

**The Impact of Crypto Currencies on Economy,
The Revolution of Bitcoin
Current Situation and Future Prospective**

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Economic science has evolved over several decades toward greater emphasis on payment methods. Electronic payments "e-Payment" revolution started with e-Cash, e-Cheques and e-Portfolio ending up with "Crypto Currencies" in general and with "Bit Coin" in particular, started in the past decade, is likely to have a further and profound effect on economies and research in economics. With "Crypto Currencies", people no longer have to go to traditional banks if they need financing. Peer-to-peer networks, including those based on Cryptocurrencies are becoming more common and those who might be turned away by traditional banks now have another way around financing. Consequently, economists made use of newly available technology and new financial data or private sector data that often are obtained through collaborations with private firms, giving rise to new opportunities and challenges. This research aims at studying the effect of Crypto Currencies on economies. The main question of this research is "What is the future of Crypto Currencies specially Bitcoin?. The main hypothesis is, similar to several other countries, the Egyptian economy will catch up with the other countries and Crypto Currencies will be somehow integrating with traditional payment methods.

Keywords: Econometrics, Economic indicators, Economic analysis-Economy, e-Commerce, e-Payment, Crypto Currencies, Bit Coin.

1 Introduction

The birth of e-Commerce was supported by e-Payment systems. That, at that time, was a revolution in economic systems. Similar to any new invention, e-Payment as having its pros it had its cons. In fact, by the end of the day, they represented a problem. When customers were able to perform the exchange of value in barter systems, they were able to communicate face-to-face and were able to instantly verify the respective physical properties being exchanged.

As world economy dispersed, and e-Commerce became one of the facts of life, purchasers and sellers became geographically distant, that led to the emergence of what could be called "agents" which are a trusted third-parties acting on behalf of the participants to guarantee the transaction. In that sense, those agent's existence became necessary to verify the quantity or quality of the property being transferred and the money to be paid. An example could be given by credit card issuers. Credit cards are issued by a third-party standing in for a buyer, guaranteeing to the seller that the buyer's funds are guaranteed.

The growth of e-Commerce, associated with the growth of the Internet led to the propagation of digital transactions which showed that traditional payment systems, represented in traditional currencies and exchange systems in the borderless, electronic world have many limitations. Those limitations include:

- High expenses,
- time delays;
- Security risks.

These limitations are particularly crippling when transactions involve parties on each side of the globe. But distance is not the only problem; a more complicated problem is the exchange rate values of different currencies when a transaction is held between party's using different currencies. Consequently, the idea of using an international currency was borne. That currency should be characterized by being:

- Independent of a country,
- Independent of a country central bank,
- Designed for a globalized economy.
- Provide anonymity to its holders,
- Protection from inflation,
- Security from theft and fraud.

The concept of digital currency enabled the concept of cash or cash equivalent to be used over the Internet. Payment methods like electronic cash, electronic checks and electronic portfolio were borne. Eventually, Crypto Currencies in general and the famous "Bit Coin" in particular were borne and swept the world in no time overtaking and dominating many other currencies.

The website Shopify recently listed 75 specialty retailers that accept **Bitcoins**, and Forbes announced its "Top 10 Bitcoin Merchant Sites," including website development software

developer WordPress. Even Baidu, Inc., China's biggest search engine, accepted "Bitcoins" until the nation's central bank banned the use or ownership of the currency by financial institutions.

This paper will focus on the recent performance of the cryptocurrency as a new currency and as an industry. It will also put emphasis on the key factors driving and restraining growth. Finally, it will try to outlook over the near future of cryptocurrency and the economic environment they are generating.

Section two presents the concept of Cryptocurrencies, Section three presents the growth of Cryptocurrencies (Bitcoins). Section four discusses the factors that affect growth of cryptocurrency. In section five, advantages and disadvantages of Cryptocurrencies are presented. The paper conclusion and future works is discussed in section six.

2 The concept of Cryptocurrencies

In their very basic form, Cryptocurrencies are encrypted digital money, in many other cases they are called "virtual money". Bitcoin, is the first and probably the best known Cryptocurrencies. Due to the success of Bitcoins, many other Cryptocurrencies have followed, those Cryptocurrencies are such as: "Ethereum"; "Ripple", "Cash, Litecoin" and many others.

