A Literature Survey of Virtual Currency

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ABSTRACT: Money is maybe the best-recognized but at the same time less-understood economic metric. Throughout the development of a monetary science starting in the eighteenth century and fundamental works on such issues as true nature and the key functions of currency, the method and theories of monetary science have changed dramatically to the point of not entering the final state. The twenty-first century can be characterized by massive technological advancement and increased internet use, which greatly resulted in the growth of a monetary system that implemented a new trend-virtual currencies. Though remaining somewhat illusive, both legislative authorities and practitioners have widely noted the virtual currencies. In addition, prime authorities such as the Securities and Exchange Commission, S Treasury and European Central Bank expressed their reservations regarding this new form of currency as well. The suggested subject deserves extra attention because of the increasing popularity of virtual currencies, particularly the cryptocurrencies. Given the various possibilities virtual currencies could bring, it is very difficult to disregard the related risks-virtual currencies, representing a form of unregulated, digital money could support higher risks such as money laundering, financing illegal activity, etc. The focus of this paper addresses the overall analysis and evaluation of risks associated with the future production of virtual currencies and the inadequate, not comprehensive regulation. The paper's main findings suggest that virtual currencies nonetheless have a strong potential for further development, the development of a global or at least regional legislative base should take precedence.

KEYWORDS: Virtual currency, Money, Alternative currency, Crypto currency, Digital currency.

INTRODUCTION

Probably one of the most important concepts when thinking about money and its purposes is the distinction of words such as wealth and riches. The creation of property and the production of capital can be seen as two totally separate things. He offered that while wealth is generated by applying human expertise to natural resources in the myriad ways in which useful goods and services are made, capital, on the other hand, is a human object; it is a sign generated by a deliberate process involving entities called banks. Although fully supporting such seeing, this paper will concentrate on understanding various aspects directly related to money, in particular as regards currency. It can be accepted that as long as a union understanding and standards have been formulated to address nationally emitted currencies, which are specified and are widely correlated with national affiliation. Nevertheless, as Rogajanu and Badea have noted, the issue of private currencies faced considerable development in the nineteenth century.

Discussing production and the key aspects of virtual currency seems much more relevant during the period when the struggle with funding of criminal organizations precedes the prospect of emission of private capital. Given the drawbacks that virtual currency presents, it has managed to greatly increase popularity. One would say, that a significant risk is that people continue to trade goods and services across thousands of types of currencies without challenging their legal aspects. Before assessing the virtual currencies and addressing related risks, it may be useful to recall the creation of alternative currencies as a class, especially bearing in mind that alternative or complementary currencies range from quaint to robust, easy to high-tech, showing in many different forms and being organized in very different ways. Here, you can note a Local Exchange Trading Systems (LETS)-Mutual Credit and CES Systems, an electronic money and banking network. Although LETS operates as clubs that set their own rules, CES is managed by an online system that connects local groups to build a global network.

Virtual currency

While the presence of virtual currency can define modern commerce to some degree, this concept is not a new one. Virtual currency tends to maintain conventional currency's key features, in other words virtual money is a symbol or synonym for a commodity, a payment system technology that has continued to develop over the

past 20 years. Virtual currency is based upon the idea of exchanging value without an institution's approval. While being aware of a wide development of different payment methods and alternative currency formation, the bold question of what virtual currency is to be addressed. United States legislative acts clarify that virtual currency is a medium of exchange that operates like a currency in some environments but does not have all the attributes of real currency which indicate the absence of legal tender status in any jurisdiction. While speaking of the overall scenarios concerning virtual currencies, the correct regulatory treatment of administrators and exchangers by US regulators was discussed under three scenarios:

- E-currencies brokers and traders, and e-precious metals. Since the concept of a money transmitter does
 not distinguish between real currencies and virtual convertible currencies, the same rules apply to ecurrency and e-precious metals brokers and dealers; even centralized virtual convertible currencies.
- Convertible virtual currency is commonly understood as a replacement for real currencies, transmitting the virtual convertible currency in the direction and constitutes money transfer on the part of the exchanger for the benefit of the user
- De-centralized virtual currencies convertible. Have no central repository and no single administrator, and that people can receive from their own computing or development efforts.

Cryptocurrencies

Bitcoin, first launched in 2008, is a peer-to-peer digital currency that trades on public exchanges that can be exchanged instantly between any two individuals anywhere in the world with the speed of an email and at much lower costs than for transactions handled by the conventional financial system. The launch of bitcoin was based on a nine-page "Bitcoin: A Peer-to-Peer Electronic Cash System" which released the bitcoin software, all public. The program allowed 21 million bitcoins to be generated, total, with the last ones released in 2140. A brief clarification on what is historically understood with peer-to-peer landing could be sound at this stage. As clarified by the European Commission, peer-to-peer lending is a form of crowdfunding – the crowd loans money to a business with a prior agreement that interest will be returned on the money. A conventional bank loan can be given as a reference, except that peer-to-peer means loan from a lot of investors. Nevertheless, there is a sense that cryptocurrencies are very different from what is commonly known by peer-to-peer lending, as investing in businesses or ventures is far from being the main cause for virtual currency usage.

