

# Sovereign Monetary Policy and Digital Currencies

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Even with assets such as Bitcoin having surged more than 19-fold this year after starting 2017 at about \$1,000 (Jung-a, Dunkley 2017), cryptocurrencies are beginning to face significant hurdles and challenges to mass adoption. These challenges are based on the supply-side structure of several digital currencies, as well as the limitations this poses to market liquidity and monetary use (Stockman 2017; Barton 2017). This is because the underlying block-chain technology allows for a limitation in the rate of the supply of coins based on non-fixed mechanisms such as mining. In the context of Bitcoin what is meant by this is that the proliferation of miners would increase the difficulty of mining, thus depleting the introduction of new coins (Bitcoinwiki 2017). This undersupply would evidently drive up the price of each asset, thus having a deflationary effect that discourages spending. Bitcoin attempts to remedy this by cyclically reintroducing transaction fees as payments to miners. In the case of Ripple these transaction fees actually reduce the monetary supply, since the ripple taken in the fee is destroyed (Ripple 2017). This may not sound imperative to the mass adoption of cryptocurrencies right now, however it poses long term risk to the health of any economy willing to implement the use of digital currencies.

In political economy the term of cost of adjustment refers to the balance of payments adjustments between debtor countries and surplus countries (Frieden 2014). Such rebalancing is important to sovereign powers as it is what determines their flexibility in combatting unemployment levels and national savings; creditor countries export more thus lending a competitive advantage and higher output/employment levels, whereas debtor countries import more and suffer the opposite effect (Askari 1999). Although theoretical, this can be empirically applied to the tight German monetary policy in the 1990s, in which the country cut spending resulting in recession and imbalance in the rest of Europe, especially in the case of Italy (Frieden 2014; Askari 1999). For example, due to the fixed parity of the European exchange rate mechanism, Italy found it incredibly difficult to devalue the lira by lowering interest rates (OECD 2017; Askari 1999). These events single the fundamental importance of maintaining sovereign monetary policy, as national account imbalances cannot be addressed with a fixed-parity system. Should sovereign states attempt this, then they would face sudden market shocks (Askari 1999), such as with the unpegging of the Swiss Franc versus the Euro in 2015. To give perspective, on Wednesday January the 14<sup>th</sup> the Euro was worth 1.2 Swiss Francs; at one point on Thursday (the 15<sup>th</sup>) its value had fallen to just 0.85 francs (C.W. 2015). The nearly 30% drop would not endure in a modern fiat backed system, as risk becomes more transparent to speculators (Askari 1999).

When we apply these concepts to cryptocurrencies we begin to notice the pitfalls of having a fixed parity system, as regulators cannot rebalance national account balances without adequate sovereign monetary policy. As with the Bretton woods system of yesteryear, we find ourselves with fixed exchange rates and free capital flow, but not sovereign monetary policy, according to the impossible trinity (Wikipedia 2017). The reason in which I mention this is because in reality most cryptocurrencies are pegged to Bitcoin. Analysts such as Jeff Currie even argued that bitcoin has become a bearer asset similar to gold (Barton 2017). So does this mean we are reliving Bretton woods 2.0 but this time with Bitcoin as the peg? Although there are constant inflows of dollars into cryptocurrencies raising the market capitalization, if we truly intend to use crypto in the form of mass adoption, then we would have absolutely no choice but to peg every other cryptocurrency to the one of the largest market capitalization, highest liquidity, and least volatility. This is because with the absent of fiat currency, we would need a commodity to peg exchanges to. Using the fixed-parity/ free-floating debate from the previous paragraph, we can see that this would lead to relative stability through fixed exchanges, however as previously mentioned the opaqueness of risk through the lack of monetary policy would lead to sudden crashes.

