How to Sole a Problem Like Venezuela: An Argument for Virtual Currency

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I. INTRO

To understand Latin America, you have to understand a place like Venezuela. Nestled at the end of the northern range of the Andes Mountains, right between the Equator and the Caribbean coast, the country is rich in both natural beauty and natural resources.1 While the country produces aluminum, steel, chemicals, and agricultural products, Venezuela’s leading sector by far is oil, which accounts for ninety-five percent of export revenues.2 Although the concept of oil being an inherently cyclical and unpredictable industry seems relatively simple, it is often a point lost on many countries, of which Venezuela is no exception.3 This is most unfortunate for the people of Venezuela (population 30.41 million), the majority of whom are lower to middle class, and who suffer the most as a result of sloppy and dysfunctional macroeconomic and legal practices by ruling politicians.4

A perfect example of extraordinary economic policies is the rampant institution of bizarre and confusing capital controls usually implemented as a triage method following an oil bust.5 Ostensibly put in place to stimulate export rates and fill the gap of lost oil revenues, the effect of such controls are arbitrary restrictions on citizens being able to get money in and out of the country.6 However, there might be hope for Venezuelans to survive and perhaps thrive during this latest economic crisis; the rise of ‘virtual currencies’ such as Bitcoin offer an alternative to local fiat currency, such as the bolivar, that consistently loses value as inflation soars.7

6. Id.
This 'extralegal' global currency operates outside of any financial institution, has no central regulation authority, and can be transmitted anywhere with no fees or government controls.  

II. WHAT IS HAPPENING IN VENEZUELA?

After the global oil boom of the 1970s, the Venezuelan economy benefitted greatly, with its currency (the bolivar) peaking against the U.S. dollar. Oil and steel industries were nationalized by the ruling Democratic Action Party, which also instituted sweeping social programs in an attempt to boost the large population of middle class Venezuelans. However, a fall in world oil prices in the subsequent 1980s bust led to a national economic depression, austerity programs, social and political upheaval, riots, and military coups. History, it seems, is bound to repeat itself. Just as in the time period following the 80's bust, which saw the rise of Hugo Chavez and a polarizing and often chaotic political landscape, Venezuela's leaders of the past decade have been incredibly divisive; after this latest economic wreckage, the woeful ineptitude of current President Nicolas Maduro could well lead to his ouster.

To say that Venezuela's economy rises and falls with the global oil market would be an understatement. The oil and gas sector in Venezuela accounts for twenty-five percent of the nation's GDP, and oil revenues make up about ninety-five percent of export earnings. Ties to oil have shaped all aspects of the country, and declines in oil prices severely affect Venezuela's economy. Nationalizing the oil industry has been but one example of a history of fiscal mismanagement in Venezuela, and, combined with the recent collapse in oil prices, has led to the extreme economic crisis Venezuela now finds itself in.

A quick look at global headlines further solidifies that things are not going great in Venezuela. As a result of global commodity destabiliza-
tion and widespread economic mismanagement by President Nicolas Maduro's socialist government, the Latin American country with the largest reserves of conventional oil in the Western Hemisphere is sinking deeper and deeper into crisis.\(^{16}\) The country can no longer produce enough food on its own, and cannot import what it needs from abroad, leading to riots and looting of grocery stores and food trucks that are often accompanied by armed military personnel.\(^{17}\) Thousands of Venezuelans travel hundreds of miles or more to cross the borders of Colombia to buy basic foods and medicine.\(^{18}\) In April, an official two-day work week was introduced to save on electricity costs.\(^{19}\) The health care system has collapsed, the crime rate is at an all time high, and hyperinflation threatens to decimate the domestic currency, whose value has been in steady decline for years.\(^{20}\)

The economic outlook does not indicate much hope for improvement – Venezuela owes over one hundred billion dollars to foreign creditors, with much of the foreign debt owed by the national oil company, PDVSA.\(^{21}\) If oil prices remain low, chances are high that Venezuela will default on payments owed, bringing bondholder lawsuits and disrupting PDVSA operations that could result in the seizure of overseas assets.\(^{22}\)

### III. BITCOIN

Bitcoin (this article will use capital-B to refer to the system, and lower-b to refer to the unit of account) is a recently developed digital technology that facilitates the use of virtual currency and electronic payments.\(^{23}\)

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21. Id.
22. Id.
The technology is based in cryptology and peer-to-peer networking, and the operation of the network occurs outside of any central financial authority. A few of the highlight characteristics of this virtual currency that make it so unique is the open source software technology underlying the ‘block chain’ data log of prior transactions, and little to no transaction fees or costs, even for small payments.

