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Introduction: cranks' and 'brave heretics': rethinking money and banking after the Great Financial Crisis

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The history of capitalism may well be written as a chronicle of its recurrent monetary and financial crises which successively reopen unresolved debates on the nature and role of money. Indeed, it could be argued that of all capitalism's constituent elements money has provoked the most protracted and contentious disputes. Perhaps this a consequence of the fact that the ubiquity of monetary crises and their consequences presents an obvious challenge to a tenet that the dominant schools of economic thought have stubbornly held for almost two hundred years – the "neutral veil" of money. Only when money is "disordered" does it have any significance for the proponents of orthodox "real" analysis (Schumpeter 1994 [1954]: 277). However, if "disorder" becomes the norm it is increasingly difficult to deny the efficacy of money in the economic process. Although the neutrality of money is less widely pronounced and with less assurance than hitherto there is no sign of wholesale apostasy in the economic mainstream.

The latest "great" financial crisis (GFC) that broke in 2007 has led to a recrudescence of challenges to monetary orthodoxy that had appeared during the inter-war crises. Most prominently, Silvio Gesell 1958 [1918])), Professor Soddy (1926) and Major Douglas (1933) advocated a range monetary remedies for the economic dislocation and subsequent stagnation: "social credit" to replace insufficient and erratic bank lending; "local scrip"to meet the deficient supply of media of exchange; and its progressive stamped depreciation ("demurrage") to encourage the holders to spend. Similar views had been expressed in the early nineteenth century by, for example, Thomas Attwood and the Birmingham School in the aftermath of the Napoleonic Wars.[1] Stigmatised by both (neo)-classical and Marxist orthodoxy as "cranks",[2] Keynes preferred to add them to the ranks of the "brave army of heretics" which rejected the Ricardian orthodoxy that "had conquered England as completely as the Holy Inquisition had conquered Spain" (Keynes 1997 [1936]: 32-33; 370-71). Keynes feigned to find it "something of a curiosity and a mystery" that classical economics "had reached conclusions quite different from what the ordinary uninstructed person would expect". But swiftly discarding the faux naivety, he solved the mystery in the following paragraph with a typical lucidity that resonates to this day: the fact that the logical beauty of classical economics "could explain much social injustice and apparent cruelty … afforded a measure justification to the free activities of the individual capitalist, attracted it to the support of the dominant social force behind authority" (Keynes 1997 [1936]: 33). Despite his trenchant criticisms of Major Douglas's theoretical reasoning, which led Keynes to reduce him to the rank of private in the brave army, Keynes believed that orthodoxy had "no valid reply to much of his destructive criticism" and to his identification of the "outstanding

[1] Attwood challenged Ricardo and the establishment's preoccupation with the value of the metallic standard, arguing that "the test of the adequacy of the money supply was a state of full employment" (Fetter, 1964, p. xviii)

[2] Clark (2008); see Dobb (1936) for a scathing rejection of the cranks and 'social credit' as an aberration of the petit bourgeois mind that did not understand the material, as opposed to the monetary, basis of all capitalist crises.

problem" to which orthodox adversaries were oblivious – under-consumption and deficient effective demand.

There is no doubt that the Nobel Prize winning radiochemist Frederick Soddy entertained, along with his correspondent Ezra Pound, some cranky and unpalatable ideas – for example, the thinly veiled anti-Semitism in his claim to have identified an international financiers' conspiracy to enslave the world (Soddy 1926). However, his condemnation of "fractional reserve banking", as the source of the exponential expansion of debt ("virtual wealth") and its mismatch with exhaustible resources ("real wealth"), later found a more respected advocacy in Irving Fisher's *100% Money* (1935).[3]

Leaving aside the details of their inconsistencies and internal theoretical disagreements, the broad heretical camp in the inter-war years shared a basic argument that, as we have noted, is at the core of many of the proposals to deal with the causes and consequences of financial crises that have appeared since 2007. In general, they insisted that money has an autonomous impact and, more specifically, that the institutional arrangements by which states and banks create money in modern capitalism could be modified to stabilise and promote economic welfare. Despite this broad affinity, there are significant obvious differences between the inter-war and today's debates. Most importantly, with the demise of commodity money the terms of the debate have shifted. Some elements of what might have been branded as heretical until very recently are now embraced by orthodoxy: notably, an acknowledgement by the Bank of England in its *Quarterly Bulletin* of the "endogenous" creation of money by the banking system (Bank of England 2014a; 2014b). Moreover, with only a slight shift in perspective some of the current central bank initiatives begin to look a little like – albeit disguised – heresy. Although the imposition of negative interest rates on banks' deposits at some central banks has not yet been passed onto bank depositors, this might be seen in the same light as Gesell's demurrage; and, of course, there is the vexed question of whether quantitative easing is really no more than the "printing" of money.

