Bitcoins within Georgia's Money Laundering Scheme

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Abstract

Bitcoins' technology brings a new level of innovation to business and communication across the world. However, the advantages of a virtual currency payment system face the threat from criminal activities occurring over a pseudonymous network where there is virtually no current regulation to cover illegal transactions. The current situation in Georgia is as follows: the second Bitcoin's processing datacenter has opened in Georgia. While the virtual money is new even in developed countries, more unusual it is for Georgia, where local economists are more skeptical toward cryptocurrency. Therefore, they believe that electronic money is not controlled by any central bank that gives a lot of opportunities for illegal transactions. According to the Georgian experts, bitcoin is a very risky currency that can be used for money laundering, as it is completely uncontrolled. However, the Georgian central bank system claims that bitcoins are not dangerous, and the lack of awareness gives rise to talk about money laundering. The biggest challenge seems to be regulation of Bitcoin without hindering the potential for growth. While there is usually certainly a chance that Bitcoin could fail or be pushed out of existence by a more innovative technology, policymakers must be careful not to hinder a technology that could change the way global economy functions.

Keywords: cryptocurrency, bitcoin, money laundering, block chain, miners

Introduction

In 2009, Satoshi Nakamoto presented Bitcoin in an essay: Bitcoin, A Peer-to-Peer Electronic Cash System and since then risen to the popular virtual currency in the world[1]. Bitcoin is a so-called virtual currency that has been devised for anonymous payments made independently of governmental or non-governmental institutions. Bitcoin payments are based on a new interesting technical solution and function differently to traditional payments that can bring advantages in the form of lower costs, rapidity or anonymity over traditional payment methods. However, usage can also be more risky because Bitcoin is not directly covered by the laws that govern other payment mediation. Bitcoin is used on a decentralized peer-to-peer payment network that is powered by its users with no authority[2]. Bitcoin has attracted the attention of businesses as well as individuals around the globe[3]. Regulators, including the Internal Revenue Service and the Commodity Futures Trading Commission, have started to pay attention to its anonymous nature as recent years have demonstrated that Bitcoin has played a part in money laundering[4]. Lawmakers must strike a balance between hindering criminal activity and maintaining Bitcoin's increased advancement[5]. The main purpose of the paper will be to find out the current situation of Bitcoins' influencing the Georgia's economic system and identify potential risks regarding money laundering for developing appropriate measures to prevent the cases associated with the mentioned problem.

Brief History of Bitcoin and Recent Developments in Georgia

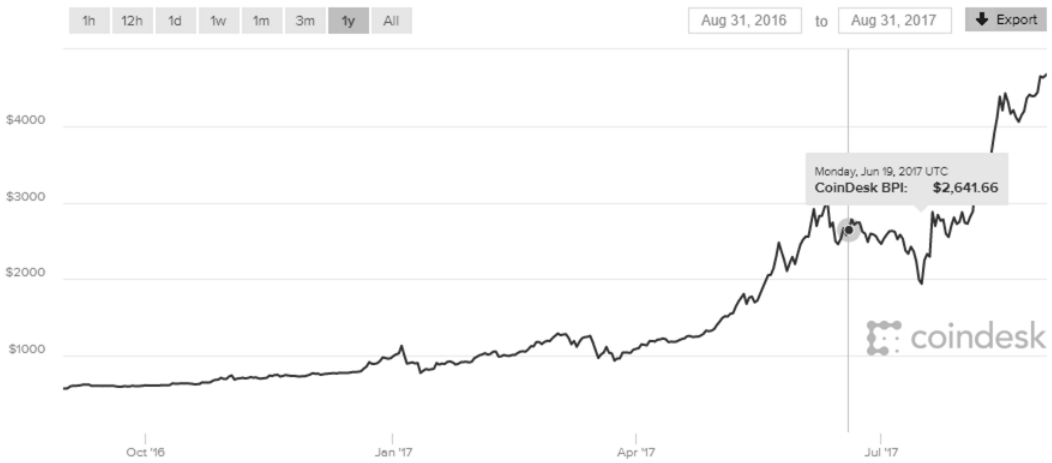
1 Satoshi Nakamoto, A Peer-To-Peer Electronic Cash System, Bitcoin Project (2009)
2 Frequently Asked Questions, Bitcoin Project (2016)
3 Bitcoin Price Index Chart, Coindesk (Nov. 30, 2016), webpage: http://www.coindesk.com/price/
4 Stan Higgins, Us Central Bank Chair: Blockchain Could Have "Significant' Impact, Coindesk (Sept. 28, 2016), http://www.coindesk.com/us-fed-yellenblockchain-impact/
5 Jerry Brito & Andrea Castillo, Bitcoin: A Primer For Policymakers 7 (2d Ed. 2016)