Although speaking explicitly of the Bitcoins, the opinions on the threats and opportunities linked to cryptocurrencies differ considerably. Whilst citing P's opinion Krugman, what a monetary system wants is not to make people who hold money rich; but to facilitate transactions and make the economy rich as a whole-and that's not what happens in Bitcoin at all.

LITERATURE REVIEW

A virtual currency can be described as a form of unregulated, digital money that is issued and usually managed by its creators, and used and accepted by members of a particular virtual community. Virtual currency schemes can be classified into three types depending on their interaction with traditional, "real" money and real economy: Type 1, which is used to refer to closed virtual currency schemes, primarily used in an online game; Type 1 virtual currency schemes have a unidirectional flow, i.e. there is a conversion rate for virtual currency purchases, which can subsequently be used [1]. This paper aims to provide some insight on virtual currencies and seeks to address the problem in a structured way. It is important to bear in mind that these currencies both look like money and come with their own separate retail payment systems; these two things are covered by the term "virtual currency scheme."

Across many areas of the financial system, virtual currency systems are important and are therefore of interest to central banks. It explains, among other things, the ECB's interest in undertaking an study, especially given its position as a catalyst for payment systems and its oversight position [2]. Bitcoin (BTC) is a significant virtual currency. This paper evaluate a BTC investment from the point of view of a US investor with a

diversified portfolio that includes both conventional assets (worldwide stocks, bonds, hard currencies) and alternative investments (commodities, hedge funds, real estate) using weekly data for the period 2010-2013. BTC investment had highly distinctive characteristics over the duration under review including unusually high total return and volatility. Remarkably small was its correlation with other properties. Spanning studies show that BTC investment provides major benefits in terms of diversification [3]. This paper provides an overview of the money-laundering risks of two virtual currencies, the Linden dollar, the interactive online environment's in-world currency Second Life, and Bitcoin, an emerging virtual currency that enables value transfer via peer-to-peer software. The paper would demonstrate that while these virtual currencies are useful for money laundering, they are actually unsuitable for large scale laundering [4]. This paper present a new digital decentralized currency, known as NRGcoin.

Prosumers in the smart grid trade generated renewable energy locally using NRGcoins, whose value is calculated on an open currency exchange market. Compared to Bitcoins, this currency provides several advantages over fiat money, but unlike Bitcoins, it's produced by injecting energy into the grid, rather than spending resources on computing power. They also suggest a novel trading model for the purchase and sale of renewable energy in the smart grid [5]. This article explores an increasingly important but underdeveloped body of law: virtual currency regulation. During its height in March 2014, the average value of US-dollar Bitcoin transactions reached \$575,000,000. However, Bitcoin's growing mainstream acceptance is best illustrated by the increasing number of leading dealers who have decided to accept Bitcoin payments. While the rise of Bitcoin as an alternative payment method is well-chronicled, the impact of Bitcoin extends further due to its use as an investment vehicle and its ability to spur the growth of a Bitcoin-based enterprise industry [6]. The modern world of mobile apps offers fair likelihood that virtual currencies will dominate globally. The crypto-currency architecture of the bitcoin actually tends to be a successor. The highly disruptive Bitcoin technology has supporters as well as detractors. However some sort of virtual currency, even if a successor to bitcoin appears to have a path forward in conjunction with other trends. When other new, unspecified and disruptive technologies take hold in a environment of increasingly autonomous systems, virtual currencies are likely to grow in stature. This department is part of a mobile trade specific issue [7]. This paper describes and analyzes BitCoin features that can make it simpler for BitCoin to become a global currency, as well as features that can hinder the usage of BitCoin as an exchange medium, account unit, and value store, and contrasts BitCoin with standard currencies in relation to the key money functions.

The intense price instability stands out most obviously of all evaluated BitCoin features compared with standard currencies. To understand the reasons for this extreme price volatility, and are attempting to identify BitCoin price formation drivers and econometrically estimate their significance [8]. This article provides a few findings for the central banks and discusses concerns that can arise in formulating monetary policy. Since this is the first such attempt to model a national money market as a combination of currency issued nationally and virtual currency issued globally, some simplistic assumptions have been made. Nevertheless, the model provides advice on the effect of virtual currencies on the monetary system and on the money market at home. In addition, the paper incorporates on this subject the official positions of the European Central Bank and the Bank of England [9]. The paper is researching Bitcoin's assets in the financial markets. Specifically, this paper use various multivariate GARCH specifications to explore the conditional cross effects and spillover volatility between Bitcoin and financial indicators. The essence of Bitcoin's relationship with financial variables and their communication mechanisms are taken into account when examining diversification and effectiveness hedging through the gold assets and stock markets [10].

