## From Bitcoin to the Brixton Pound: History and Prospects for Alternative Currencies (Poster Abstract)

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The rise of Bitcoin has led to renewed interest in alternative currencies. While alternative currencies have regularly featured on the economic landscape over the last half-millennia we have a limited understanding of several salient questions, such as which factors explain their rise and decline. An alternative currency is considered here to be any medium of exchange other than legal tender. A new taxonomy is introduced below to more precisely define the many different types of alternative currencies and to address the disparate lexicon found in the literature. Alternative currencies can be broadly classified as either *tangible* (Table 1) or *digital* (Table 2).

Table 1. Classification framework - tangible alternative currencies

	Historical	Contemporary
Intrinsic utility	Metals, cigarettes in post-WWII Berlin	African SIM airtime minutes
Token	17 <sup>th</sup> –19 <sup>th</sup> c. British tokens,	Chiemgau, Brixton pound,
	1930s Great Depression-era scrip	BerkShares

Tangibles possessing *intrinsic utility* were likely some of the earliest currencies. Often referred to as 'commodity money', these currencies derive their value from relative scarcity and non-monetary utility. Unlike other monetary instruments, the value in such currencies is not an abstraction, nor dependent upon governance. They are also not geographically bound, making them well suited for earlier nomadic peoples. *Token* currencies have comparatively less intrinsic value, which is instead derived from social agreements such as honoring them for exchange or limiting supply. Also referred to as 'local' or 'community' currencies, token currencies are often issued by commercial enterprises and other organizations for use within a limited range.

Table 2. Classification framework - digital alternative currencies

	Closed	Open
Centralized	Linden Dollar, World of Warcraft Gold	Flooz, Beenz
Decentralized	N/A	Bitcoin, Litecoin

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Localism	Protect independent retailers, promote community commerce
Technology	Open source software, mobile devices, cryptography advances
Political economy	Economic distress, 'Too Big to Fail', inflation, privacy
Environmentalism <sup>a</sup>	Impact of globalization, 'peak oil', industrial food
Inefficiencies	Expensive credit card and wire transfer fees, long waiting
Financial Repression	Bypass capital controls, avoid liquidation of savings
Speculation	Currency appreciation due to wider acceptance

Table 3. Socio-economic forces driving demand for alternative currencies

Digital alternative currencies can be distinguished by the degree they must be transacted in a *closed* system versus in the *open* marketplace. Second Life's Linden dollar is largely transacted inside a bounded environment. Governance structure, which in the Linden dollar's case is *centralized*, is a second distinguishing characteristic. Open digital currencies such as Bitcoin can be transacted outside any clearly demarcated environment. Bitcoin's governance can also be characterized as relatively *decentralized* due to its open source software and other features.

A survey of historical and contemporary alternative currencies shows they arise for similar reasons, such as recessions or to promote local commerce (Table 3).

Compared to national currencies, alternative currencies tend to cease circulating following their introduction within a relatively short time for three broad reasons: *technological innovation*, *regulation*, and *insufficient demand*.

Technological innovation can be any advancement that impacts the use of an alternative currency. The ultimate decline of thousands of British merchant tokens circulating throughout the 17<sup>th</sup>–19<sup>th</sup> centuries [1] was hastened by two innovations: the adoption of the 'standard formula', whereby the market rather than authorities determine the mix of denominations, and new low-cost minting technology [2].

Governments have periodically sought to eliminate the use of alternative currencies through regulation. The King of England succeeded in temporarily banning the use of British tokens [3]. A more decisive regulatory action occurred with the Austrian Freigeld, which was introduced in 1932 only to be outlawed by authorities in 1933.

Insufficient demand for an alternative currency can occur for many reasons, including limited acceptance, improved economic conditions, low institutional support, low social motivation, fraud, and other factors. Many of the aforementioned played a role in the demise of the hundreds of short-lived U.S. scrip currencies introduced during the 1930s Great Depression [4].

## References

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<sup>&</sup>lt;sup>a</sup> Historical precedent is found for all forces identified in this Table except environmentalism.

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