In 2008, Satoshi Nakamoto invented the Bitcoin. According to Newsweek (2014), Nakamoto was unhappy with the commissions he had to pay when buying. Therefore, he invented the virtual exchange coin. However, according to El País (2016), it is revealed that the creator of the Bitcoin is an Australian entrepreneur - Craig Steven Wright, and has admitted to act with the pseudonym of Satoshi Nakamoto.

Cinco Días (2013) stated that Bitcoin is a decentralized electronic coin. Each bitcoin has a unique serial number, similar to the bills and coins in use by the Banks. According to Cárdenas, Avellaneda and Bermúdez (2015), to be able to operate with bitcoins one should download a virtual wallet on a computer or a mobile device. This is digital encrypted file composed of a series of exclusive codes. Once the wallet is downloaded, a bitcoin address will be given. This is a large alphanumeric sequence in two related parts within the network system. One part contains the private code for the wallet for each individual subscriber, and there is an account to access to and dispose of any funds they might have in their virtual wallet – it is similar to a credit card PIN number. The other part consists of a public address that makes an individual identifiable, i.e. similar to the IBAN of bank accounts. According to Rose, 2015, the emission of bitcoins is limited, so once the amount is reached it would not be possible to have more. The process itself validates the new transactions, and once they are verified they are recorded in the blockchain.

Bitcoin can be exchanged for a currencies like dollars, lari, or euro. The currency has value because people believe it does. One Bitcoin was only a few dollars until early 2013, and has fluctuated wildly since then but today is worth US$4 674.66.

Graph 1. Bitcoin Price Vartiation in USD



Source: https://www.coindesk.com/price/

As of today, Bitcoin risen to the status of the most popular virtual currency. The biggest advantage of Bitcoin is the avoidance of the doublespending problem[1]. The Bitcoin network is a decentralized network, in which individual has no complete ownership or control. Bitcoin transactions do not require middlemen services, such as PayPal, eliminating the otherwise time-consuming and costly processes. One can send money globally without having to incur additional fee of payment to the third party. These qualities make Bitcoin an attractive payment system for money laundering. Bitcoin's decentralized network means that users are pseudonymous, while transaction is not tied to anyone's identity. Users found ways to gain access into Bitcoin exchanges to steal millions of dollars' worth bitcoins from businesses for online illegal markets. The infamous Silk Road, which was shut down in 2014, was the ultimate black market that traded Bitcoins in exchange for illegal drugs, fake passports, driver's licenses, and illegal services[2]. The severity of criminal activities alerted

1 Erik Bonadonna, Bitcoin And The Double-Spending Problem, Cornell U.: Networks Ii (Mar. 29, 2013), https://blogs.cornell.edu/info4220/2013/03/29/bitcoin-and-the-double-spending-problem/

2 Donna Leinwand Leger, How FBI Brought Down Cyber-Underworld Site Silk Road, Usa Today (May 15, 2014), http://www.usatoday.com/story/news/nation/2013/10/21/fbi-cracks-silk-road/2984921/

regulators to focus their efforts on formulating an effective solution[1]. The solution would ideally eliminate Bitcoin's disadvantages and its susceptibility to money laundering while preserving its advantageous payment system.

Over the past year, Georgia has become a player in the international world of bitcoin. While the bitcoin industry is still developing, investors hope Georgia's role, as a mining center will help create a name for the country as a destination for high tech companies. New Bitcoins are created by an electricity intensive on-line computing process called "mining". Bitcoin limits the availability of its currency by requiring new currency generators to run complex algorithms. Processing the algorithms or "mining" costs money, principally in electricity to run and cool the computers, which need extremely fast and powerful processors. If the ultimate value of the bitcoins produced is greater than the electricity running costs, then bitcoin mining is profitable. Georgia is, therefore, attractive more to this sector as it has relatively cheap electricity and an open regulatory environment.