METHOD

Research Goal

The author describes the assessment of risks virtual currencies possesses as the main goal of this report. Knowing the production of virtual currencies and their availability in various economic zones, as well as analyzing quantitative data, is important to mirror whether the growing interest in virtual currencies poses a

significant economic danger. Therefore, the findings would give an clear response as to whether there is any more creation of virtual currency that could have any effect on the national currencies. A complex statistical data and survey analysis were performed by means of the study.

Analyses and Research

Since Bitcoins are reasonably agreed to being the most popular cryptocurrencies, the collation will only be restricted to such. Coinbase offers very fascinating details-the website that claims to be the easiest way to buy Bitcoins in the world. Coinbase's service is now available in 32 countries, it is argued. Fair to say, offering its operation in countries such as Canada, the United States or the United Kingdom, the list of potential clients retains residency in countries such as Lithuania, Romania and Bulgaria – nations with much less established financial markets. While evaluating the listed countries, it can be concluded that Coinbase provides service on the purchase or sale of Bitcoins, rather than in well-developed and organized representatives of the financial market or small countries with poorly developed financial system and supervision, which could play a bold role in less legally supported transactions.

When reviewing the list of countries where Bitcoins, for example, are not forbidden, it seems that, given the progress towards a financial union in euro area countries, the prospect of buying Bitcoins, which could be considered to be equivalent due to its revolutionary nature, remains a problem. The legislative overview of EU member states confidently notes that despite having few tax-related rules, there is an utter absence of both the union perception of cryptocurrencies (Bitcoins) and the strategy of union acts to face the prospect of risks simultaneously arising. In addition, the proportion of those member states of the European Union where Bitcoins are prohibited is very low – Sweden can be mentioned as an example

Country	Regulation	
Russia	Bitcoins cannot be used by citizens nor legal entities.	
China	Banks and payment institutions in China are prohibited from dealing in bitcoins. Individuals are free to trade.	
Belgium	Not regulated.	
Cyprus	Not regulated.	
Denmark	Not regulated.	
Estonia	Not regulated.	
United Kingdom	No official statement published.	
Finland	Specific taxation regulations.	
France	No specific laws or regulations.	
Germany	No specific laws or regulations.	
Netherlands	No specific regulations.	
European Union	No specific legislation relative to the status of the bitcoin as a currency.	

TABLE 1: Regulation of Bitcoin in different countries.

The author argues that the absence of legislative union as well as tax laws that seem less threatening in the event that they are united at least among member states of the European Union, the US, and other major market representatives. Now, as the Bitcoin example study shows, virtual currency market regulation is in a state where a far-off destination remains a free and cohesive market. The author argues that all official institutions should reject the poorly controlled virtual currency market – though, however, possessing very poor advantages such a form of trade – trading appears to be groundless and all transactions must be monitored. Their noted high propensity to form so-called bubbles is the last statement bolding the risks virtual currency possesses.

When analyzing the market dynamics of Bitcoin, it is very curious how a digitally generated code that has no protection from any central government, or financial institution, or is backed by any product, could ever reach a market as high as, for example, in January 2013, USD 1150. Such an ability purely boldens the fears of many analysts and central banks that the threats Bitcoins possessed are often far higher than the illusory potential they are supposed to bring to market.

Date	Price per one Bitcoin
January 26th, 2013	20 USD
July 2nd, 2013	99 USD
November 30th, 2013	1150 USD
January 1st, 2014	750 USD
July 2nd, 2014	659USD
January 1st, 2015	330 USD
July 2nd, 2015	259 USD
October 1st, 2015	244 USD
October 22nd, 2015	279 USD

Table 2. Bitcoin price dynamics

CONCLUSION

The study carried out leads to H1 being unable to be supported. It has been shown that there is a total lack of formal legislative framework governing virtual currency transactions. Moreover, the method differs considerably even within the framework of the European union market. If ignored, such a situation could bring new challenges to the market, and give some help to illicit transactions and money laundering operations. Will endorse H2. Virtual currency production should not be seen as strictly negative, as it may boost the exchange of values between users. Still, global regulative base growth will take precedence. To conclude, when interviewed at the end of 2013, he acknowledged that virtual currency production is still a new phase in technological growth but it must go hand in hand with the creation of the global regulatory framework. So far, it seems that virtual currency production has significantly outperformed the global union regulation, which in the foreseeable future will pose major challenges not only to consumers, but also to the overall stability of national financial supervisory authorities. Development of the foreign and union supervisory mechanism as well as the integrated tax system can be advised accepting the fact that citizenship could become a kind of secondary problem for the new leap in monetary growth. The spontaneous end of virtual currency creation is very doubtful, and therefore, the key challenge is to create such a environment that would eradicate the future use of virtual currency in illicit transactions.

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