



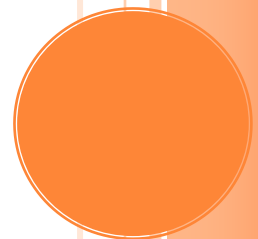
MACROECONOMIC
Analysis & Policy Studies

Cryptocurrency in India going legal?

Student Research Internship Report

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July 2021



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Introduction

Modern money theory (MMT) the unconventional branch of heterodox economics which has been gaining popularity in the States, has been quite the talk of the town for the past decade. After the Global Financial Crisis of 2008, MMT under proponents like Randall Wray and Stephanie Kelton had been constantly drawn upon to address economic issues of modern times. MMT economists articulate that a country which issues its own currency can never go bankrupt. Fiscal stimulus can therefore be boosted regardless of high debt levels in the economy so that the GDP of the country increases. Expansionary fiscal policy by adopting “pump priming” policy will rekindle businesses and increase consumer demand to boost GDP. However, there runs the risk of ramifications if there are no reins on the policy. If there is excess money circulation in the market, the real price of money falls and nominal prices due to excessive demand of consumer goods causing inflation beyond reasonable levels.

Here comes the efficacy of monetary policy, not through conventional pumping of helicopter money into the market or fluctuating interest rates which again has the inflationary and distributional implications. The answer is cryptocurrency as a digital currency payment accepted as a legal tender in many countries can serve for the adoption of a new monetary policy.

In this research paper, we would bring out cryptocurrency’s efficiency and disadvantage in monetary policy through MMT analysis.

The Indian Perspective

Reserve Bank of India (RBI) issued a notification wherein it directed ~~the~~ commercial banks to stop avoiding transactions involving virtual tokens citing its earlier 2018 circular since it has been quashed by the Supreme Court. However, the RBI is of the opinion that there are still concerns that need to be communicated to the government regarding the use of digital currencies. Recently, Ketan Surana, Director and Chief Financial Officer, Coinsbit and Member of Internet and Mobile Association of India made a statement in the media that a new committee has been working on the regulation of cryptocurrency and is extremely optimistic on its regulation and legislation. He also revealed that very soon a proposal will be in the Cabinet and that the government will embrace cryptocurrency soon.

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This article was written as part of our research internship at Foundation to Aid Industrial Recovery-Macroeconomic Analysis & Policy Studies.

The views expressed in this article are our own and not those of FAIR-MAPS.

We, Shrimanta Satpati and Gauri Sharma, hereby declare that this article is not plagiarised.

It is a common perception among the crypto and policy enthusiasts that the adoption of cryptocurrency as an alternate asset class is more realistic. However, since it fluctuates regularly, its adoption as a mode of payment is precarious and problematic.

Heads or Tails?

Now let us take a pause to look at both sides of the coin.

Bitcoin, the newly emerging cryptocurrency, and many such digital currencies are based on blockchain technology. The idea of using dollar as a global reserve currency and all the other currencies being pegged to dollar is sort of a jinx as it only aggravates high import duties in developing countries like India. The nominal exchange rate is so high that often our hands bleed when we buy an imported product from the United States. Crypto solves these issues in a simple way as there is no import duty involved. As a critic of MMT, I feel that the government should advocate crypto as a legal tender. Issuing fiat currency to boost fiscal stimulus is an old-fashioned policy because it only pumps inflation in the country. In the payments which involve crypto there is no physical exchange of money so the problem of inflation can be easily done away with. It also minimises risk of corruption and black money which is a constant threat to the government. The secured channel of monetary transaction would enhance transparency on both the buyer and seller side.

We can prove that MMT does defend crypto in a way. We will see in the later Finland ETH contract.

Let us now understand the smart contract based in ETH. **Ethereum** is a decentralized, open-source the most actively used blockchain with smart contract functionality. **Ether (ETH)** is the native cryptocurrency of the platform. After Bitcoin, it is the largest cryptocurrency by market capitalization. A "smart contract" is a program that runs on Ethereum, one of the most popular cryptocurrencies in the world. It's a collection of code (its functions) and data (its state) that resides at a specific address on the Ethereum.

Smart contracts are a type of Ethereum account, meaning they have balance, and they can send transactions over the network. However, they're not controlled by a user, instead they are deployed to the network and run as programmed. Users can then interact with a smart contract by submitting transactions that execute a function defined on the smart contract. They can define rules, like a regular contract, and automatically enforce them via the code. Refugees and asylum seekers forced to leave their homes are often found without paperwork, posing problems for them and for legal authorities in proving their very existence. Without paperwork, it's impossible to prove your date of birth, open a bank account, access government services, and even get a legal job. Blockchain technology offers an interesting solution here - being able to track an identity on a ledger via a unique, immutable, and independently verified record provides new opportunities to tackle this problem.