Georgia hopes to be added to the innovative technologies world map and tries to bring modern information technologies into the country. Georgia committed in a signing ceremony in the capital to use the bitcoin network to validate property-related government transactions. In 2016, the government and bitcoin hardware and software firm Bitfury Group launched a project to register land titles via a private blockchain and make transactions verifiable using bitcoin's blockchain, which is public. It is the first time a national government has used the bitcoin blockchain to secure and validate official actions. Having built the software and tested it with land title registrations, Bitfury and the Georgian National Agency of Public Registry have signed a new memorandum of understanding to expand the service to purchases and sales of land titles, registration of new land titles, demolition of property, mortgages and rentals, as well as notary services. While many financial institutions and governments have expressed interest in blockchain technology, the vast majority of them have been pursuing private blockchain, some for reasons of privacy and some because of bitcoin's early reputation as being the currency of choice for online drug dealers. However, Bitfury is working with the bitcoin blockchain both because it is public, for purposes of transparency, and because it is the blockchain that would be most difficult to fraudulently alter. Attractive investment climate and ease of conducting business as well as low energy cost and competitive labour market played a big part in decision-making.

Bitcoins within Money Laundering Scheme

Money laundering is "the process of creating the appearance that large amounts of money obtained from serious crimes, such as drug trafficking or terrorist activity, originated from a legitimate source"[2]. Financial transaction is "a transaction which in any way or degree affects interstate or foreign commerce . . . involving the movement of funds by wire or other means or . . . involving one or more monetary instruments". Money laundering is a concept that refers to the integration of money or goods into the legal economic system coming from illegal means, although appearing legal through different methods (Tondini, 2006).

Money laundering has different phases before getting integrated and finally deposited as part of the legal financial system. Almost everyone indicates three main stages – placement, stratification/transformation, and integration or investment of funds (Tondini, 2006). Thus, the procedure through which money laundering is done is the following:

Placement stage is the first step within the money laundry process. Here the illegal funds are being introduced into the economic system. Cash funds are deposited in different easy bank accounts with several names; money is also converted to metals or precious stones. Other business that might laundry money are casinos, restaurants, hotels, and night business.

Stratification or transformation stage makes difficult to detect the laundering. Money is transferred from one bank account into another, from one business into another, or direct to tax havens – both in cash and electronic means (Brot, 2002). According to the Financial Action Task Force on Money Laundering (FATF), the most important means in the transferring of money is by electronic means.

1 See Generally U.S. Commodity Futures Trading Comm'n, Order Instituting Proceedings Pursuant To Sections 6(C) And 6(D) Of The Commodity Exchange Act, Making Findings And Imposing Remedial Sanctions, No. 15-29, Sept. 17, 2015, http://www.cftc.gov/idc/groups/ Adam Hayes, Fla. Lawmaker Pushing To Classify Bitcoin As Money, Investopedia (Sept. 13, 2016)
2 Money Laundering, Investopedia, http://www.investopedia.com/terms/m/moneylaundering.asp?lgl=no-infinite

Integration or investment stage is the most difficult stage to detect. Illicit activities are already part of the economy and appear legal, thus they become normal (Tondini, 2006).

These secret activities make it difficult to be detected on time. According to OroyFinanzas (2016) there are following reasons explaining the anonymity of Bitcoin: Bitcoin addresses are not identifiable with the personal information or with the transactions taking place, no one knows who has transferred them, etc. Nowadays bitcoin is the virtual currency most used on the internet for money laundering (Technoxplora, 2016). Below are presented the most common methods for money laundering by using the bitcoin:

Mixers - These are secret organizations that make some difficulties for the government to interfere anti-money laundering actions. They are used to mix money of various individuals, so it is difficult to know what belongs to whom, or where is it coming from. This process starts with sending one's money to the anonymous service for further returning but mixed with bitcoins from other individuals (Criptonoticias, 2016). This way, the transactions history is hidden. Therefore, it becomes easier to laundry money without being detected;