Bitcoin was invented by an unknown person or group of people under the name Satoshi Nakamoto and released as open-source software in the year (1) (2009). It has been established as a result of the financial crash in that year as a digital currency that has no central bank or regulatory authority backing it up. In fact, the coins don't exist in a tangible form but are made by computers and stored in a digital wallet or on the cloud, and then they could be exchanged and used in commercial transactions.

Today, Bitcoin, as the leader of crypto currencies, is an accepted worldwide payment system. It is the most renowned decentralized digital currency. They can be exchanged for other currencies, products, and services. It has been defined that Bitcoins are a form of money that's remarkable for what it is not:

- It is not currency you can hold in your hand.
- It is not recognized by most Main Street stores.
- It is not issued or backed by a national government.

Then Bitcoin became part of a public online ledgers that is called "Blockchain" [2] The Blockchain technology is used for verifying and recording transactions of different sorts, that formulated the heart of Bitcoin.

There is a finite number of bitcoin that can be supplied – 21m – and there are currently 15m in circulation. Its price has fluctuated wildly since it was launched. Seven years ago, two pizzas were bought for 10,000 Bitcoins. At its peak at the beginning of September this year each Bitcoin was worth almost (3) .(21,000\$)

Blockchain, is seen as having the potential to reshape the global financial system and possibly other industries. Both Bitcoin and its umbrella, the Blockchain, are followed by thousands of imitators as well as adherents. In the meantime, plenty of critics were directed to them including from Jamie Dimon, the chief executive officer of JPMorgan Chase & Co. May be the worst critics to Bitcoin is, as it can be used as an anonymous way to carry out cross-border money transfers, it has been linked to drug dealing and money laundering.

Cryptocurrencies were accepted in financial transactions because, similar to any functioning form of currency, Cryptocurrencies facilitate payments between parties and provide a store of value with an advantage of being capable of serving those roles even in environments where trust or lack of trust is a problem, in fact trust is implicit for practically any means of payment where payment “validation,” determining which transactions can precede through the system and which should be refused as invalid, that includes checking for sufficient funds in the account of someone who wants to make a payment. With Bitcoin there isn't one designated validator. Instead, everybody in the Bitcoin network could be picked, essentially at random, to validate recent transactions. Actually, Cryptocurrencies transactions, in general, are verified by network of nodes and recorded in a public distributed ledger called a Blockchain.

The most important and most controversial feature in Bitcoins is **"The system works without a central repository or single administrator"**, consequently, it could be completely invisible. The network is peer-to-peer and transactions take place between users directly through the use of cryptography, without an intermediary. [4]

How Cryptocurrencies (Bitcoins) are working - The concept of mining

Traditional currencies are usually backed by gold or some other physical commodity. Contrary to traditional currencies, virtual currencies aren't backed by anything real which raise the question **"does that make them worthless?"**, the answer to that question could be driven from the fact that some important traditional currencies such as the dollar and many other modern currencies are not.

Money, even intrinsically worthless currencies, cuts the problem of "double coincidence" of barter payment system between the trading parties. One just needs to find someone willing to pay some of that currency for product or service, and then use that currency to pay for another goods or services. The secret is, as long as trading parties trust that currency, someone will accept it. Then a situation is borne, trading parties become willing to accept it in exchange for anything they trade. Trust made "worthless" piece of currency, a worthy currency to people and made it an acceptable medium of exchange between them. That is the case with Cryptocurrencies.

Bitcoins are created as a result of a process known as mining. At their core, Cryptocurrencies, Bitcoins and its similar coins, in

their core are sets of software protocols that encrypt and transmit data from one place to another. The transmitted encrypted values are the basis for generating digital tokens and for tracking transactions in a way that makes it hard to counterfeit or re-use those tokens. Cryptocurrencies including Bitcoins have value only when its users agree that it does. [5] (Bloomberg)

Bitcoins are created in blocks of 50 bitcoins through a process called "**mining**". That process is transformed to the amounts to a payment for services provided to the decentralized network by processing transactions. Mining, processing transactions for the Bitcoin network, is the only method by which new Bitcoins are created.

