

# A Handbook of Alternative Monetary Economics

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## 5 Chartalism and the tax-driven approach to money

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### 1. Introduction

Economists, numismatists, sociologists and anthropologists alike have long probed the vexing question 'What is money?' And it seems Keynes's 'Babylonian madness' has infected a new generation of scholars unsettled by the conventional accounts of the origins, nature and role of money.<sup>1</sup> Among them are the advocates of a heterodox approach identified as 'Chartalism', 'neo-Chartalism', 'tax-driven money', 'modern money', or 'money as a creature of the state'.

The Chartalist contribution turns on the recognition that money cannot be appropriately studied in isolation from the powers of the state – be it modern nation-states or ancient governing bodies. It thus offers a view diametrically opposed to that of orthodox theory, where money spontaneously emerges as a medium of exchange from the attempts of enterprising individuals to minimize the transaction costs of barter. The standard story deems money to be neutral – a veil, a simple medium of exchange, which lubricates markets and derives its value from its metallic content.

Chartalism, on the other hand, posits that money (broadly speaking) is a unit of account, designated by a public authority for the codification of social debt obligations. More specifically, in the modern world, this debt relation is between the population and the nation-state in the form of a tax liability. Thus money is a creature of the state and a tax credit for extinguishing this debt. If money is to be considered a veil at all, it is a veil of the historically specific nature of these debt relationships. Therefore, Chartalism insists on a historically grounded and socially embedded analysis of money.

This chapter distinguishes between several broad Chartalist propositions about the origin, nature and role of money, and several specific propositions about money in the modern context. It offers only a cursory examination of the historical record to illuminate the essential characteristics of money emphasized in the Chartalist tradition. Chartalist ideas are not new, although they are most closely associated with the writings of Georg Friedrich Knapp of the German Historical School. Thus the chapter briefly surveys instances in the history of thought which have emphasized the chartal nature of money. The paper then expounds on Chartalism, clarifying aspects of the concepts and drawing out the implications for modern currencies. It concludes with a discussion of the various applications of this approach to policy.

#### *Chartalism: the broad propositions*

The historical record suggests an examination of Chartalism according to its broad and specific propositions. The latter address the nature of money in the modern context, and although Chartalism should not be narrowly identified with the modern money approach, the specific propositions are more important for understanding today's economies, modern currencies, and government monetary and fiscal policy.

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7. As a monopolist over its currency, the state also has the power to set prices, which include both the interest rate and how the currency exchanges for other goods and services.

Neo-Chartalism is appropriately subsumed under the broad Chartalist school of thought. When it is said that 'money is a creature of the state' or that 'taxes drive money', two things are important to keep in mind. First, 'state' refers not just to modern nation-states, but also to any governing authority such as a sovereign government, ancient palace, priest, temple, or a colonial governor. Second, 'tax' denotes not just modern income, estate or other head tax, but also any non-reciprocal obligation to that governing authority – compulsory fines, fees, dues, tribute, taxes and other obligations.

Before detailing the broad and specific propositions of Chartalism, the next two sections take a cursory look at the historical record of the origins of money and the recognition of the chartal nature of money in the history of thought.

## 2. History of money

Chartalists insist on a socially embedded and historically grounded study of money. While a conclusive chronicle of its genesis is perhaps impossible to attain, they turn to a historically informed analysis to unearth a more accurate account of the nature, origin and role of money.<sup>3</sup>

### *Genesis of money*

It is a well-established fact that money pre-dated minting by nearly 3000 years. Thus Chartalists aim to correct a common error of conflating the origins of money with the origins of coinage (Innes, 1913: p. 394, Knapp, 1924: p. 1, Hudson, 2003: p. 40).