Deep web - Deep Web is a space of the internet, including information not obtainable from other search engines like Google, Yahoo, etc. Not all its data is illegal, there can also be censored information from governments and corporations. Some illegal contains that can be obtained are: confidential government files, drugs, arms, etc. For anonymity's aims, there are some encrypted networks for securing surfing on the net. TOR, for instance, had 2.5 million users by 2014 around the world, according to an article published by EL País, A, (2014). TOR allows and helps users to maintain an anonymous link. This makes difficult and almost impossible to detect the origin of the searches done. Therefore, most of the transactions done on the Deep Web are done through bitcoins (CIO, 2013).

Silk Road - Silk Road is the largest ever-electronic black market on the net. It started in February 2011. It was created with the objective to trade illegal products worldwide. This net was inside the Deep Web and the Access was through TOR (Barratt, Ferris & Winstock, 2014). Users trading within the Silk Road used bitcoins as their own coin, thus there is anonymity in the transactions. Silk Road functioned as an anonymous middleman for both the buyers and the sellers, without knowing each other. This was the main purpose to use bitcoins as payment money. Silk Road was closed down, on 11 October 2013, after the detention of its founders.

While Bitcoin may have some characteristics in common with what we commonly refer to money, the uniqueness of virtual currency did not fit into the anti-money laundering statutes. Bitcoin cannot always be exchanged for items of value, as some merchants do not accept Bitcoin as payment. In some's view, it is very clear, even to someone with limited knowledge in economics, that bitcoin has a long way to goto become the equivalent of money. The main thing that distinguishes Bitcoin from other digital currencies is decentralization. Cryptocurrency is not tied to any address, country or company. This decentralization makes the state control almost impossible. Libertarians believe that citizens are not able to trade currencies due to the tight control from the state. According to some Georgian experts, bitcoin is a very risky currency that can be used for money laundering, as it is completely uncontrolled. However, others claims that bitcoins are not dangerous, and the lack of awareness gives rise to talk about money laundering. According to this group, it is impossible to determine how many Bitcoins were used in Georgia since cryptocurrency has no boundaries.

Regulations regarding Bitcoins within Money Laundering Scheme and Georgia's Experience

Financial Action Task on Money Laundering was created in Paris in 1989 by Group of Seven with an aim to avoid money laundering by Banks and Financial institutions (Quirk, 1997). FATF is an independent intergovernmental institution promoting and developing policies for protecting the financial institutions of money laundering, the promotion of terrorism and the financing of arms of mass destruction (GAFISUD, 2012). Bitcoin is relatively new and users as well as regulators are constantly uncovering new ways the technology can be used. Therefore, the government struggles to find a way to fit Bitcoin into the statutory definitions of currency and other financial instruments. In recent years, several federal regulatory bodies, e.g. the Financial Crimes Enforcement Network of the U.S. Department of the Treasury, the IRS, and the CFTC have released statements regarding the regulation of virtual currencies, including Bitcoin in response to the rise in criminal activities. On March 18, 2013, FinCEN issued a guidance clarifying the differences between currency and virtual currency,

including Bitcoin[1]. It clarified the differences between entities and persons involved in virtual currency transactions in an effort to clarify which Bitcoin participants can be defined as a money transmitter. The guidance defines virtual currency as a medium of exchange that operates like a currency in some environments, but does not have all the attributes of real currency. In September 2015, the CFTC issued an order finding that Bitcoin should be defined as commodity[2]. Currently, trading Bitcoin is less accessible because there are dozens of Bitcoin exchanges, a trader has to set up an account on each individual exchange, and many are hesitant to trade Bitcoin because of its past involvement in illegal activities. However, in case of transparency of the virtual currency, there is a possibility of contracts that would make it easier for both professional and individual investors to trade bitcoin that in turn will help Bitcoin gain more credibility as a viable virtual currency and open the door for other avenues of positive influence. Bitcoins are treated as property for tax purposes rather than actual currency. Any gain made from selling Bitcoins is taxable income[3]. This notice has less impact than expected, as users use Bitcoin to make money while evading taxes[4]. Bitcoin transactions do not go through a third-party, which means there is no real way to report the transactions and thus makes it easier for someone to evade taxes[5]. This recent discovery will most likely urge the governmental bodies to further define Bitcoin to close the gap of illegal activities. European Union (EU) legislators and governments have not yet applied any clear law regarding the business done with bitcoins and other crypto-exchange. There is no clarity in the existing law, there are doubts about creating a new normative. This is something to be solved. Currently, the European Union (EU) has only applied the following norm: In Bitcoin chaser (2016) is mentioned that the European Court of Justice (ECJ) declared, in 2015, both sales and purchases with bitcoins would be exempt of VAT within the European Union countries. Thus, bitcoins get the same status as do the foreign exchange traditionally encounter in the article 135[6].