In that process '**mining**' a transaction occurs when one party transferring Bitcoin to a second party electronically using each party's Bitcoins "wallet".

The term "**wallet**" is given for the public digital files where the respective parties, in other words "wallet" owners, keep private encryption keys to prove ownership of the wallet.

Transactions are processed by network computers that are called "**Bitcoins miners**" into a shared public ledger called a "block chain."

The block chain is maintained over the entire network according to specific cryptographic rules, and each transaction must be verified by other computers (nodes) in the network before it's confirmed.

Once the network computers (the "miners") complete the increasingly, complex algorithms associated with each transaction,

the owners of the mining computers earn a fixed number of Bitcoins.

Essentially, the Bitcoin transaction is audited a minimum of six times by different computers in the network before the transfer is confirmed to the wallet owners. This ensures that:

1. The transferring bitcoin wallet has sufficient Bitcoins to complete the transaction.
2. The appropriate number of Bitcoins is transferred from one wallet to the other, thus agreeing and confirming the total number of Bitcoins outstanding remains the same.
3. The Bitcoin balance in each wallet is correct following the transfer, again confirming that the total outstanding Bitcoins are correct.

Each computer verifying the transaction adds its own sequence of numbers to the block chain. As transactions increase, the computing power necessary to complete each transaction also increases due to the longer block chain and the greater complexity of the algorithms required completing each operation.

As the number of outstanding (unissued) Bitcoins decrease, and the number of Bitcoin transactions increase, the Bitcoin miner must expand greater computer power to complete each transaction.

3 The growth of Cryptocurrencies

When Bitcoin broke into public consciousness in 2013, it couldn't have been more attractive; it encapsulated all the merits traders dreamt of: "a digital currency being used to buy everything from drugs to cupcakes". In the year 2017, the total number of cryptocurrencies and digital assets on exchanges exploded to reach 1,335 cryptocurrencies from 617 cryptocurrencies it has been called the "year of the cryptocurrency." [6] That is due to the exponential jump of the market capitalization, investor, and institutional coverage for cryptocurrencies. Figure 1, shows the total crypto currencies market capitalization.

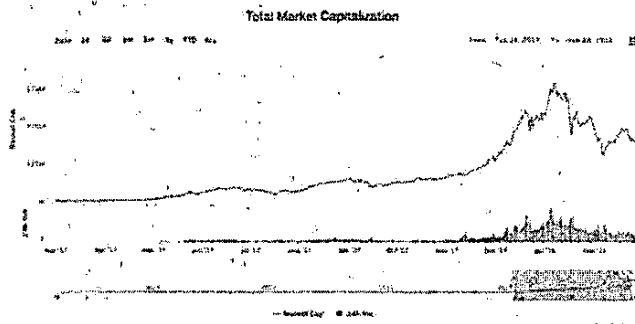


Figure 1, total crypto currencies market capitalization (coinmarketcap.com).

As of February 2015, over (100,000) merchants and vendors accepted Bitcoins as payment. Research produced by Cambridge University estimates that in 2017, there are 2.9 to 5.8 million unique users using a Cryptocurrency wallet, most of them using Bitcoins. [4]

In 2017, Bitcoin ATMs started to appear that allow the crypto currency to be exchanged for cash, and an increasing number of businesses accept it.

In 2018 Lady Mone, co-founder of underwear brand Ultimo, launched a property development in Dubai with prices in Bitcoin, while a London property developer is to allow its tenants to pay their deposits using it.

But, trying to estimate the exact market size of cryptocurrencies might prove difficult, but the fact is cryptocurrency industry is suffering massive volatility in prices over short periods of time. As of December 2017 ,1, the total market capitalization of the cryptocurrency market was 326.7\$B. By January 2018 1, the cryptocurrency market cap had increased to 629.5\$B. By February 2018 ,28, the market cap settled at 447.9\$B. Figure 2, presents SIFR Vol Index Annualized Volatility and Future Projection [7]