Many people do not understand Bitcoin. But there is a good reason to pay attention to it. In November of 2013 Bitcoin rose to its highest price ever: $1,242 US dollars, which at the time was worth nearly as much as one ounce of gold. In 2015 venture capital groups from around the world invested almost one billion U.S. dollars into Bitcoin and Bitcoin-related startups. However, the so-called ‘digital gold’ has not entered into the global economy without its share of hiccups and setbacks: A top developer in the Bitcoin community walked away from the Bitcoin movement completely in January over fundamental differences with several other programmers who make up the small handful of developers who work to maintain the Bitcoin network. In April, several prominent American investors flew to China, where a handful of technology companies have “effectively assumed majority control of the Bitcoin network.” The Americans were seeking to curry favor with Chinese executives in order to overcome a division in the Bitcoin community on technical matters that in the Americans’ view, threatens the decentralized nature of the virtual currency experiment.

Bitcoin may or may not survive its own internal divisions, but the essence of what it is trying to achieve is likely to persist. Virtual currency rivals such as Ethereum have garnered attention from financial and technology blue bloods such as JPMorgan Chase, Microsoft, and IBM. Referred to some as “Bitcoin 2.0”, the Ethereum system is built in the same model of blockchain technology that allows for a faster and cheaper exchange of money and assets. However, the Ethereum system is very

30. Id.
32. Id.
much in a nascent stage, and though it may expand or even surpass Bitcoin on the capabilities it can provide (including the creation of new online markets and programmable transactions known as smart contracts), such results have not yet been fully realized. Thus, this article will specifically refer to the Bitcoin network, with the understanding that other systems of virtual currency may replace the network, but should ultimately create similar results. Simply put, the term “Bitcoin” is intended to suggest the notion of virtual currency generally.

Bitcoin is essentially an idea, a concept. It's not something tangible, as in a literal coin – it is referred to as a virtual currency because it is electronic with no physical form. In reality, Bitcoin is a computer program that functions as a communication tool, similar to email. Just as email messages contain the written contents of what one person types up and sends to another, Bitcoin “messages” contain the details of a transaction, and are sent from user to user. One of the very unique aspects of Bitcoin is that the details of these transactions are not stored on a server or set of servers, as would be the case if you were sending money to someone from your bank account. Instead, they are recorded in what is known as the “blockchain” – basically a message board that contains all transactions that have ever been made using Bitcoin, and which can be downloaded online by anyone wishing to participate in the Bitcoin network.

The Bitcoin network is used as a virtual payment system, in that users communicate to each other via the blockchain that they have electronically exchanged goods or services for ‘coins’. As mentioned above, bitcoins are not physical units that you can store and touch, but are just the record of a transaction. However, bitcoins function a lot like tangible, classic forms of money, such as gold or paper bills, because everyone in the network agrees that bitcoins can be used to pay for goods and services. When the Bitcoin project started, the creator of the program intended for only a certain amount of bitcoins to ever be produced, ensuring scarcity of supply. The creator also established a way for users of the community to obtain bitcoins at a controlled pace; by verifying transactions posted to the blockchain, users maintain the bookkeeping system as an asset ledger and consensus network, and are subsequently rewarded for their efforts. Again, this is an extremely technical and

33. Id.
35. *Supra* note 8, at 71.
complicated process, but to obtain bitcoins, you either have to go through the above process, referred to as 'mining', and verify transactions, or you can be sent bitcoins that other people have received or 'mined' for themselves.\footnote{Id.}