The amendments to the legal framework enacted between 2008 and February 2012 have improved Georgia's technical compliance with the FATF recommendations, in particular with respect to the criminalization of ML and FT and the preventive measures for financial institutions. Significant progress has been made since 2007 with regard to the effective use of the ML criminal provisions and international cooperation. A combination of technical deficiencies, poor implementation, and limited resources undermine the effectiveness of the financial intelligence unit (FIU) and AML/CFT supervision. However, there are still major loopholes in terms of transparency of legal entities, domestic cooperation, and preventive measures for designated nonfinancial businesses and professions. Issues regarding customers that are, or are owned by, offshore companies for which the identity of their beneficial owners is unknown, a rapid and ongoing increase of nonresident deposits, the development of private banking activities, the rapid growth of the casino business and rising number of non-face–to-face transaction as well as domestic statistics demonstrating the existence of major proceeds-generating crimes are included in the concerning topic list. Based on statistics provided by the authorities, the ML provisions do not seem to be applied effectively to combat the most prevalent proceeds generating crimes, or to combat transnational organized crime. The modest number of legal persons investigated or prosecuted for ML raises concern since the authorities indicated the widespread use of companies in ML schemes. Some sectors are not under a legal obligation to report suspicious transactions, e.g. real estate agents, lawyers, trust and company service providers, and electronic money institutions; hence, bodies are not capable of requesting additional information from them. The quality of analysis of suspicious transaction reports is poor, mostly due to lack of analytical tools and weak quality of reporting. Only a small percentage of inbound and outbound movements of currency and bearer negotiable instruments are actually declared. Additionally, credit card services are not properly covered, as well as electronic money and investment funds. Some forms of money value transfer operators are not subject to regulation and supervision. They include electronic money institutions, casino accounts operated to move value within Georgia, and self-service terminals accepting cash and providing transfer

1 See Generally Fin. Crimes Enf't Network, U.S. Dep't Of The Treas., Fin-2013-G001, Application Of Fincen's Regulations To Persons Administering, Exchanging, Or Using Virtual Currencies (2013)
2 Luke Kawa, Bitcoin Is Officially A Commodity, According To U.S. Regulator, Bloomberg (Sept. 17, 2015), http://www.bloomberg.com/news/articles/2015-09-17/bitcoin-is-officially-a-commodity-according-to-u-sregulator
3 Rebecca Campbell, Irs At A Standstill With Bitcoin; Users And Tax Professionals Remain In The Dark, Cryptocoins News (Oct. 8, 2016), https://www.cryptocoinsnews.com/irs-standstill-bitcoin-users-taxprofessionals-remain-dark/
4 Nathaniel Popper, Bitcoin Users Who Evade Taxes Are Sought By The I.R.S., N.Y. Times: Dealbook (Nov. 18, 2016), http://www.nytimes.com/2016/11/19/business/dealbook/irs-is-seeking-tax-evaders-who-use-bitcoin
5 Kelly Phillips Erb, Irs Wants Court Authority to Identify Bitcoin Users & Transactions at Coinbase, Forbes (Nov. 21, 2016), http://www.forbes.com/sites/kellyphillipserb/2016/11/21/irs-wants-court-authority-toidentify-bitcoin-users-transactions-at-coinbase/2/#767c4f834183 [https://perma.cc/2zla-gzkl]
6 Block 1, letters from d) to f) pertained to Directive, 2006/112/Counsel, 28 November, 2006

facilities. In addition, implementation is generally poor regarding the identification and verification of beneficial owners, documentation of the purpose and nature of the account business, ongoing customer due diligence, and the application of risk-sensitive measures to customers. The National Bank of Georgia exercises regulatory and supervisory oversight over the financial institutions (around 1,700 institutions) but with only a staff of five for onsite AML/CFT inspection. Electronic money institutions are not yet subject to AML/CFT supervision. Given its limited resources, the supervisory cycle has been quite long for some institutions, such as currency exchange bureaus and money remittance operators.

