US - Mexico Remittance Market and Bitcoin ATMs (BTMs):

A Case Study

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Abstract: The number of remittances sent from the US to Mexico in 2017 reached an all-time high of $28.771 billion, but there are still many issues that need to be tackled in order to have a frictionless sending process. Undocumented immigrants cannot easily access banking services. International banking fees can be as high as 7.16% and average 4.06%. Political change may even stall any fiat transfer from the U.S. - but could Bitcoin and BTMs come to rescue?

**"Remittances"** are funds or other assets that migrants send to their home countries.[[1]](#footnote-0) Worldwide, an estimated $574 billion (USD) was sent by migrants to relatives in their home countries in 2016, according to economists at the World Bank.[[2]](#footnote-1)

In the United States, the majority of remittances in 2016 were sent to Mexico, approximately 28.1 billion (USD), followed closely by China, at 15.4 billion (USD) remittances sent.1Mexican migrants, including those from the United States, contribute a great amount to the economy of Mexico and, in 2015, remittances coming into Mexico overtook oil revenues.[[3]](#footnote-2)

US migrants in Mexico have sent back to their home in 2016 approximately USD1.75 billion.1 Thus, the cash flow from the US to Mexico surpasses the flow from Mexico to the US by nearly 16:1.  
  
The majority of remittances are sent from the US using small money transfer operators (MTOs). Those MTOs have a market share of nearly two thirds (67%-68%), followed by MTOs such as Western Union (15%), Orlandi Valuta (10%) and Money Gram (7%-8%).[[4]](#footnote-3)

Although half or more of Mexican immigrants to the United States are properly documented, many migrant workers find their access to formal remittance channels blocked by their lack of accepted identification documents. 4

One of the main features of the U.S.-Mexico remittance corridor has been the declining transfer cost over the years; however, there are certain characteristics that need to be considered when examining the decline in transfer cost. These include:

1. The cost reduction is different depending on the city of origin of the transaction.

2. The cost reduction is different depending on the remittance product used.4

The necessity for higher speed, lower costs, and deregulation of the remittance corridor appear to make it the perfect opportunity for cryptocurrencies to step in and take market share.

But is that really the case?

**Bitcoin (₿)** is a cryptocurrency, a form of electronic cash. It is a decentralized digital currency without a central bank or single administrator that can be sent from user-to-user on the peer-to-peer Bitcoin network, without the need for intermediaries.[[5]](#footnote-4)

Bitcoin automated telling machines (**BTM**s) facilitate the selling and buying of Bitcoin.

To this end, Bitcoin ATMs are not literal automatic teller machines, as traditional ATMs connect with users’ bank accounts. Instead, Bitcoin ‘ATMs’ are linked up to:

* the Internet
* a Bitcoin exchange

The end user will need the wallet on their mobile device to receive or deposit Bitcoin from/to the BTM. Accordingly, Bitcoin ATMs are kiosks — they either provide a printed-out ‘paper wallet’ receipt of the transaction or shift over the purchased amount of Bitcoin to a public key address. Using a QR code of that address, the user is able to scan it with their mobile device and interact with the BTM. Thus instead of punching in one’s pin to access their checking or savings accounts, the Bitcoin ATM is used to interact with a given Bitcoin exchange. And, likewise, user verification standards will vary from machine to machine and company to company.6

Going back to remittances, how does Bitcoin stack up for money transfers, and can it compete in the money transfer market?

Though many people still use banks for international money transfers, online transfer services are gaining popularity for their simplicity.

[[6]](#footnote-5) The steps to using a money transfer service are:

* Tell the money transfer platform how much one wants to transfer and who to send money to.
* Send the money to the money transfer platform.

The money transfer service takes care of the details of sending the currency, and the recipient receives the funds rapidly, often the same day.

By contrast, the basic process for transferring money through Bitcoin is as follows:

* Deposit fiat onto a BTM to purchase Bitcoin

Then follows two different paths, one where the end receiver will use Bitcoin as is, or else:

* The recipient sells the bitcoin for fiat on a BTM.

The process involves a few more steps than using a traditional money transfer platform. What’s more, one has to complete them alone — nobody takes care of the entire process.

This may be a strike against Bitcoin.

Transferring money through Bitcoin is more complicated than doing so through traditional money transfer services.

How about costs?

Transferring through bitcoin reduces intermediary banking fees, however, BTMs charge fees averaging 8%[[7]](#footnote-6). Knowing that international banking fees may be around 4% on average[[8]](#footnote-7), it may even be cheaper to use traditional banks.

But what about speed?

When someone initiates a Bitcoin transaction, it is confirmed on the blockchain in around ten minutes. Some Bitcoin platforms require multiple confirmations before they will clear a transaction, but one can often complete a Bitcoin transfer in under an hour.

Unfortunately, that is not faster than existing options. Although international wire transfers take several days, in-person transfers are completed in mere minutes with services like Western Union and MoneyGram.

So, transferring money through Bitcoin is not much faster either, considering deposits and withdrawals.

And what about regulations?

Here, there is a clear advantage to the Bitcoin blockchain, with its built-in privacy and lack of KYC procedures. In order to transfer Bitcoin, the majority of BTMs require much fewer government-issued documents and paper-filling than traditional alternatives.

The following table sums up the previous exposition of advantages and disadvantages:

|  |  |  |
| --- | --- | --- |
|  | BTMs | Traditional |
| Technical complexity | 🆇 | ✅ |
| Speed | 🆇 | ✅ |
| Costs | 🆇 | ✅ |
| Privacy | ✅ | 🆇 |

Although there seem to be more advantages to traditional money transfer services, the privacy offered by Bitcoin is an unmatched advantage for undocumented immigrants that wish to send money from the United States to Mexico, or anywhere else.

While the BTM network is still growing, one can easily find a BTM in nearly every big city in the US. At the time of writing, there are a total of 2,364 active BTMs, some even servicing customers on a 24/7 basis. [[9]](#footnote-8)

However, there are only ten BTMs in Mexico.[[10]](#footnote-9)

Note that even though BTMs promise a more affordable and more private flow of remittances, the need for technical knowledge and servicing infrastructure may not be enough, at least right now or until the BTM network expands in Mexico. Then, however, the price of Bitcoin may have stabilized and adoption of the cryptocurrency itself may be more widespread. That may mean that there is no need to convert into fiat. But that also means BTMs will most likely be forsaken then for the added convenience of mobile/web wallets.

1. <http://www.pewglobal.org/interactives/remittance-map/#> [↑](#footnote-ref-0)
2. <http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data> [↑](#footnote-ref-1)
3. <https://www.nbcnews.com/news/latino/mexico-got-more-money-remittances-oil-revenues-2015-n510346> [↑](#footnote-ref-2)
4. <https://siteresources.worldbank.org/EXTAML/Resources/396511-1146581427871/US-Mexico_Remittance_Corridor_WP.pdf> [↑](#footnote-ref-3)
5. <https://en.wikipedia.org/wiki/Bitcoin> [↑](#footnote-ref-4)
6. <https://www.finder.com/how-bitcoin-compete-money-transfer-market>. [↑](#footnote-ref-5)
7. <https://cryptonews.com/exclusives/bitcoin-atms-are-increasing-fees-don-t-change-2505.htm> [↑](#footnote-ref-6)
8. <https://remittanceprices.worldbank.org/en/corridor/United-States/Mexico> [↑](#footnote-ref-7)
9. <https://coinatmradar.com/country/226/bitcoin-atm-united-states/> [↑](#footnote-ref-8)
10. <https://coinatmradar.com/country/138/bitcoin-atm-mexico/> [↑](#footnote-ref-9)