Very generally, they advance two accounts of money's origins. Grierson (1977), Goodhart (1998) and Wray (2001) posit that money originated in ancient penal systems which instituted compensation schedules of fines, similar to *wergild*, as a means of settling one's debt for inflicted wrongdoing to the injured party. These debts were settled according to a complex system of disbursements, which were eventually centralized into payments to the state for crimes. Subsequently, the public authority added various other fines, dues, fees and taxes to the list of compulsory obligations of the population.

The second account offered by Hudson (2003), and supported by some Assyriologist scholars (*ibid.*: p. 45, n. 3), traces the origins of money to the Mesopotamian temples and palaces, which developed an elaborate system of internal accounting of credits and debts. These large public institutions played a key role in establishing a general unit of account and store of value (initially for internal record keeping but also for administering prices). Hudson argues that money evolved through public institutions as standardized weight, independently from the practice of injury payments.

These stories are not mutually exclusive. As Ingham speculates, since a system of debts for social transgressions existed in pre-Mesopotamian societies, it is highly likely that 'the calculation of social obligations was transformed into a means of measuring the equivalencies between commodities' (2004: p. 91). Henry's analysis of ancient Egypt (2004) bridges the two accounts. In Egypt, as in Mesopotamia, money emerged from the necessity of the ruling class to maintain accounts of agricultural crops and accumulated surpluses, but it also served as a means of accounting for payment of levies, foreign tribute, and tribal obligations to the kings and priests.<sup>4</sup>

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*Money* taxes [in Africa] were introduced on numerous items – cattle, land, houses, and the people themselves. Money to pay taxes was got by growing cash crops or working on European farms or in their mines. (Rodney, 1972: p. 165, original emphasis)

The tax requirement payable in European currency was all that was needed for the colonized tribes to start using the new money. Taxation compelled the community's members to sell goods and services to the colonizers in return for the currency that would discharge their tax obligation. Taxation turned out to be a highly effective means of coercing Africans to enter cash crop production and to offer their labour for sale (see also Forstater, 2005).

Public authorities, like colonial governors, not only 'wrote the dictionary' but also did so for many millennia. As Keynes pointed out, money has been chartal money for at least 4000 years:

The State, therefore, comes in first of all as the authority of law which enforces the payment of the thing which corresponds to the name or description in the contract. But it comes doubly when, in addition, it claims the right to determine and declare *what thing* corresponds to the name, and to vary its declaration from time to time – when, that is to say it claims the right to re-edit the dictionary. This right is claimed by all modern States and has been so claimed for some four thousand years at least. It is when this stage in the evolution of Money has been reached that Knapp's Chartalism – the doctrine that money is peculiarly a creation of the State – is fully realized. . . . To-day all civilized money is, beyond the possibility of dispute, Chartalist. (Keynes, 1930: pp. 4–5)

### 3. Chartal money in the history of thought

Many scholars, both orthodox and heterodox, have dealt with the chartal nature of money. Wray (1998) and Forstater (2006) have documented these instances in the history of thought. Their surveys seem to indicate two separate lines of research:

1. The first uses the chartal nature of money to identify its role in the evolution of markets (Ingham, Henry), the introduction of new currencies, the spread of centralized governments (Polanyi, Lovejoy), and the emergence of capitalism and wage labour (Marx, Ake).
2. The second detects the tax-driven nature of money in its attempts to discover why seemingly worthless paper circulates as a medium of exchange (Smith, Say, Mill, Wicksteed).

From the first group of scholars, for example, Polanyi clearly rejects the traditional treatment of cowrie shells as 'primitive money' (Forstater, 2006). In studying the introduction of non-metallic money in Africa, Polanyi observes that cowrie existed alongside metal currencies, which were already well established in the continent. The cowrie was, in fact, an example of 'the launching of a currency as an instrument of taxation' (1966: p. 189, quoted in Forstater, 2006). Polanyi furthermore argues that the emergence of non-metallic currencies should be correctly regarded 'as a feature in the spread both of *centralized government* and of food markets in the early [African] empires which left its imprint on the local history of money' (ibid.).