Therefore this determines that most cryptocurrencies are not viable in the real economy, because they do not give governments the monetary tools to combat national account imbalances, nor do they protect from sudden market shocks from devaluation or appreciation. This is part of the reason why the digital currencies that are appreciating, do not follow a philosophy of fixed exchange rates. Ripple on the one hand acts as a system for interbank transfers (including Fiat) that contains a centralized authority, although the network is autonomous (Wikipedia 2017). This structure allows for some degree of monetary manipulation with the efficiency of the block chain system. Although the ripple currency itself is essentially pegged to Bitcoin, the network offers governments the tools to combat national account imbalances and sudden shocks, as it blends its services with Fiat currency. The main drawback that I see however is the risk associated with centralization, since the currency does not seem to encourage replacement of Fiat.

That is why I believe Stellar Lumens to be the best crypto asset to own as of now, because it offers the same transaction speeds and fees as Ripple, but it does so without a centralized authority and with a fixed monetary policy. Inflation in cryptocurrency is just as important as inflation in the real world, however since crypto is not becoming the standard currency anytime soon, it should not supersede the volatility of foreign exchange markets. Nor should it remain stagnant. The 1% rate of inflation in Stellar offers us the incentive to use the lumen currency within the system and it also offers us a flexible yet fixed monetary policy, which will not become overbearing for policy makers. What I mean is that since the Stellar network acts as an intermediary to transfer Fiat from and to the developing world, we must offer sufficient mechanisms to ensure that deflation is avoided in order to stop hoarding of lumens. However, we must also keep a controlled inflation that does not impede on real monetary policy makers, thus removing the incentive to use Stellar in the first place. Having a high inflation rate would remove the initial dollar value of the lumens to the point where one lumen tomorrow would be worth substantially less than one today. In a system like Stellar, this would mean that dollars are essentially disappearing in the system.

Say I buy 1000 lumens for \$1000 today with a monthly inflation rate of 2%. That means those 1000 lumens will have 2% less purchasing power than previously. That means that in order to purchase the same goods and services as today, you would need 1020 lumens one month from now. Once those 1000 lumens are converted back into dollars you would have \$980. Much of this can be explained in natural market forces, however it goes to show that a high inflation cryptocurrency used to transfer Fiat will in adversely affect the Fiat's money supply. The 1% inflation rate is a perfect target to compensate against hoarding and against excessive loss of purchasing power and effect of Fiat monetary supply.

Regardless, Stellar remains highly competitive with its low latency and transaction costs (stellar) which contrast with the rising transaction costs of Bitcoin. Although Bitcoin remains the reserve currency of cryptocurrencies, Stellar has room to manoeuvre in a Fiat centric world, especially with its design to provide a middle ground between scarcity and liquidity. Most people do not even realize that Fiat currency is very new (Politics of Money) thus inflationary pressures from yesteryear are not even linked to the non-value of modern-day currency. Based on the current market capitalization of nearly \$6 billion (Coinmarketcap 2017), stellar lumens can swiftly secure a price target at \$10-\$15, which would imply a market capitalization of \$200-\$250 billion. This is entirely possible by Q1 2019 given the rapid adoption of Ripple. In addition both currencies see the least regulatory resistance to adoption, particularly because a degree of sovereign monetary policy is kept intact. This last part is a simple educated guess, however the market share that Ripple has recently captured (Coinmarketcap 2017) demonstrates that cryptocurrencies emphasizing on sovereign monetary policy are the ones with the most promise. It would be unsurprising to see Stellar rise to the top five cryptocurrencies by market capitalization. Using today's figures that would mean that an \$18 billion market cap replacing Cardano (Coinmarketcap 2017) would easily place Stellar at a price target of \$1. This is not considering estimates that cryptocurrencies still have a long way to go until it seizes sizable shares of the Gold market which is at \$8 trillion (Barton 2017). Such introduction to liquidity could guarantee a cryptocurrency total market capitalization at over \$1 trillion and realistically give Lumens a sizable portion of market share. An optimistic estimate of Stellar could put it at \$300 million market capitalization which means a price target of about \$17 per lumen. These are obviously estimates, however they spell that Stellar has only one way to go and that way is up.

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