The Finland Case Study of ETH

The Finnish Immigration Service Migri first partnered with Helsinki-based start-up MONI back in 2015, as part of a pilot project that offered refugees a prepaid Mastercard linked to their unique digital identity stored on a blockchain (provided by Migri). It was specially

designed for asylum seekers who do not have a bank account. Blockchain technology, deployed via Ethereum, maintains a record of the financial transactions made with the card. And this turned out to be such an amazing solution that let alone identity, this system works better than most of our traditional banks wherein the accounts are not just accessible by smartphones but also have a feature to receive special government benefits and salary disbursements.

By bringing all the refugees officially into the banking system, MONI services have enabled the asylum seekers to not just have an identity but also to start contributing to the economy as soon as possible. This makes it easier for refugees to find employment, receive money from jobs, and allows them to pay bills electronically - ultimately speeding up their process of becoming established in Finland. It's thought that there are now thousands of MONI users among Finland's refugee community.

Universal Job Guarantee, a federally funded locally administered scheme that offers employment to people at a socially inclusive minimum wage is an integral part of MMT. It is an automatic stabilizer for creation of employment given that the State has economic sovereignty. Since modern money includes fiat currency and legal tender, allowing legal tender of the cryptocurrency can ease digital transactions without creating inflation as it is a digital currency and not a paper currency would create employment. In this context, MMT supports the idea of cryptocurrency as a way of generating employment and reducing involuntary unemployment.

The government can tie up with a smart contract as a provider of job schemes to facilitate these refugees through digital payments to avoid cash transfers and curbs excessive money circulation and hence inflation. Though technology takes away skill job, refugees been mostly manual and nonskilled labour can engage in community work and get digitally paid instantly which MMT defend.

At the same time, India also faces certain problems that need similar solutions. So, the question is how could we use ETH to solve the most pressing problems in India?

The first application is that of the government subsidy allocation. People, in 2016, the Economic Survey of India revealed that about Rs 1 lakh crore from the subsidy bill is being unevenly distributed to the better-off population due to the flawed targeting of the assistance and multiple reasons, including corruption, fake documents and most importantly, the lack of a technological tool that can calculatedly allocate and revoke subsidies based on data.

We need a system to filter out people who do not need subsidies. We also need a system that can revoke and allocate subsidies based on the progress that people make. India is witnessing a data management crisis. For example, in just 4 months into 2020 the Food Corporation of India had about 65 lakh tonnes of food grains wasted merely due to lack of storage while, at the same time, we had 189 million Indians sleeping hungry at night and who had no access to food. Corruption and lack of data processing systems end up putting

millions of lives at stake despite the availability of the resources. Smart contracts could be used to solve these issues.

(Source - <https://youtu.be/aEDjZvB3UZM>)

Crypto can be just as dangerous.

But with the good there are always comes some disadvantages which also need to be considered.

This is where crypto is not supported by MMT. Cryptocurrency is extremely volatile since it is unregulated and not backed by a physical commodity, causing sudden fluctuations in its price. Its value is dependent on demand and supply. The greater the demand, the higher the value. Hence, a heap of cryptocurrencies which are worth a fortune today may be worthless tomorrow. Illegal transactions are a cause of concern with data losses which can cause financial distress. Despite decentralised operations, it is still operated by some remote organisation or independent financial tech giant which does not come under the radar of the central government. Some coins are not available in other fiat currencies which makes difficulty in transaction. The almost hidden nature of cryptocurrency transactions makes them easy to be the focus of illegal activities such as money laundering, tax-evasion and possibly even terror-financing.

Conclusion

We can use the Finland Case Study to adopt smart contracts in India to tackle some of the issues raised above. Stephanie Kelton, in her Cryptocurrency and Fiat Currency lectures, says that fiat money is backed by government ability to believe in its worth, but cryptocurrency belief is voluntary. In that sense, a national currency would have a backup that would secure the currency value. Crypto, on the other side, can have its value going to zero. Though it is volatile still it allows ease in transaction. Though dollar is the official currency of El Salvador still it accepted bitcoin as a legal tender as a future prospect. In this paper we have looked into both sides because an MMT economist cannot rule out the different outcomes. Can India also accept it as a legal tender besides rupee?

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