Lovejoy (as Ake and Rodney above) similarly reports that taxation in pre-colonial Nigeria was used to generate demand for new currencies:

emirates [of Nigeria] paid their levies in cowries as well, so that the taxation system effectively assured that people participated in the market economy and used the currency,

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exchange. Over time, money naturally emerged to lubricate these markets by dramatically reducing transaction costs.

M-theory focuses on money as a medium of exchange. Its *value* stems from the intrinsic properties of the commodity that backs it – usually a type of precious metal (and hence the term Metallism). Money owes its *existence* to rational agents who spontaneously pick a commodity for exchange, pressed by the requirements of the double coincidence of wants (Goodhart, 1998: p. 410). Money, therefore, *originates* in the private sector and only exists to facilitate market transactions. Because money has no special properties that endow it with a principal role, monetary analysis takes a backseat to ‘real’ analysis.

Since orthodox analysis turns on the smooth functioning of private markets, it generally abstracts from the role (or intervention) of government. The absence of any link between state and money also explains why M-theory cannot account for the important and almost universal ‘one nation–one currency’ relationship (Goodhart, 1998). Metallism struggles to find value in modern fiat money, no longer backed by any commodity of intrinsic worth. For M-theory, paper currency circulates because governments have usurped control over money and because it continues to reduce transaction costs of barter (Goodhart, 1998: p. 417, n. 21).

Chartalists find several problems with the Metallist story. Specifically, they identify two circular arguments, which pertain to the use of money as a medium of exchange, means of payment and store of abstract value. The first deals with money’s existence. For M-theory, money is a consequence of rational agents ‘holding the most tradeable commodity in a barter economy’ (Ingham, 2000: p. 20). In other words: (a) money is universal because rational agents use it; and (b) rational agents use it because it is universal. Attempts to resolve this circularity by concentrating on money’s role in reducing transaction costs have been unsatisfactory.

The logical difficulties emerge from the ‘identification problem’ – benefits from using a particular commodity as medium of exchange can be recognized only *after* that commodity has already been in use. Coins, for example, must be minted and circulated *before* the benefits of reduced transaction cost are recognized. And, as Goodhart notes, the costs of using an unworked precious metal can themselves be quite high (1998: p. 411). Thus the argument that private agents collectively and spontaneously choose a certain commodity for exchange *because* it reduces costs is, at a minimum, tenuous.

The second circular argument pertains to the other functions of money. Orthodox reasoning is that: (a) money is a store of abstract value because it is a means of payment; and (b) it is a means of payment because it is a store of abstract value (Ingham, 2000: p. 21). Essentially, there is no *definitive* property that gives money its special status. In the absence of an unambiguous condition that explains the use of gold, wooden sticks or salt as money, *spontaneous choice* becomes essential to the orthodox story and it must be assumed *a priori*. The result is a ‘helicopter drop’ theory of money (Cottrell, 1994: p. 590, n. 2).

C-theory does not suffer from the ‘identification problem’ or the ‘spontaneous choice’ paradox. It has no difficulty explaining the introduction and circulation of fiat currency or the ‘one nation–one currency’ regularity. This is because the origin of money is located outside private markets and rests within the complex web of social (debt) relations where the state has a principal role.<sup>7</sup>

The legitimate and sovereign powers of the governing body render money ‘a creature of the state’ (Lerner, 1947). Its *value* stems from the powers of the money-issuing authority.

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extinguishing debt to the state. The unit of account that settles tax obligations is delimited by the special authority, which 'does the counting' (ibid.: p. 22).