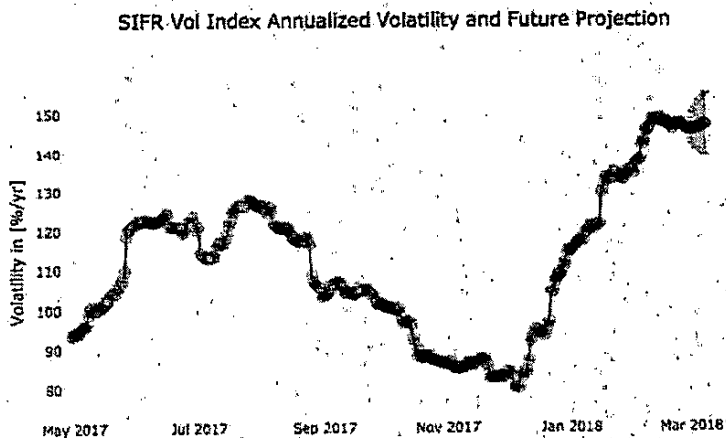


Figure 2: SIFR Vol Index Annualized Volatility and Future Projection (Source: SIFR)

In recent years the cryptocurrency industry saw record-breaking growth rates, in the year 2017, the number of market participants and market capitalization have skyrocketed. The growth was:

- The total number of cryptocurrencies and digital assets on exchanges soared by %216, from 617 to 1,335, and currently stands at 9][8].1,531]
- Total market capitalization increased by %3,363 in 2017, with Bitcoin's market cap jumping %1,364 and the Altcoin side shooting 10].%16,695]

Prices of the Top 10 cryptocurrencies by capitalization during 2017, are presented in figure 2.

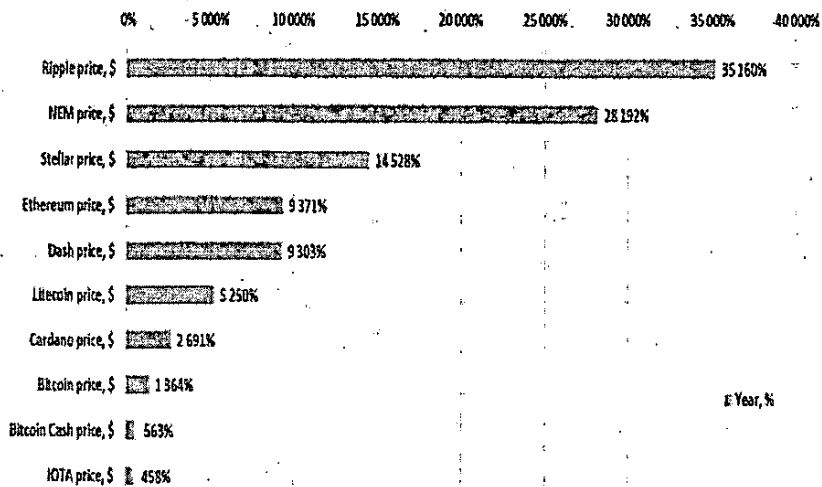


Figure 3:

Prices of the Top 10 cryptocurrencies by capitalization during 2017 (USD),(Source: CoinSpeaker)

The birth of new type of financial transactions

Due to all of that activity, a new kind of financial transaction was borne, this financial transaction is called Initial Coin Offerings (ICO) which is used to raise funds for a new cryptocurrency or other digital asset.

In this type of transactions, investors can trade and pay using both cash or cryptocurrency and are given a percentage of the new cryptocurrency in return.

ICOs, are becoming to be a popular means of raising money and avoiding the arduous regulation surrounding the capital raising process because cryptocurrencies are becoming a more stable asset class.[11] Figure 4, shows the ICO Market, Funds Invested and Number of ICO's in 2017.

