurred in August 1971: the Nixon administration announced that it was going to stop buying and selling gold to foreign central banks, which it officially represented an abandonment of the Bretton Woods system.

After this action, the system international monetary fund experienced considerable turbulence. In December 1971, the authorities currencies of major countries industrialists met in Washington to develop a new system of exchange agreements.

This meeting resulted in the Agreement Smithsonian in which a new parities system more flexible than that of the Bretton system Woods.

Later, in 1976 came the Jamaica Agreement, which formally recognized the system of controlled flotation and left countries free to choose the most appropriate exchange rate regime.

The European Monetary System

A truly important breakthrough in international monetary arrangements began in March

1979 with the installation of the System European Monetary Fund (EMS). This system was born from joint flotation of the six major European currencies against other currencies. The first key step of the EMS was the creation of a new monetary unit, the ECU (European Currency Unit), defining the central exchange rates of countries ' currencies members of the European Community.

The EMS was formed to encourage greater exchange rate stability in Europe and generate more stable and balanced economic growth, with a firmer foundation. Although central exchange rates have varied from time to time, it is generally considered that the system has reached their goals to some extent. As increased exchange rate stability- want a degree of coordination of macroeconomic policies, the EMS has also encouraged a partial convergence of policies and rates inflation.

Alternatives for reforming the system international monetary fund

In view of the various characteristics of the behavior of the current international monetary system, many observers have proposed changes to the system to improve how it works. The main objection to the current system concerns the exchange rate volatility of the currencies of the large industrial countries, especially the United States, Germany and Japan, and their potential negative effects. Like these countries have an important role in the global economy and as a good part of exchange and payments of the world is called in its currency, it is considered that it is necessary to find a mechanism for decrease exchange rate variability.

The following will be presented: main proposals for change system, analyzing their respective advantages and disadvantages.

Restoring the gold standard.

The argument in favor of the restoration of the gold standard says that if the value of the currencies in gold was fixed and if national monetary offers are linked to the volume of stocks of countries, there would be no long-year BOP deficit and surplus due to automatic adjustment and the world would suffer less inflation because monetary offers could not grow faster than monetary world gold stocks; they could also reduce the risks of using currencies as international reserves due to exchange rates fixed. If countries respect their gold parities, it is obvious that the system eliminates exchange rate volatility that he's gotten so much attention lately.

The main disadvantage of this proposal is that it gives more importance to objective of the external equilibrium (BOP equilibrium) than to the objectives full employment and economic growth. As in an economy modern prices and wages tend to have an inflexibility downwards, the monetary contraction leads to a decline in output and an increase in unemployment.

The expected increase in rates deficit country interest also prevents long-term investment, the which is necessary to sustain economic growth.

A world central bank.

Some economists have formulated this proposal at different times, since Keynes in the forties, consisting of proposing different degrees of control that would exercise a new central monetary institution.

To establish this institution, the participating countries would deposit less part of its international reservations in the new Authority Monetary. This authority would have to its disposal billions of dollars of assets with which he could handle the world money supply. If growth is needed faster monetary (slow), the authority could buy (sell) government bonds in the world financial markets.

The main argument in favor of this controlled global money supply means that currency fluctuations today are mainly due to different and uncoordinated macroeconomic policies, especially those of the largest industrial countries.

The main criticism of this proposal is that it is unrealistic, because it does not it is possible to think that all countries would completely renounce the autonomy of their monetary policies. National sovereignty in economic policy is a firmly rooted and protected tradition. Without however, the large countries have not lost as much autonomy as the and the authorities of the countries believe they have considerable monetary control and that is why they oppose this plan.

Controls on capital flows.

According to this approach, the problem of the exchange rate instability of the great countries lies in the fact that let short-term capital move with so much freedom between countries.

Many of these capital flows do not they have nothing to do with economic fundamentals such as inflation rates, resource productivity and economic conditions in general, but rather reflect speculative reactions. These volatile flows of short-term speculative capital they cause considerable exchange rate instability. According to the proposal, one remedy is to apply restrictions on the entry and exit of these capitals [6].

Economists generally dislike capital controls. Controls can impede the flow of capital that moves in response to real differences in the marginal productivity of capital.

Stability and coordination.

Proponents of this proposal say that the current exchange rate instability between large industrial countries is mainly due to two factors:

1) macroeconomic policies of any country tend to be unstable

2) macroeconomic policies between countries often operate in opposite directions. In the first, proponents of stability and coordination demonstrate that flexible monetary policies are now being followed by soon a sharp shift towards more restrictive policies. Thus, capital in the short term you can leave the country to cause of low interest rates in the first period and back in the next when interest rates be taller. In the second case, if one country pursues an expansionary monetary policy, while another country applies a contractionary policy, capital will flow into the country with the contractionary policy.