Knapp himself emphasized this point: 'Nor can legal tender be taken as the test, for in monetary systems there are frequently kinds of money which are not legal tender . . . but the *acceptation* . . . is decisive. State acceptance delimits the monetary systems' (Knapp, 1973 [1924]: p. 95, original emphasis); and Keynes endorsed it: 'Knapp accepts as "Money" – rightly, I think – anything which the State undertakes to accept at its pay-offices, whether or not it is declared legal-tender between citizens' (Keynes, 1930: p. 6, n. 1). Legal code is only a manifestation of state powers. Lack of legal tender laws does not mean that state money is unacceptable – such is the case in the European Union, for example, where no formal legal tender laws exist, yet the euro circulates widely.<sup>9</sup>

What, then, is the purpose of legal tender laws? Davidson provides the answer: legal tender laws determine that which will be 'universally acceptable – *in the eyes of the court* – in the discharge of contractual obligations' (2002: p. 75, emphasis added). Therefore, legal tender laws only ensure that when a dispute is settled by the courts in terms of dollars (for example), dollars must be accepted.

Money is indeed a creature of law – not legal tender law, but law which imposes and enforces non-reciprocal obligations on the population. The 'money-thing' is only the empirical manifestation of the state's choice of the 'money of account' that extinguishes these obligations. This is the nature of the tax-driven money mechanism.

This chapter began by outlining several broad and specific propositions of Chartalism. Thus far, the focus has been primarily on the former. The role of the public authority and taxation was used to decipher the nature of money as a creature of the state and to locate its position in the topmost strata of social debt relations. The contrast with the Metallist story revealed the importance of distinguishing between the 'money-thing' and the 'money of account'. Finally it was shown that the chartality of money stems not from legal tender laws but from the state's ability to create the promise of last resort.

What light, then, does Chartalism shed on money in the modern world and specifically on government fiscal and monetary operations? The remainder of this chapter concentrates on the specific propositions of neo-Chartalism and their applications to policy.

## 6. Money in the modern world

Neo-Chartalists are particularly concerned with sovereign currencies – those inconvertible into gold or any foreign currency through fixed exchange rates (Mosler, 1997–98; Wray, 2001). Their main point of departure is that most modern economies operate on the basis of high-powered money (HPM) systems. HPM – reserves, coins, federal notes and Treasury cheques – is that which settles tax obligations and sits at the top of the debt pyramid. Accordingly, it is also the money 'into which bank liabilities are converted' and which is used for clearing in the bank community (between banks themselves or between private banks and the central bank) (Wray, 1998: p. 77). Only a proper understanding of how HPM is supplied through the economy and its effect on the monetary system can lay bare the full implications of modern fiscal and monetary policy.

Modern money is state money. Taxation today functions to create demand for state currencies in order for the money-issuing authority to purchase requisite goods and services from the private sector. Taxation, in a sense, is a vehicle for moving resources from the private to the public domain. Government spending in sovereign currency systems is not

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is that the consolidated actions of the Fed and the Treasury result in an immediate change in the system-wide level of reserves. It is this effect on reserves that matters for understanding policy.

Government fiscal policy is one of two important factors that change the level of reserve balances in the banking system. The other is through Fed open market operations. The Treasury is the main supplier of HPM. When it writes a cheque on its account at the Fed, by accounting necessity, reserve balances in the banking system increase. When it collects tax payments, on the other hand, bank reserves decline. Alternatively, when the Fed buys bonds in the open market, it adds reserves, and when it sells bonds, it drains them. What Chartalism makes clear next is that the effect of fiscal policy on reserve balances can be large and disruptive. Thus, while Treasury operations are discretionary, central bank operations are largely defensive in nature.

*High-powered money, borrowing and interest rates*

Historically banks have aimed to minimize non-interest-bearing reserve balances. Essentially, reserves in excess of what is necessary to meet daily payment commitments are lent in the overnight market to earn interest. Alternatively, if banks cannot meet reserve requirements, they will borrow reserves in the overnight market. All else equal, these operations do not change the level of reserves in the banking system as a whole. Government spending and taxation, however, do. Any new injection of 'outside money' (HPM) floods the banking system with excess reserves. Banks try to pass the unwanted reserves to other member banks but, in the aggregate of course, these attempts are ineffective and they only depress overnight interest rates. Government spending, therefore, increases system-wide reserves and exerts a downward pressure on interest rates.