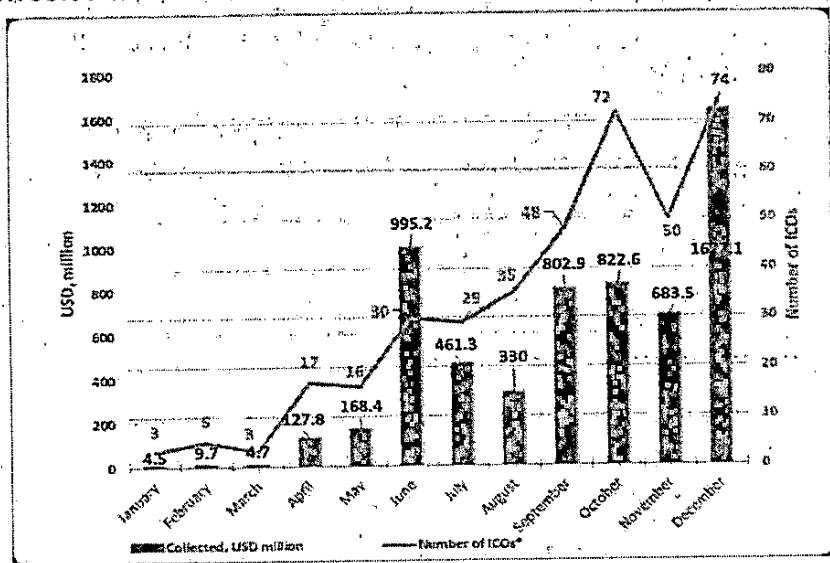


Figure 4: ICO Market, Funds Invested & Number of ICO's, 2017 (Source: CoinSpeaker)

According to a study by Bank of Canada Victoria and the University of Wellington Thorsten Koepl Queen's University, "The Economics of Cryptocurrencies – Bitcoin and Beyond", they presented the following trends regarding:

- Active users.
- Exchanges.
- Wallets
- Payments
- Mining

They found the following results:

a. Active Users

- The current number of unique active users of Cryptocurrency wallets is estimated to be between 2.9 million and 5.8 million.
- The lines between the different Cryptocurrency industry sectors are increasingly blurred: %31 of Cryptocurrency companies surveyed are operating across two Cryptocurrency industry sectors or more, giving rise to an increasing number of universal Cryptocurrency companies.
- At least 1,876 people are working full-time in the Cryptocurrency industry, and the actual total figure is likely well above two thousand when large mining organisations and other organizations that did not provide headcount figures are added.
- Average security headcount and costs for payment companies and exchanges as a percentage of total headcount/operating expenses are similar, but significantly higher for wallets.

b. Exchanges

- The exchanges sector has the highest number of operating entities and employs more people than any other industry sector covered in this study; a significant geographical dispersion of exchanges is observed.
- %52 of small exchanges hold a formal government license compared to only %35 of large exchanges.
- On average, security headcount corresponds to %13 of total employees and %17 of budget is spent on security.

c. Wallets

- Between 5.8 million and 11.5 million wallets are estimated to be currently 'active'.
- The lines between wallets and exchanges are increasingly blurred: %52 of wallets surveyed provide an integrated currency exchange feature, of which %80 offer a national-to-cryptocurrency exchange service. In contrast with exchanges, the majority of wallets do not control access to user keys.

d. Payments

- While %79 of payment companies have existing relationships with banking institutions and payment networks, the difficulty of obtaining and maintaining these relationships is cited as this sector's biggest challenge.
- On average, national-to-Cryptocurrency payments constitute two-thirds of total payment company transaction volume, whereas national-to-national currency transfers

and Cryptocurrency -to- Cryptocurrency payments account for %27 and %6, respectively.

e. Mining

- %70 of large miners rate their influence on protocol development as high or very high, compared to %51 of small miners.
- The Cryptocurrency mining map shows that publicly known mining facilities are geographically dispersed, but a significant concentration can be observed in certain Chinese provinces.

4 Factors That Affect Growth of Cryptocurrency

Despite the traction that Cryptocurrency has gained over the last half decade, its path has been turbulent. Many argue that the performance of anarchic Cryptocurrency has been underwhelming in comparison to the hype it stirred when it publicly emerged in [2] 2009]. There are two main factors that have affected the growth of the Cryptocurrency industry and will continue to influence its development and integration into the broader financial scheme those factors are:

- Regulatory attempts by several international governments.
- Public perception in moving toward wider adoption of the Cryptocurrency.