How does one store bitcoins? One of the central features of Bitcoin is that it operates outside of any central financial institution, but for purposes of explanation, it is best to think of storing bitcoins the way you store money in a bank account. Often referred to as 'digital wallets', these accounts contain the private key and public address of a Bitcoin user, and can be stored on the hard drive of a computer, through an online service, or in an offline vault service.\footnote{How Can I Buy Bitcoins?, COINDESK, http://www.coindesk.com/information/how-can-i-buy-bitcoins/ (last updated Oct. 28, 2015).} The most popular are wallet services, such as Coinbase, which store users network information and digital currency, and allows users to purchase bitcoins using dollars and euros.\footnote{See generally, COINBASE HOME, https://www.coinbase.com/home (last visited Aug. 26, 2016).}

\section*{A. Bitcoin in Latin America}

Bitcoin has recently emerged as an alternative to domestic fiat currency in countries that have experienced financial struggle and inflation. This is most apparent in Latin America, where rapid inflation and capital controls have destabilized local currencies so much that locals have scrambled to place their savings or investments in anything outside what is backed by the local government.\footnote{Nathaniel Popper, Can Bitcoin Conquer Argentina?, THE NEW YORK TIMES MAGAZINE (April 29, 2015), http://www.nytimes.com/2015/05/03/magazine/how-bitcoin-is-disrupting-argentinas-economy.html.} As Nathaniel Popper has thoroughly covered for The New York Times, virtual currencies such as Bitcoin may provide a unique solution to a pervasive problem in struggling Latin American countries such as Argentina and Venezuela.\footnote{Nathaniel Popper, THE NEW YORK TIMES (ONLINE), http://www.nytimes.com/by/nathaniel-popper (last visited Oct. 2, 2016).}

For many people in struggling countries in Latin America, Bitcoin offers the potential of breaking out of oppressive financial structures: Bitcoin can be transferred anywhere in the world cheaply and efficiently, without needing to go through a central institution that can say yes or no or add security risk to the equation.\footnote{Laura Shin, What Bitcoin’s History Means For Its Future: Q & A With Nathaniel Popper, Author of ‘Digital Gold’, FORBES (May 19, 2015, 9:07 AM), http://www.forbes.com/sites/laurashin/2015/05/19/what-bitcoins-history-means-for-its-future-qa-with-nathaniel-popper-author-of-digital-gold/#7ee4193a690f.} Family members, relatives, and friends can send money into and get money out of countries where capital controls might otherwise restrict transfers or exchange. For people in countries like Argentina, Venezuela, and Brazil, who have watched as their domestic currency has consistently depreciated in value, Bitcoin has
the potential to offer a more stable place to keep their money.\textsuperscript{46}

Argentina is one of the most well-known examples of Bitcoin economics playing out at a national scale. Following the financial collapses of the 2000s, Argentina became a fertile ground for virtual currency.\textsuperscript{47} Rapid inflation, a decreasing peso, and uncontrolled government spending resulted in a severe distrust of traditional financial establishments in the country.\textsuperscript{48} Less than half of the country's population use Argentina credit cards - "even wealthy Argentines fear keeping their money in the country's banks."\textsuperscript{49} In early 2015, with little to no change in the Argentine government's approach to capital controls, the use of Bitcoin doubled, "mainly among small businesses."\textsuperscript{50} In the summer of 2015, bitcoins could be sold "on the unofficial currency market for fifty per cent more than [one] would get at the official exchange rate."\textsuperscript{51}

IV. VENEZUELA

Venezuela has also found itself in the midst of a financial crisis. The Venezuelan economy, which is largely based on oil, shrank seven percent in the third quarter of 2015, and has been shrinking for seven consecutive quarters since 2014.\textsuperscript{52} As a result of falling oil prices, inflation has risen - the central bank of Venezuela reported one hundred and forty-one percent inflation in September of 2015, and the IMF has projected inflation to rise over two hundred percent in the next year.\textsuperscript{53} This rapid inflation, coupled with a confusing system of exchange rates imposed by the government, has created a high demand in Venezuela for alternatives to the national currency, the bolivar.\textsuperscript{54} In early 2016, one U.S. dollar was worth eight hundred and sixty five bolivars.\textsuperscript{55}

Venezuela faced a similar problem in 2014. Inflation was rising, and tight currency controls - originally imposed by Hugo Chavez - were maintained by President Nicolas Maduro, making it very difficult for Venezuelans to change bolivars to US dollars.\textsuperscript{56} As a result, Venezuelans turned to Bitcoin. In October of 2014, SurBitcoin launched as the first Venezuela-