Alternatively, the collection of tax revenue reduces high-powered money, i.e. reserves are destroyed. Since required reserve ratios are computed with a lag (*even* in a contemporaneous accounting system [see Wray, 1998: pp. 102-4]), all else equal, tax payments cause a system-wide deficiency of reserves. The reserve effect is the opposite and, as banks scramble to obtain the necessary reserves in the overnight market, the federal funds rate is bid up above its target rate. In sum, discretionary Treasury action directly influences overnight interest rates through its impact on reserves.

The government has devised various ways for mitigating the reserve effect of fiscal policy. The first *modus operandi* is the utilization of tax and loan accounts (T&Ls), which offer only temporary relief to these considerable reserve fluctuations (see Bell, 2000 for detailed analysis). While T&Ls reduce the reserve impact of government spending, the calls on these accounts never match the exact amount of tax collections or government spending. Therefore, there is *always* a flux in reserves in the banking system as a whole that must be offset in order to avoid swings in the overnight interest rate (*ibid.*).

The second method for dealing with the excess or deficiency in reserve balances is through open market operations. To drain the infusion of excess reserves, the Fed offers bonds for sale in the open market. With this action it effectively provides an interest-bearing alternative to banks' interest-free excess reserves and prevents the overnight interest rate from falling to its logical zero-bid limit.<sup>11</sup> Bond purchases, conversely, add reserves when there is a system-wide reserve deficiency and thus relieve any upward pressure on the overnight rate. Therefore, open market operations are more appropriately viewed, not as borrowing or lending procedures of the government, but as interest rate maintenance operations.

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What this means is that the state as a monopoly supplier of HPM has the power to exogenously set the price at which it will provide HPM, i.e. the price at which it buys assets, goods and services from the private sector. While it is hardly desirable for the state to set the prices of all goods and services it purchases, it none the less has this prerogative. As it will be discussed later, Chartalists recognize that the money monopolist need only set *one* price to anchor the value of its currency.

Lastly, Chartalists point out that it is not necessary to force slack on the economy (as espoused by traditional economists) in order to maintain the purchasing power of the currency. Rather full employment policies, if properly implemented, can do the job (Wray, 2003a: p. 106).

*Unemployment*

Once again, government deficit spending necessarily results in increased private sector holdings of net financial assets. If the non-government sector chronically desires to save more than it invests, the result will be a widening demand gap (Wray, 1998: p. 83). This demand gap cannot be filled by other private sector agents, because in order for some people to increase their holdings of net savings, others must reduce theirs. In the aggregate, an increase in the desire to net save can only be accommodated by an increase in government deficit spending. Mosler explains:

Unemployment occurs when, in aggregate, the private sector wants to work and earn the monetary unit of account, but does not want to spend all it would earn (if fully employed) on the current products of industry . . . Involuntary unemployment is evidence that the desired holding of net financial assets of the private sector exceeds the actual [net savings] allowed by government fiscal policy. (Mosler, 1997–98: pp. 176–7)

Similarly, Wray concludes that 'unemployment is *de facto* evidence that the government's deficit is too low to provide the level of net saving desired'. In a sense unemployment keeps the value of the currency, because it is a reflection of a position where the 'government has kept the supply of fiat money too scarce' (1998: p. 84).

For Chartalists it is not necessary to use unemployment to fight inflation. Rather they advance a full employment policy in which the state exogenously sets one important price in the economy, which in turn serves as stabilization anchor for all other prices (ibid.: pp. 3–10). This proposal rests on the recognition that the state does not face operational financial constraints, that unemployment is a result of restricting the issue of the currency, and that the state can exercise exogenous pricing.