The disadvantage of this proposal is that it involves some sacrifice of national autonomy in what it concerns policy implementation and countries tend to oppose such interference in their sovereignty. No however, a characteristic of the eighties and nineties has been the increased consultations among industrial countries

Cryptocurrency

A cryptocurrency or crypto asset is a digital medium of exchange that uses strong cryptography to secure transactions, control the creation of additional units, and verify the transfer of assets using distributed recording technologies. Cryptocurrencies are a type of alternative currency or digital currency. There is controversy as to whether cryptocurrencies must be decentralized, or centralized currencies controlled by central banks or other entities.

The control of each currency operates through a decentralized database, usually a blockchain, which serves as a public financial transaction database.

The history of cryptocurrencies as we know them dates to 2008. However, their true roots go back years, to the 1980s. More specifically, in 1983, when the American cryptographer David Chaum developed the first cryptographic system called “eCash”. It was conceived as a kind of anonymous cryptographic electronic money or electronic cash system. And it was used as a micropayment system in a US bank from 1995 to 1998.

Cryptocurrencies have several characteristics that differentiate them from traditional systems: they are not regulated or controlled by any institution and do not require intermediaries in transactions. A decentralized database, blockchain or shared accounting register, is used to control these transactions.

They are not backed by a central bank or other public authorities and are not covered by customer protection mechanisms such as the Deposit Guarantee Fund or the Investor Guarantee Fund.

Regarding the operation of these digital currencies, it is very important to remember that once the cryptocurrency transaction is carried out, when the digital asset is bought or sold, it is not possible to cancel the transaction because the blockchain is a registry that does not allow data to be deleted. To "reverse" a transaction, it is necessary to execute the opposite transaction.

These coins are not available in physical form, you must use a digital cryptocurrency wallet service, which is not regulated to store them.

How many types of digital wallets are there?

A digital wallet is a software or application where it is possible to store, send and receive cryptocurrencies. The truth is that, unlike a physical money wallet, what is stored in digital wallets are the keys that give us ownership and rights over the cryptocurrencies and allow us to operate with them. In other words, it is enough to know the keys to be able to transfer the cryptocurrencies, and the loss or theft of the keys can mean the loss of the cryptocurrencies, with no possibility of recovering them.

There are two types of wallethot and cold wallets. The difference between the two is that the former is connected to the internet, while the latter are not. Thus, within the hot wallets we find web wallets, mobile wallets and desktop wallets, the latter only if the computer is connected to the internet. On the other hand, within the cold wallets there are hardware wallets and paper wallets, which is simply the printing of the private key on paper.

How is the value of a cryptocurrency determined?

The value of cryptocurrencies varies according to supply, demand and user commitment. This value is formed in the absence of effective mechanisms to prevent manipulation, such as those present in regulated securities markets. On many occasions, prices are also formed without public information to back them up. We recommend you read this statement from the Bank of Spain and the National Securities Market Commission (CNMV) on the risks of buying cryptocurrencies.

Bitcoin is a distributed financial system that contributes to financial decentralization. It is not issued by any government or entity, but it is powerful. Its supply and demand, buying and selling and users always determine the price, although it is true that some factors intervene in this process:

- Miners. They can reach price agreements with those interested in buying the cryptocurrency.
- When an offer to sell is equal to yours, the transaction is carried out automatically, so that the operation on a given platform means that the price is fixed according to the exchange made.
- User trust has also marked the evolution of its value over time.

We live in a dynamic world, and this has an impact on the rise and fall of the value and price we put on everything, although sometimes we are not aware of it. It happens with cryptocurrencies, with shares and with any product.

Thus, we can say that there is no single price for Bitcoin and other cryptocurrencies.

What is blockchain?

The blockchain is generally associated with Bitcoin and other cryptocurrencies, but these are just the tip of the iceberg. The technology, which has its origins in 1991, when Stuart Haber and W. Scott Stornetta described the first work on a cryptographically secured blockchain, did not come to prominence until 2008, when it became popular with the advent of bitcoin. But it is now in demand in other commercial applications and is projected to grow by 51 per cent annually by 2022 in various markets, such as financial institutions and the Internet of Things (IoT), according to MarketWatch.

Is a single, agreed, and distributed record across multiple nodes in a network. In the case of cryptocurrencies, we can think of it as the ledger where each transaction is recorded.

Its operation can be complex to understand if we delve into the internal details of its implementation, but the basic idea is simple to follow.

Each block stores

- a few valid records or transactions,
- information about that block,
- its linkage to the previous block and the next block through the hash of each block ─ a unique code that would be like the block's fingerprint.

Therefore, each block has a specific and immovable place within the chain, as each block contains information from the hash of the previous block. The entire chain is stored in each node of the network that makes up the blockchain, so an exact copy of the chain is stored in all participants of the network [7].

As new records are created, they are first verified and validated by the network nodes and then added to a new block that is linked to the chain.

Main cryptocurrency mining method

Mining consists of validating and recording transactions on the blockchain. To do this, all nodes in the network participate in successfully solving the riddle of searching for the block, where a random number and applying a cryptographic function results in a hash that meets one characteristic: it has a certain number of leading zeros. This work requires effort and computational power, which ensures that it is complex to write new transaction blocks to the log and thus prevent an attacker from generating a fake block and adding it to the network or modifying an existing block.