4.1 Regulatory attempts by governments

Virtual currencies are not universally recognized as official means of paying for goods and services, until Cryptocurrency is regulated by governments and developing standardized systems

for their use, the expanding Cryptocurrency market in global venues is fraught with challenges and potential pitfalls [13]. Those pitfalls include:

- Inability to limit fraud,
- Inability to protect consumers,
- Inability to respect economic sanctions,
- Inability to institute viable taxation methods.
- Inability to offer clarity and a broad overview of contemporary regulation attempts.
- Available data is in flux and subject to frequent change.

Various governments are contemplating several approaches of regulatory systems. The current challenge faced by regulators is expanding existing laws to allow for the unique aspects and challenges of the virtual currency world. Anyways, current regulatory measures are in their infancy and continue to evolve with the rapidly expanding industry. Advantages of having regulatory measures include:

- Regulations will offer greater legitimacy to a currency struggling to gain mass acceptance.
- They will standardize elements of the market.
- They will minimize at least some of the volatility of the currency.

4.2 Public perception in moving toward wider adoption of the Cryptocurrency.

Public perception in moving toward wider adoption of the Cryptocurrency, is taking different directions in different countries as follows:

a. The United States:

The United States takes a permissive, slightly neutral stance on Cryptocurrency. For taxation purposes, virtual currencies are handled as property rather than as currency, and transactions are subject to the same taxation norms as other types of property.

b. The Financial Crimes Enforcement Network (FINCEN)

In 2013 the FINCEN's tried to clarify Cryptocurrency place in the financial market and announced that while individual use of virtual currencies is not to be considered a money service business (MSB), exchanges and conversion of virtual currencies do fall under the definition of a money service business [14]. As such:

- Virtual currency transmitters must follow the government requirements already established for MSBs, including reporting techniques, record-keeping and abiding by the Bank Secrecy Act of 1970.
- It demands a degree of accountability from virtual currency transmitters, as well as one more layer of security against fraud.

c. Individual U.S. states

In April 12, 2015 states and Puerto Rico played a large role in establishing regulations for the emerging currency. They instituted licensing protocol for virtual coin operations [15].

d. California State

In January of 2015, Cryptocurrency gained legal status in California [16]. Currently, California has more Cryptocurrency activity than any other state, and has been proactive in incorporating digital currencies into existing financial frameworks [16].

e. New York

New York is currently in the final stages of instituting its own regulatory framework [17].

f. Australia

The Australian government has not formally adopted regulations for virtual currency, and has been clear that "Bitcoin is not a legally recognized universal means of exchange and form of payment by the laws of Australia or the laws of any other country. But, it has provided space for the Cryptocurrency to comfortably exist and Australian citizens account for roughly 7% of Bitcoin users. The Australian government has established a system of taxation for the coinage [18]. Trading done in the form of Cryptocurrency is subject to the country's preexisting tax rules relating to goods and services [19].

g. Canada

Canada is the first country in the world to establish a tax on virtual currencies. The Bank of Canada has expressed a willingness to acknowledge the developing virtual currency market, but currently recognizes Cryptocurrency as investments rather than currency. Taxation system and Bank of Canada acknowledgement, seek to minimize the risks most frequently associated with Cryptocurrency: money-laundering and terrorist-funding [17].

h. Russia

- Russia has reacted less favorably to the emergence of Cryptocurrency. They took the following actions:

- The Bank of Russia shared concerns that the currency could facilitate money-laundering attempts, as well as be convenient means to transport funds to terrorist organizations.
- In February of 2015, Russia's Prosecutor General's Office claimed that Bitcoin "cannot be used by individuals or legal entities."
- And in April 2015, Deputy Minister of Finance Alexei Moiseev reiterated that position, stating "The law, which provides measures for penalizing the usage of monetary surrogates, will finally be passed this year" [20].
- Russia's crackdown on the currency is already evident, with at least half a dozen Cryptocurrency websites blocked at the beginning of 20] 2015].
- The bank argued that virtual currency violates federal law mandating one central bank and currency [20].
- The Ministry of Finance announced its intent to restrict use of Cryptocurrencies as a means of payment.

i. China

- China has taken steps to restrict the use of virtual coinage.
- In December of 2013, China's Central Bank prohibited financial institutions from handling Bitcoin transactions,
- They also limited legal trade of the coin to individuals and private parties.
- Bitcoins and other Cryptocurrencies are treated as a goods rather than a viable currency.

j. Vietnam

Vietnam has firmly cautioned its citizens on the use of Cryptocurrencies. While there is no regulation specifically relating to virtual currency usage, the Bank of Vietnam has warned that Vietnam does not consider virtual currency to be a legitimate form of currency. Accordingly, transactions utilizing forms of cryptocurrency are not covered by legal protections.