\textsuperscript{46} Id.
\textsuperscript{47} Supra note 43.
\textsuperscript{48} Id.
\textsuperscript{49} Id.
\textsuperscript{50} Benedict Mander, \textit{Argentine Small Businesses Turning to Bitcoin}, \textit{Financial Times} (July 19, 2015), http://www.ft.com/intl/cms/s/0/b2a8cca4-2c11-11e5-86f3-e7aedd17b7db7.html#axzz3zz7mPo7i.
\textsuperscript{51} Id.
\textsuperscript{53} Id.
\textsuperscript{54} Id.
\textsuperscript{55} Id.
ian Bitcoin exchange. Though the price of bitcoin fluctuates, leading to a volatile market, it is still more stable than the bolivar – by the end of 2014 the price of one bitcoin was around three hundred US dollars. The reaction to Bitcoin in Venezuela was initially slow. However, since 2014 SurBitcoin has begun accepting bolivars in exchange for bitcoins. Even with a worsening situation in Venezuela now than in 2014 – the average monthly salary is now close to twenty dollars per month, as opposed to two hundred and fifty per month in 2014 – many in Venezuela have been turning their savings into bitcoins, albeit in very small portions.

For many places around the world, the legal and economic status of virtual currencies has been the subject of much debate. It is hard to determine Bitcoin as “legal” or “illegal”, due to its unique nature of being outside any centralized legal or financial structures, it is more appropriate to consider Bitcoin as “extralegal” - beyond the traditional authority of law. Though the Venezuelan government places extremely tight price controls on the economy, the legality and regulation of Bitcoin in the country has been largely undetermined. The government has not communicated an official stance on Bitcoin, though Venezuelan law has been interpreted to view Bitcoin not as money, but property. As a result, some observers have declared “purchasing bitcoins turns to be the only safe, legal investment in Venezuela where people can safely buy using their bank account.” However, as it is outside of institutional control, a determination of Bitcoin being “illegal” in Venezuela is not likely to have a significant prescribed effect.

A transition from a national currency to a strictly virtual one is not only highly unlikely, but also rather impractical, at least for right now. A more germane approach would be the use of virtual currencies such as Bitcoin to supplement – not supplant – the Venezuela economy. Due to the worsening economic crisis, many Venezuelans have taken extreme measures to bring basic household supplies – including toilet paper – back into the country. Roughly half a million Venezuelans visited the United States last year, and many who have the means are traveling to America just to

57. Id.
61. Id.
62. Id.
buy basic goods. With Bitcoin, these same items could be purchased online and shipped into the country, without the risk of wire transfers and central banks. Online commerce markets such as Open Bazaar have taken the lead of trying to become a one-stop shop for online peer to peer transactions – basically an Amazon for Bitcoin. With cell phone access and Internet access growing in Venezuela and around the world, the “digitization” of finance could allow even more people in developing nations to have access to financial services such as Bitcoin. As more Venezuelans gain access to technology and the Internet, they merely need to download a software application and can become a participant in an international economy with currency that can be transmitted anywhere in the world with no fees or government controls.

V. CONCLUSION

Virtual currency such as Bitcoin has the potential to effectively supplement volatile fiat currency in countries such as Venezuela that suffer from dysfunctional capital controls and mismanaged government macroeconomic policies. With access to a truly international economy that is outside of any central regulatory authority, Venezuelans can have more financial autonomy, and may be given a better opportunity to survive an economic crisis that has gone “from bad, to worse, to horrific.” Political leadership in the country seems to have taken nothing from the repeating cycle of highs and lows in the oil industry, particularly in the last boom, when Venezuela did not accumulate enough savings to mitigate a reversal in the terms of trade or to cushion necessary macroeconomic adjustments. This would indicate there is likely to be no significant progress, at least in terms of the near future. It would thus be better for Venezuelans to take financial power into their own hands, and thanks to new virtual currencies such as Bitcoin, it is right at their fingertips.

64. Id.
68. Supra note 8.
69. Supra note 20.