Not all cryptocurrencies work in the same way, as the way they are mined depends on the system that uses the blockchain or algorithm of each cryptocurrency. However, they all have one thing in common: miners do not perform useless operations but are necessary to maintain the stability and security of the network. Because their work is so important, miners are paid a certain amount of money for their mining work. In the case of bitcoin, for example, every time a miner finds a valid block, he or she is rewarded with 12.5 bitcoins. The payment is made with coins that are in reserve and at that moment they enter into circulation, which is why it is often mistakenly believed that cryptocurrency mining consists of generating new coins. The coins are already defined, however, through mining, new coins are brought into circulation.

It is important to note that laws are not the same for all countries, so it is not easy to generalize an answer.

Cryptocurrencies operate in a decentralized manner and outside the traditional banking system. However, this type of currency is not untouchable. In fact, regulations are already being implemented in several countries regarding mining and transactions of digital currencies.

In Latin America, as far as we know, the only country that does not allow the use of non-legal tender currencies backed by a country is Bolivia. Due to scams and cyber-attacks involving these types of currencies, in Bolivia you are very likely to have serious problems if you use cryptocurrencies, and probably also if you want to mine.

While it is true that cryptocurrencies are strongly associated with cybercrime, we should not forget that they are very powerful tools that bring great benefits to financial transactions in the digital age, and that in the near future they are far from disappearing. As far as the rest of Latin America is concerned, regulations regarding the use and holding of cryptocurrencies are nonexistent or scarce, so we can interact with them without any problems, as long as we operate within legal business and operations.

The future of cryptocurrencies

Cryptocurrencies continue to be in the eye of the storm. Although they have been on the market for several years and their use has increased over time, the truth is that their defenders are equal in number and passion to the system's detractors. Among the latter are renowned economists and financial authorities who are suspicious of their seriousness, as they believe that, being in a decentralized system, which is not regulated by a public body, they can be used for money laundering, to finance illicit activities or to evade taxes.

Some 21 million bitcoins are said to be in circulation, although there are other virtual currencies, albeit less famous, including Ethereum, litecoin and ripple. Experts predict that daily bitcoin usage will grow by 363% to 175 billion by 2027, making it one third of all digital currencies.

The high yield that bitcoin has reached at times, and only during the last year it has achieved a considerable rise, just a few weeks ago it had a strong increase in its value, reaching more than U$7,000 for a bitcoin, which has meant that not only investors try to get them as they can, but also that the financial system and the press put more interest there.

With the above data, we can only recognize the impact of bitcoin, a currency that has become powerful, and which many are already using for their transactions. However, nothing is as easy as it seems.

Not everyone can trade in this market. Whoever wants to buy, sell or dispatch a bitcoin must be an expert in technological and computational issues, as it is a transaction that requires a higher level of technical understanding and patience, as it is a complex and difficult task, perhaps for the same reason, it has been pointed out that the programmers of this system, have made and reviewed through various mathematical algorithms, the security of the system when making transactions.

This is vital for the confidence of those who invest and buy or sell cryptocurrencies.

Conclusion

To choose an international monetary system, we must consider the adequacy of international reserve assets, the confidence that countries have in those assets, the extent to which effective adjustment is achieved balance of payments, the degree of existing national autonomy in economic policy and the extent to which exchange rate fluctuations cause instability in macroeconomic behavior.

The system Bretton Woods used exchange rates fixed but adjustable, based on parities that were defined in dollars, which in turn were defined in gold, but disintegrated in 1971 by the emergence of greater uncertainty around the value of the dollar. In the years following that disintegration, countries have adopted a wide variety of exchange rate regimes and the current international monetary system is described as a 'no system'.

The recent exchange rate history has characterized by a considerable exchange rate volatility real and nominal of the main industrial countries and the constant transmission of fluctuations between countries, although the real exchange rate is the nominal exchange rate adjusted by the difference in prices, both domestic and foreign. When it comes to discussing competitiveness gains or losses, the relevant thing is real change.

A country can gain competitiveness either because its currency is devalued in terms prices remain unchanged, or because foreign prices grow faster than nationals.

Volume of exchange and payments has grown substantially.

To propose a change to the current international monetary system, is not easy. Major industrial countries favor greater coordination of their macroeconomic policies but adopt greater restrictions on short-term capital flows.

The least developed countries developed tend to prefer an international monetary system based on greater exchange rate fixation and greater allocation of international reserve assets to its value.

How to put them according to the one (rich countries) and the other (poor countries)? Economists still do not have an adequate response to this.

On the other hand with respect to cryptocurrencies it is important to mention that the world is constantly changing through technological advances that in recent decades have been increasingly faster, it is mentioned that technology is advancing with a speed of 200 years, a very important fact to mention, since the monetary systems that the world has is of ancient origin. This is why we believe that cryptocurrencies have a promising future, but this will not be easy to accept because the mining process is quite expensive but we believe that cryptocurrencies could have a promising future for the world on the condition that they have a clear backing as it is one of the cons that the monetary system has been referring to cryptocurrencies.

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