5 Advantages and Disadvantages of Cryptocurrencies

5.1 Advantages of Cryptocurrencies

According to Anthony Gallippi, CEO of Bitpay payment processor, "Bitcoin is a more secure, faster, and more affordable option for transferring funds." In technical terms, Bitcoins are a math-based, finite, verifiable, open-sourced, decentralized Virtual currency that relies upon Cryptography for security. Proponents of the new currency claim that:

- Instant payment can be made to anyone, anywhere in the world
- Transactions cannot be reversed for any reason
- Third parties are unnecessary
- The supply of Bitcoins cannot be manipulated by any government, bank, organization, or individual
- As Cris Skippers (author of digital banks) puts it: "People who could not access trade and finance ten years ago can do so today. This will lift many out of poverty"

5.2 Disadvantages of Cryptocurrencies (Bitcoins)

Cryptocurrencies suffer from several disadvantages, some of them are:

1. The association of Cryptocurrencies with illicit activities.
2. The fluctuation of the price of Cryptocurrencies

The association of Cryptocurrencies with illicit activities

- Cryptocurrencies sometimes associated with illicit activities, and this is likely related to trusting it. Criminals found Cryptocurrencies as more convenient than cash for many illegal activities that now take place online. What made Cryptocurrencies ideal for circumventing legal or regulatory authorities is due to being not governed by any. Accordingly, Cryptocurrencies replaced cash and traditional payment systems between criminals, who typically use cash for the anonymity and security it provides. Examples include:
 - In 2013, the crackdown on an online marketplace that is called Silk Road, which was used to trade illegal goods, Bitcoin prices plunged.
 - In 2013, China, banned banks from dealing with Bitcoin, (this was relaxed later). As China controls capital flow, they thought that Bitcoins are used for money laundering.
 - In 2015, when Greece fell deeper into financial distress, Greek interests and trading in Bitcoin rose quickly amidst fears of capital controls and the possibility of exiting the eurozone. Bitcoin became attractive as trust eroded.

- In 2016, reports by the Drug Enforcement Administration showed a sharp decline in bulk cash smuggling. They suggests that payments may have shifted toward Cryptocurrencies.
- Finally, North Korea is reportedly responsible for state-sponsored hacks to steal Cryptocurrencies, which help bypass economic sanctions that are enforced through the cooperation of financial institutions and countries.

The fluctuation of the price of Cryptocurrencies

- Cryptocurrencies has experiences extremely high levels of fluctuation in 2017. In fact, those levels of fluctuation are unheard of for any assets traded in volumes.
- Compared to US stock market, which experienced one of the least volatile years on record in 2017, Cryptocurrencies fluctuation was exceptionally high.[21]
- As a result, the price of Bitcoin fluctuates with news that vendors or firms accept or decline Bitcoin as a mode of payment. Late in the year 2017, Bitcoin prices jumped after Square, a payments firm, was reported to be testing Bitcoin. Wider adoption and acceptance of Cryptocurrencies as a payment option naturally increases what they are worth.
- In the year 2017, the following volatility behaviors were detected:
 - The volatility of crypto market was above %80 annualized volatility level.
 - A large portion of the year consistently was above %100 volatility.

- The volatility peak was reached in February 2018 to hit %148 volatility.[22].

6 Conclusion and Future Prospective

From the previous discussions, it appears that the market of cryptocurrency will be a fixture of a new era of investing. That conclusion is based on two reasons [23]:

- The overabundance of new technologies that it employs.
- Its applications in the several industries.

From the previous analysis we can conclude that [24]:

- Cryptocurrencies are expected to continue to grow and eventually stabilize.
- Volatility will gradually subside over the coming decade.
- More regulation will control the market.
- A greater diversity of investors enter the market.
- Improved security measures will be imposed.