The Future of Bitcoin

Bitcoin attempted to grow since its inception in 2009 to become a mainstream crypto-currency that goes beyond the sphere of what paper currency offers to the world. The biggest issue facing Bitcoin is anonymity and their speed and global reach attract criminal actors engaged in illicit financing"[1]. It is necessary for regulators to focus on the proper classification of the virtual currency within the money laundering scheme in order to combat illicit activities associated with Bitcoin. Clarity will definitely benefit the world, as Bitcoin has the potential to improve human welfare if the criminal consequences are minimized by appropriate regulation. Proponents of this solution are more concerned about the anonymity of the decentralized network enabling criminals to easily launder money with Bitcoin. The development of digital currencies in general, or more broadly any new technology for making payments, is also subject to considerable uncertainty. One reason is the rapid evolution of technology. For instance, agents maintaining the Bitcoin network are trying to improve its transaction processing capacity, which is a necessary condition for Bitcoin to handle any nontrivial fraction of the realistic volume of transactions routinely processed by networks such as Visa and MasterCard. In addition, how the legal and regulatory system will react to the changes is equally hard to predict. Regarding specific aspects of the Bitcoin network, there will be further consolidations in the mining community, ending in a few coalitions that dominate the network. There may also be consolidations among digital wallets: those able to offer desirable services at a competitive price and demonstrate superior security should win market share. There may even be mergers across exchanges, if some can execute trades faster, at a lower cost, or with greater security.

As soon as cryptocurrency has appeared, the online gambling industry faces fundamental changes. It is cryptocurrencies, bitcoins in particular, that will play a significant role in this process. Bitcoin gambling will be a common phenomenon - almost all online casinos will start accepting bitcoin bets and allow withdrawing won money in digital currency. Additionally, gambling transactions will be conducted in bitcoins. Moreover, online casinos will give bonuses for bitcoins as they are interested in implementing cryptocurrencies bringing more income because of lower transactional expenditures. Nowadays, the bitcoin exchange rate is unstable, but everything will change as soon as cryptocurrency becomes more popular and high-demand. To motivate players to shift to bitcoins, casinos will offer protection from cryptocurrency volatility: the price of bitcoins on user accounts will remain unchanged and developed countries will officially permit bitcoin operations. They will be followed by other developed countries soon. In Georgia, bitcoins are already available through Liberty Bank EMoney as there are over 4,500 bitcoin-driven startups around the world and 9 million bitcoin users. Additionally, more than 100K merchants accept bitcoin today, an increase from 5,000 a year ago. Hundreds of retailers accept bitcoin as payment for goods and services, including such large merchants and websites as overstock.com, Dell, Wikipedia, Virgin Galactic, Expedia, Newegg, Bloomberg, OkCupid, cheapair.com and Reddit. It is popular because the transaction fees charged to retailers are much less than that with Visa or MasterCard. It is believed that bitcoin adoption will continue its upward trajectory.

Another source of comparative advantage that may emerge is regulation. Exchanges domiciled in countries with lighter digital currency regulation should attract more agents who are suspicious of the establishment, or are keener to chase the technology frontier, or less risk averse. In contrast, exchanges that are more regulated, and therefore more secure, should attract more agents, to the extent that digital currency becomes a class of contingent claims absorbed into the mainstream financial system. If the current price of bitcoin is sustained over the next year or two, more competing alternative digital currencies, so called altcoins may emerge, especially since the barriers to entry in virtual currency are low. The growth of altcoins depends inversely on Bitcoin's first-mover advantage, such as the network effect of the breadth of acceptance for conducting transactions, the strength of which is uncertain. To differentiate themselves from bitcoin, these altcoins will offer different features along various dimensions, such as in transaction validation schemes, fees, supply growth, etc. By comparison, more regulation is almost inevitable. For example, bitcoin wallets must already comply with anti-money-

1 Fin. Crimes Enf't Network, U.S. Dep't Of The Treas., Sar Stats Technical Bulletin (July 2014)

laundering rules, and the Internal Revenue Service has just issued a ruling regarding how bitcoin earnings should be taxed. Agencies such as the Financial Industry Regulatory Authority and even the Securities Exchange Commission may issue rulings about the safety and soundness of exchanges.

