



BENEFITS AND RISKS OF BITCOIN FOR SMALL BUSINESSES

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Mr. Chairman and members of the committee, thank you for inviting me here today to comment on Bitcoin's use for small businesses. My name is Jerry Brito and I am a senior research fellow at the Mercatus Center at George Mason University, where I study the regulation of emerging technologies in the Mercatus Center's Technology Policy Program.

INTRODUCTION

Online virtual currencies are nothing new. They have existed for decades—from World of Warcraft Gold to Facebook Credits to e-gold. Neither are online payments systems new. PayPal, Visa, and Western Union Pay are all examples. So what is it about Bitcoin that makes it unique?

- Bitcoin is the world's first completely decentralized digital currency.
- Its decentralized nature results in lower transactions costs, making it particularly attractive to small businesses.
- It could also be an attractive electronic payments option for consumers, including the unbanked and underbanked.
- Risks include volatility and security, but these are not problems inherent in Bitcoin's design.

The policy challenge is to address the risks associated with Bitcoin without stifling innovation.

BACKGROUND

Whatever one may think about Bitcoin's prospects for enduring value, it is safe to say that it is a remarkable technical achievement.¹ Bitcoin is the world's first completely decentralized digital currency, and it's the decentral-

1. The attached appendix is an updated version of *Bitcoin: A Primer for Policymakers* by me and Andrea Castillo, which goes into considerable detail about the technical workings of Bitcoin, as well as a detailed description of the cryptocurrency's potential benefits not just for consumers

ized part that makes it unique. Prior to Bitcoin's invention in 2009, online currencies or payments systems had to be managed by a central authority, whether it was Facebook issuing Facebook Credits or PayPal ensuring that transactions between its customers were reconciled. However, by solving a longstanding conundrum in computer science known as the "double spend" problem, Bitcoin for the first time makes possible transactions online that are person to person, without the need for an intermediary between them, just like cash.

BENEFITS

This technical breakthrough presents both potential benefits and risks for consumers and small businesses.

For example, because there is no central intermediary in Bitcoin transactions, fees associated with those transactions are relatively small. Small businesses accepting credit card payments often face fees of around 25 cents for each card swipe, plus two to four percent of the transaction total. If you are a small-margin business, those fees can really eat into your bottom line. This is why we often see small businesses like dry cleaners or convenience stores display signs limiting credit cards to transactions over a certain amount. In contrast, businesses that use a merchant processor like BitPay or Coinbase pay fees of one percent or less on Bitcoin transactions. If you are a small-margin business, that difference could mean doubling your profits.

Another reason small businesses are attracted to Bitcoin is that, like cash, all transactions are final. Again, because there is no central intermediary, there is no third party that can reverse a transaction. This protects small businesses from chargeback fraud, which often results not just in the loss of the sale, but also in penalty fees. Such "friendly fraud" accounts for 41 percent of all claims,³ and if a merchant has one percent of their charges reversed as chargebacks, they can be kicked out of the credit card networks, potentially ending their business.³

Finally, because Bitcoin is decentralized, businesses can now accept international payments that were not previously possible. There are over 50 countries that traditional payment processors do not serve, often because of high fraud rates.⁴ Because Bitcoin payments are global and final, doing business with consumers in those countries is now feasible. For example, one small electronics retailer who accepts Bitcoin payments recently noted that over the last nine months he sold \$300,000 worth of merchandise to nearly 40 countries.⁵ This includes countries like Pakistan and Moldova, which were previously unavailable to American merchants. "We could never ship to these countries using a system other than Bitcoin," he wrote.

For consumers, the benefit Bitcoin presents is essentially choice. Wishing to encourage its use, merchants frequently offer discounts to customers who pay with Bitcoin. Now consumers can choose to pay a little more and get the benefits of using a credit card, like fraud insurance and airline miles, or pay a little less. For some price-sensitive consumers, this could be a very valuable choice. More than a quarter of American households are either unbanked or underbanked, and many rely on prepaid cards for access to electronic payments.⁶ Bitcoin could potentially be an important new option for these consumers.

and the economy, but also for free speech and oppressed minorities around the world. It also looks at Bitcoin's challenges, including the currency's security and volatility, as well as law enforcement concerns and regulatory alternatives.

2. CyberSource, 2012 Online Fraud Report, <http://tinyurl.com/n3ze9pw>.

3. Elizabeth Harper, "Friendly Fraud? Yes It Exists," *Christian Science Monitor* (blog), March 11, 2014, <http://www.csmonitor.com/Business/Saving-Money/2014/0311/Friendly-fraud-Yes-it-exists>.

4. Andy Skelton, "Pay Another Way: Bitcoin," *WordPress* (blog), November 15, 2012, <http://en.blog.wordpress.com/2012/11/15/pay-another-way-bitcoin/>.

5. Dylan Love, "A Guy Who Owns a Bitcoin-Only Electronics Store Is Revealing Everything on Reddit," *Business Insider*, March 18, 2014, <http://www.businessinsider.com/e-commerce-with-bitcoin-2014-3>.

6. FDIC, *2011 FDIC National Survey of Unbanked And Underbanked Households*, September 2012, https://www.fdic.gov/householdsurvey/2012_unbankedreport.pdf.

RISKS

Of course, there are also risks associated with Bitcoin. Chief among these is Bitcoin's historic volatility. It has traded from a low of pennies when it was first introduced in 2009 to a high of \$1,200 last December, with wild short-term swings. However, there is nothing inherent in Bitcoin's design that makes it naturally volatile. Its volatility is likely attributable to the fact that it is a new currency, still in the process of discovering its stable price. Additionally, as a nascent currency, it is very thinly traded and as a result a single large-enough trade can affect the exchange price substantially. If Bitcoin's use continues to expand, we should expect to see volatility subside. Additionally, derivatives that allow investors to bet against the price of Bitcoin will soon become available, and this should help stabilize the price as well.⁷

It should also be noted that small businesses can use Bitcoin entirely as a payment system, and in fact, this is what most do. Using a merchant service company like BitPay or Coinbase, they do not need to be exposed to Bitcoin volatility. Merchants can denominate prices in dollars, accept bitcoins for payment at the current exchange rate, and then immediately convert those bitcoins to dollars. Indeed, a business that accepts Bitcoin payments never has to hold bitcoins.

Security is another concern. Because Bitcoin is essentially digital cash, securing it is vitally important. There is no intermediary that can replace your bitcoins if they are stolen. As we have seen, however, merchants need not hold bitcoins, and as interest in Bitcoin expands we are seeing a great deal of innovation and investment in secure consumer products.

Like the Internet itself, Bitcoin has the potential to be a platform for the kind of permissionless innovation that has driven so much of the growth of our economy.⁸ And like all emerging technologies, Bitcoin also presents risks. The challenge for policymakers is to address those risks while doing no harm to the innovative potential of the technology.

Thank you for your time and I look forward to your questions.

ABOUT THE AUTHOR

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7. Katy Burne, "New Derivative Guards Against Bitcoin's Price Swings," *Wall Street Journal*, March 24, 2014, <http://blogs.wsj.com/moneybeat/2014/03/24/new-derivative-guards-against-bitcoins-price-swings/>.

8. See Adam Thierer, *Permissionless Innovation: The Continuing Case for Comprehensive Technological Freedom* (Arlington, VA: Mercatus Center at George Mason University, 2014), <http://permissionlessinnovation.org>.