Consequently:

- The flow of capital into the crypto market will be a continued.
- Long term investors will begin to invest in the market.
- A solid foundation for long term market growth will be built.

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تأثير العملات المشفرة علي الاقتصاد ، ثورة البيت كوين

الوضع الحالي وأفاق المستقبل

د / مروة صلاح الدين فهمي

مدرس الاقتصاد بأكاديمية السادات

لقد نمت العلوم الاقتصادية وأزدهرت في خلال العصور السابقة عن طريق وضع معايير وقواعد وقوانين تركز وتنظم وتتحكم في عمليات بناء طرق سداد مقبولة بين أطراف الصفقة.

نتيجة لإزدهار التجارة الإلكترونية حدثت ثورة في طرق السداد المختلفة لكي تتواكب مع العمليات المختلفة القائمة في التجارة الإلكترونية، وتمثل ذلك فيما يسمى بطرق «السداد الإلكتروني» التي تمحورت حول «النقود الإلكترونية» و «الشبكات الإلكترونية» و «حافظة الأموال الإلكترونية» إلي أن ظهرت العملات المشفرة كمفكرة عامة وولدت عملة «البيت كوين» بصفة خاصة في ٢٠٠٩ التي أصبحت هي أهم وأشهر تلك العملات. هذا البحث يعرض تطور تلك العملات وينبئ بمزيد منها وتطورها ويستعرض تأثيرها العميق علي اقتصاديات العالم كدول وكأقتصاد عالمي مما يستتبع إعادة النظر في النظريات الاقتصادية الحالية وآليات التعامل في تلك النظريات الجديدة.

ينبع تأثير تلك العملات علي الاقتصاد العالمي من أنه في الواقع الإلكتروني الجديد نجد أن الافراد لن يصبحوا في حاجة إلي بنوك تقليدية لتنفيذ عمليات التعامل المختلفة وإنما سوف يتم التعامل بين الاطراف المختلفة للصفقة من خلال عمليات «الند-لند» التي تعتمد علي شبكات المعلومات المدعمة ببرامج عالية الجودة تقوم بعمليات التشفير وتدعم أمن العملات المشفرة وتضمن أمن الصفقات التجارية بأسعار أقل مما تأخذه البنوك ويعيدا عن أعين الآخرين بما فيهم البنوك المركزية والجهات الرقابية.

ومع التوسع في تلك الشبكات وزيادة الثقة في الآليات المتاحة لأمن الصفقات فإن مزيداً من العملاء سوف يتحولون من النظم التقليدية السائدة التي تعتمد علي

البنوك التقليدية والعملات التقليدية التي تحكمها آليات اقتصادية عتيبة إلى النظم الجديدة الأقل تكلفة والأكثر مرونة ولكن بلا قواعد اقتصادية محددة أو معروفة.

نتيجة لما سبق، فإن الاقتصاديين اعتمدوا على التكنولوجيات الجديدة الداعمة لتلك العملات لجمع المعلومات الخاصة بهذه العملات وبدأوا في جمع البيانات على أحجام التعامل ودورة رأس المال ونسب العائد ودرجات مرونة العملة من مستخدمي تلك العملات والشركات الخاصة والمؤسسات المالية الخاصة لتحديد التحديات ومحاولة وضع نظريات جديدة للتعامل تحت مظلة «الاقتصاد المشفر».

يتعرض هذا البحث لمجموعة من الدراسات من الزوايا المختلفة للعملات المشفرة، ويحاول أن يشرح تأثير تلك العملات على الأوضاع الاقتصادية الحالية.

في ظل هذه الدراسة فإن البحث يحاول الإجابة على عدة أسئلة منها:

ما هو تأثير العملات الالكترونية المشفرة على النظم الاقتصادية القائمة؟

ما هو مستقبل العملات الالكترونية المشفرة على وجه العموم وعمله «بيتكوين» على وجه الخصوص؟

الفرضية الأساسية لهذا البحث أنه مثل أي تكنولوجيا جديدة ومع وضع قواعد التعامل والقوانين المنظمة فإن كثير من الدول، بما في ذلك مصر، سوف تدمج العملات المشفرة مع اقتصادها التقليدي وسوف تزي إزدهارا لطرق السداد الالكتروني المختلفة.