Some group of experts think that the Bitcoin network as originally designed, and especially its associated digital currency, will probably not survive in the long run. Some serious design flaws of the current Bitcoin system have been identified, and some of them may eventually prove fatal. First, realistic growth projections of the scale of the blockchain indicate that it will likely become infeasible for individual users to store the data on their personal computers, and this may happen as soon as within a year or two. Second, the resource cost of mining is becoming increasingly unaffordable, not to mention the inefficiency associated with this aspect of the system design. Again, it is possible that within a few years it will become infeasible to rely on this distributed model, however consolidated, to verify transactions. Nevertheless, there is growing recognition that the lasting legacy of Bitcoin most likely lies in the technological advances made possible by its protocol for computation and communication that facilitates payments and transfers. The revolution in payments technology pioneered by Bitcoin helps to accelerate the development of better technologies for making payments and transfers cheaper, faster, and more secure.

For most people Bitcoin will not matter very much any time soon, the same way the internet did not matter very much for Georgia in the 1990's. However, the internet matters now as Georgia would get a head start in the region if parliament were to pass some carefully considered regulation about it connected with tax and other issues. Bitcoin will make transferring money across borders much cheaper, in fact free. That could be useful for those who work abroad and the relatives they help back home. Credit cards and buying things on-line can be a challenge for people in Georgia. However, more and more catalogues and websites are accepting Bitcoin and the transfer costs are zero. So those who figure out bitcoin and what it means for their life and their business will benefit because this movement will only grow stronger. Moreover, there will be people who fear it but in several years, it will be integrated into their lives just the way it will be integrated into everybody else's lives, just like the internet. Taking into account the recent development of cryptocurrency mining in Georgia, one could argue that Georgia might find a niche in providing technological services in the long run, which in fact might lead to an increase of exported service. At the same time, the Georgian market should maintain a competitive advantage on the global market in order to attract foreign investors.

Conclusion

There are some benefits that should be mentioned, e.g. bitcoins are rapidly evolving and the contours of the future landscape are difficult to predict, bitcoin can offer many potential benefits, including rapidly increasing speed and efficiency in making payments and transfers, and deepening financial inclusion. At the same time, bitcoins pose many risks and threats to financial integrity, consumer protection, tax evasion, exchange control enforcement, and effective financial regulation. While risks to the conduct of monetary policy seem unlikely at this stage given bitcoin's very small scale, it is possible that risks to financial stability may eventually emerge as new technologies come into more widespread use. The development of effective regulatory responses to the development of bitcoin is still at an early stage. Regulators in some areas, i.e. AML/CFT have made considerable progress in developing effective responses. However, a great deal of work remains to be done to put in place effective frameworks to regulate bitcoins in a manner that guards against the risks while not stifling financial and technological innovation. Bitcoin represents a disruptive financial technology that many AML and money transmitter statutes are ill prepared to deal with. Virtual currencies in general have broken the trend of physical, government-backed coin and paper currencies, and it is unlikely that any new law will capture all iterations of emerging technologies for any significant period. However, this does not mean that Bitcoin and similar virtual currencies should be deemed illegal or should be onerously regulated to compensate for the lack of initial oversight. In an increasingly digital world, it makes perfect economic and societal sense to allow digital currencies, governmentbacked or otherwise. Regulation of such currencies should occur at the point where law enforcement can most effectively punish civil and criminal violations with the least overhead. Because Bitcoin is a decentralized, peer-to-peer virtual currency, it makes little since to regulate entities other than Bitcoin currency exchanges. Increased pressure on users will only serve to increase the cost of enforcement in the long run. Instead of increasing regulation and trying to predict the next generation of disruptive technologies, it would ultimately be better to understand the technologies and police the points of public contact with existing legal schemes.

