

Welcome to Morgan Creek Digital's weekly digital asset update. It is comprised of a thought piece from our team followed by a summary of what we consider the most compelling digital asset news during the last week. We hope you find this content interesting. Please let us know if you have any comments or questions or if you would like to speak to a member of the Morgan Creek Digital team.

## The History and Functionalities of Money

What do beads, tea bricks, Parmigiano, fiat money, and cryptocurrencies have in common? Humans have chosen each of these unique items, among many others, as a medium of exchange throughout history. A single medium of exchange or small-medium number of exchanges widely accepted to have value by multiple parties is, by all accounts, **money**. Digital assets are the newest technology to serve the function of money, an invention that harnesses the technical possibilities of the digital era and attempts to solve the age-old challenge of preserving economic value across time and space. To understand digital currencies, we believe you should conceptualize the role of money. This newsletter will review the functionality and history of money.

# What Qualifies the Monetary Role?

Humans face many uncertainties, so people stuff mattresses and piggy banks for those unforeseen days of economic uncertainty. Money adoption depends on its liquidity or relative salability in scale and across time. The scale allows the sale of money in any quantity or unit of account desired, and time is its ability to hold value across the future, supporting storage of wealth and value.

Maintaining the value of currency by controlling the stock and flow and the quantity and movement of money at a specific point in time has proven to be a tough challenge. The existing stock consists of everything produced minus everything consumed or destroyed, and the flow is the extra production in the following period. The restriction of new money production to maintain value and the relative difficulty of producing new units determines money's "hardness". Easy money relates to units in which the currency supply is more vulnerable to rapid increases and can more easily lose its monetary status. In short, the ratio between the stock and flow is an indicator of the money's suitability to serve an economic role. For supply that can quickly grow, prices will decrease, destroying salability over time. Therefore, in an ideal scenario, anything successfully used as money will have some natural or artificial mechanism that limits its growth and preserves value.

### **History of Money**

In an agrarian economy, farmers exchange various goods, crops, and seeds to satisfy their needs and wants. However, the direct exchange of goods is inefficient because of its inability to maintain value across time and scale. When exchanging interests, an individual's wants may not be equal in scale to what he or she can offer, and fractional units may be impractical. Expanding on the agrarian example, exchanging corn crops for a farmhouse is impractical, as reaching the equivalent ratio of corn to farmhouse value is extremely difficult. Never mind the challenges of the corn expiring and the farmhouse being immovable and indivisible. Therefore, as economies grow in scale, they develop an indirect intermediary goods as a medium of exchange. In theory, and throughout history, many goods can serve as this medium of exchange, but those economies which discover the best solution are generally more productive than those

who do not.

**Historical Examples of Exchange Mediums** 

**Aggry Beads:** Glass beads, also known as aggry beads or trade beads, were popular as a currency in Africa because they offered an exceptional stock to flow ratio, as glassmaking was uncommon in West Africa and thereby hard to mass-produce. As trade between Europe and Africa increased, Europeans capitalized on their advanced glassmaking technology to mass-produce beads and gain increased purchasing power. The European monetary production resulted in adverse outcomes over time, including devaluing the currency.

**Tea Bricks:** As recently as the 19<sup>th</sup> century, blocks of ground tea leaves packed into molds and pressed were used as currency throughout China, Tibet, Mongolia, and Central Asia.<sup>3</sup> Based on the quality of bricks and leaves, the empire assigned the value of each brick.<sup>3</sup> The currency faced two significant problems as post World War II inflated its value dramatically, and locals consumed the bricks in times of food insecurity.<sup>3</sup>

**Parmigiano Reggiano**: In 1953, Northern Italian bank Credito Emiliano accepted Parmigiano cheese as collateral for loans, with the intent to aid cheesemakers during a time of economic downturn<sup>3</sup>. The bank held an estimated \$187.5 million worth of cheese, but cheese cannot maintain its integrity across a long time horizon; therefore, the loans were granted for the period equivalent to the cheese maturation cycle.<sup>3</sup>

# Conclusion

The monetary role is subject to change over time. Nonetheless, we believe the hardest and most salable form of money will emerge most successful when left to the free market. Beyond that, another critical ingredient is acceptability or trust, as the more people accept a currency, the more liquid it becomes. Ultimately people and not government, may choose which medium to store their wealth, from foreign currencies to gold and cryptocurrencies. This autonomy has been proven repeatedly throughout the 21<sup>st</sup> century as citizens have emptied their bank accounts as soon as a distrusted political regime claims that the local currency will not be devalued (as the inverse interpretation can be more accurate). Moreover, technological advancements may empower people to discover the "best-fit" money, and at Morgan Creek Digital, we believe that the best fit may be technically advanced cryptocurrencies. Part 2 of this series will explore cryptocurrencies' natural and technological qualities that we think make this medium interesting.

#### THE RUNDOWN:

**PayPal Brings Crypto Service to U.K. Customers**: PayPal is extending its crypto service to the U.K., allowing customers to buy, sell and hold four different cryptocurrencies on its platform. Users will be able transact in bitcoin, ether, litecoin, and bitcoin cash for as little as £1 (\$1.40), PayPal said. The rollout is the first expansion of PayPal's crypto offering outside the U.S. The process will begin this week and should be available to all eligible customers within the next few weeks. *Read more*.

**Inside Afghanistan's Cryptocurrency Underground as the Country Plunges Into Turmoil**: Farhan Hotak isn't your typical 22 year-old Afghan. In the last week, he helped his family of ten flee the province of Zabul in southern Afghanistan and travel 97 miles to a city on the Pakistani border. But unlike others choosing to leave the country, once his relatives were in safe hands, Hotak then turned around and came back so that he could protect his family home – and vlog to his thousands of Instagram followers about the evolving situation on the ground in Afghanistan. *Read more*.

**How Bitcoin Is Preparing For An Explosive Bullish Break**: This past Saturday, Benzinga ran a poll on Twitter asking whether people think Bitcoin would hit \$50,000

last weekend. As of last Sunday afternoon 71% of respondents chose 'yes.' Although Bitcoin may need a few days for further consolidation as the apex cryptocurrency looks to be preparing for another run north. *Read more.* 

**OKEx Establishes \$10M Fund for GameFi Projects**: Crypto exchange OKEx said it is launching a \$10 million fund to help develop GameFi, or "play-to-earn," projects. The cash will come from the exchange's \$100 million OKEx BlockDream Ventures fund, which invests in blockchain projects, the company said. GameFi introduces financial mechanisms into games, allowing users to make money by playing. *Read more*.

**Sweden's Government Forced to Return \$1.5M in Bitcoin to Drug Dealer**: The Swedish government has been forced to return over \$1.5 million in bitcoin to a drug dealer after its value surged while he was in custody. Authorities in Sweden seized 36 BTC from the drug dealer, worth just under \$150,000 at the time of his prosecution two years ago, according to a recent report by U.K. newspaper *The Telegraph*. *Read more*.

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<sup>&</sup>lt;sup>1</sup>Ammous, S. (2018). The bitcoin standard: The decentralized alternative to central banking. John Wiley & Sons, Inc.

<sup>&</sup>lt;sup>2</sup>Victoria and Albert Museum, O. M. (2013, September 11). Trade beads. http://www.vam.ac.uk/content/articles/t/trade-beads/.

<sup>&</sup>lt;sup>3</sup>Avakian, T. (2016, April 19). The 10 strangest things that have been used as money around the world. Business Insider. https://www.businessinsider.com/alternative-forms-of-currency-2016-4.