But before explaining this proposal, it is important to point out that Chartalist propositions are not *necessarily* tied to any particular policy prescription; they are simply a way of understanding the state's powers and liabilities and its financing and pricing options.

The above implications of Chartalism outline the essential causal government powers regardless of whether they are exercised or not. Many governments willingly restrict the issue of the currency by balancing budgets. This in no way indicates that they actually face operational financial constraints. These are self-imposed, perhaps subject to political or ideological constraints. Governments furthermore do not explicitly employ their prerogative to set prices, even though they can. The value of the currency fluctuates, but this does not mean that states cannot devise a mechanism that serves as an anchor for the currency's



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Furthermore, it is argued that ELR enhances price stability because of its buffer stock mechanism (Mitchell, 1998). In a nutshell, when recessions hit, jobless workers find employment in the public sector at the ELR wage. Total government spending rises to relieve deflationary pressures. Alternatively, when the economy heats up and non-government demand for labour increases, ELR workers are hired into private sector jobs at a premium over the ELR wage. Government spending automatically contracts, relieving the inflationary pressures in the economy. Thus, public sector employment acts as a buffer stock that shrinks and expands counter-cyclically. This buffer stock mechanism ensures that government spending is (as Lerner instructed) always at the 'right' level.

This proposal innovatively suggests that full employment can anchor the value of the currency (quite contrary to the conventional belief that unemployment is necessary to curb inflation). The ELR programme utilizes the logical extensions of chartal money to achieve the two goals of government – the elimination of unemployment and the stabilization of prices.

Space does not permit a detailed discussion of this proposal; what is important is to emphasize its chartal institutional features. The ELR/buffer stock approach recognizes that:

1. The government is the only institution that can divorce 'the offer of labour from the profitability of hiring workers' (Minsky, 1986: p. 308) and can thus provide an infinitely elastic demand for labour, without concerns about financing.
2. The government can formulate an anchor for the value of its currency by exogenously fixing the wage of ELR workers.
3. The government can utilize a buffer stock mechanism to ensure that spending is always at the right level – neither more, nor less.
4. The responsibility for full employment and price stability rests with the Treasury, not the Fed. 'Sound finance' assumes a whole new meaning: it is that which secures full employment and price stability.

Chartalists stress that such an employment programme is a policy option only for countries with sovereign control over their currencies. It is not a viable proposal for nations that have dollarized or operate under currency boards or other fixed exchange rate regimes. This is because the important link between the money-issuing authority and the fiscal agent has been severed, thereby drastically reducing the range of available stabilization policy options. Goodhart has pointed out that, similarly, the present institutional design of the European Monetary Union exhibits an 'unprecedented divorce between the main monetary and fiscal authorities' (1998: p. 410). Kregel (1999) has advanced an innovative proposal to correct for this institutional flaw and allow the EMU to implement an ELR-type of programme. He recommends that the European Central Bank act as the fiscal agent for the Euro-zone as a whole and implement functional finance to secure high employment and price stability.

Chartalist analysis can equally be applied to the study of contemporary domestic issues, such as the provision of universal retirement, healthcare and education. The present debate on the social security 'crisis' in the USA, for example, and virtually the entire rhetoric on government budgeting, rest on fictitious beliefs concerning fiscal spending limitations. Chartalism insists that focus on non-existent problems disables adequate policy responses

- fully dollarized countries, the state has *chosen* to declare that all debts are payable in dollars (even if it does not have sovereign control over the issue of dollars). In all of the above cases, the state has nevertheless exercised its prerogative to determine what will serve as 'definitive' money.
10. Godley (1999) has demonstrated that, by accounting necessity, public sector deficits equal private sector surpluses (including those of firms, households and foreigners).
  11. For technical discussion of Fed operations, see Fullwiler (2003, 2005).
  12. Wray notes: 'If the state simply handed HPM on request, its value would be close to zero as anyone could meet her tax liability simply by requesting HPM' (2003b: p. 104).

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