For Georgia, bitcoins' revolutionary technology certainly brings a new level of innovation to business, payment systems, and communication across the world. However, just as many technological developments from the past, the advantages of

a virtual currency payment system also faces the threat from criminal activities occurring over a pseudonymous network where is no current regulation to cover illegal transactions. Legislative changes are certainly forthcoming. The biggest challenge will be to regulate Bitcoin without hindering the potential for growth. While there is almost always certainly a chance that Bitcoin, could fail or be pushed out of existence by a newer, more innovative technology, policymakers must be careful not to hinder a technology that could change the way global economy functions. Instead, the better option is to bring more transparency to Bitcoin so that regulators and potential users better understand and appreciate this technology.

Bibliography

[1] Satoshi Nakamoto, A Peer-To-Peer Electronic Cash System, Bitcoin Project (2009)
[2] Frequently Asked Questions, Bitcoin Project (2016)
[3] Bitcoin Price Index Chart, Coindesk (Nov. 30, 2016)
[4] Stan Higgins, Us Central Bank Chair: Blockchain Could Have "Significant' Impact, Coindesk (Sept. 28, 2016)
[5] Jerry Brito & Andrea Castillo, Bitcoin: A Primer For Policymakers 7 (2d Ed. 2016)
[6] Erik Bonadonna, Bitcoin And The Double-Spending Problem, Cornell U.: Networks Ii (Mar. 29, 2013)
[7] Donna Leinwand Leger, How FBI Brought Down Cyber-Underworld Site Silk Road, Usa Today (May 15, 2014)
[8] See Generally U.S. Commodity Futures Trading Comm'n, Order Instituting Proceedings Pursuant To Sections 6(C) And 6(D) Of The Commodity Exchange Act, Making Findings And Imposing Remedial Sanctions, No. 15-29, Sept. 17, 2015, http://www.cftc.gov/idc/groups/ Adam Hayes, Fla. Lawmaker Pushing To Classify Bitcoin As Money, Investopedia (Sept. 13, 2016)
[9] Money Laundering, Investopedia, http://www.investopedia.com/terms/m/moneylaundering.asp?lgl=no-infinite
[10] See Generally Fin. Crimes Enf't Network, U.S. Dep't Of The Treas., Fin-2013-G001, Application Of Fincen's Regulations To Persons Administering, Exchanging, Or Using Virtual Currencies (2013)
[11] Luke Kawa, Bitcoin Is Officially A Commodity, According To U.S. Regulator, Bloomberg (Sept. 17, 2015), http://www.bloomberg.com/news/articles/2015-09-17/bitcoin-is-officially-a-commodity-according-to-u-sregulator
[12] Rebecca Campbell, Irs At A Standstill With Bitcoin; Users And Tax Professionals Remain In The Dark, Cryptocoins News (Oct. 8, 2016), https://www.cryptocoinsnews.com/irs-standstill-bitcoin-users-taxprofessionals-remain-dark/
[13] Nathaniel Popper, Bitcoin Users Who Evade Taxes Are Sought By The I.R.S., N.Y. Times: Dealbook (Nov. 18, 2016), http://www.nytimes.com/2016/11/19/business/dealbook/irs-is-seeking-tax-evaders-who-use-bitcoin
[14] Kelly Phillips Erb, Irs Wants Court Authority to Identify Bitcoin Users & Transactions at Coinbase, Forbes (Nov. 21, 2016), http://www.forbes.com/sites/kellyphillipserb/2016/11/21/irs-wants-court-authority-toidentify-bitcoin-users-transactions-at-coinbase/2/#767c4f834183 [https://perma.cc/2zla-gzkl]
[15] Block 1, letters from d) to f) pertained to Directive, 2006/112/Counsel, 28 November, 2006
[16] Fin. Crimes Enf't Network, U.S. Dep't Of The Treas., Sar Stats Technical Bulletin (July 2014)
[17] See Generally Faiella, 39 F. Supp. 3d 544; Ulbricht, 31 F. Supp. 3d 540; Espinoza, No. F14-2923