However, as in the past, the more radical proposals have originated outside the established academic world. The IMF Working Paper "The Chicago Plan Revisited" (Benes and Kumhof 2012) has stimulated renewed interest in Fisher's "full reserve banking"; has been endorsed in the UK by the influential *Financial Times* journalist Martin Wolf and the public intellectual Adair Turner (Turner 2016); and is a central plank of the monetary reform organisation *Positive Money*. This time round, the established economic mainstream has mostly ignored this proposal; but, it has been opposed with some vigour by some in the heterodox camp. As might well be inferred from some of the contributions in this issue: one person's heretic is another's crank (see Fontana and Sawyer 2016, this issue; Nersisyan and Wray 2016, this issue; Dyson, Hodgson and van Lerven 2016, this issue). Apart from the "heretics" and "cranks" represented here, mention should also be made of kindred individuals and organisations: Huber (2016), Werner (2014), Zarlenga (2002) and the American Monetary Institute.

[3] See Dimand (1991) for account of the relationships during the 1930s between those outside the economic establishment, invariably categorised as cranks, and academic economists and their participation in the now defunct journal *Economic Forum* which was devoted to exploring unorthodox remedies for the depression.

Smithin (2016, this issue) and Bezemer (2016, this issue) provide further reflections on elements of the one-time heretical critiques of mainstream monetary macroeconomics that now might be seen – very loosely – as "mainstream heterodoxy": the credit theory of money; endogenous money; the monetary circuit; and modern monetary theory (MMT). In a similar vein to Goodhart's seminal indictment of mainstream monetary economics' entitled "continuing muddles … and steadfast refusal to face facts" (Goodhart 2009) Smithin (2016, this issue) identifies a "deceptively simple question" which orthodox economics is unable to identify and has not even been successfully posed by would-be monetary reformers: whether, in an actual money-using economy, there is enough money in existence to purchase the full value of output. This is further explored by looking at the problem from the perspective of orthodoxy's velocity of money circulation; the Marxian monetary circuit; and the question of the realization of money profits. Aside from the novel presentation of the arguments, Smithin's main contribution lies in the demonstration of the analytical necessity to resolve these problems of understanding money as an autonomous economic force, *sui generis*. Money is never a simple medium of exchange or reflection of value, established independently in the "real" economy. In following this reasoning, orthodoxy fails, for example, "to understand that *both* the inflation-adjusted real interest rate and, in international economic relations, the real exchange rate are *monetary* variables" which "are determined primarily in the money and financial markets" (Smithin this issue).

As heterodox and heretical theories have made clear, Smithin concludes, money is "part of a definite social technology that *enables* the actual production of goods and services, and which, in [capitalism], could not proceed without it. It is therefore entirely "real" in its impact on the well-being of society, on questions of poverty or prosperity. In particular, credit and money creation are continuously necessary in order for firms to realize the profits and for workers to receive the wages, on which the "method of enterprise", as Weber (1927) called it (i.e., capitalism), depends." (Smithin 2006, this issue). Money doesn't merely do what would be done less efficiently without it – as orthodoxy tells us; rather, it is an essential ingredient in capitalism's operation. Herein lies the rub. As Minskyans, Austrians and many others know full well, the relatively autonomous elasticity of money creation is the source of boom-bust cycles. However, as Smithin and others such as Fontana, Sawyer, Nersisyan and Wray in this issue recognise: "the tap cannot be turned off". Smithin stops short of addressing the impasse and the solutions that the latter-day "cranks" have proposed which, as we shall see, have provoked the critical attention of some of today's heretics.

Noting that there has been a recent shift in mainstream economic opinion, such as the recognition that banks do not merely intermediate but "create money out of nothing",[4] Bezemer (2016, this issue) embarks on the laudable aim of reconciling heterodox and orthodox schools on money and finance in an "accounting view" of economics. As financial reciprocity between all economic agents –firms, banks, households, nations – is represented in balance sheets and accounting conventions they should be a central element of the understanding of how economies work. It is essential to recognise that "for every asset there is a liability, and for every debt a credit" (Bezemer 2016, this issue). This has been long

[4] It is a telling instance of the entrenched hegemony of orthodox economics that even heterodox critics routinely and unwittingly adopt some of its tacit assumptions and expressions. Banks do not create money "out of nothing". Rather, to be consistent with the credit theory of money that Bezemer espouses, it should be made clear that money is created out of the social relationship that is the debtor's promise to repay.

accepted in some heterodox circles, as Bezemer correctly observes; and the time is now ripe to make this case in the wider economic community. Pursuing the case steadfastly and thoroughly, he intimates that the heresy is now sufficiently well-established for the missionaries to act.

Nersisyan and Wray (2016, this issue) present a succinct statement of Modern Monetary Theory (MMT) in relation to both the broader Post-Keynesian analysis of "endogenous money" and the recent restatement of the cranky interwar proposals. MMT had its origins in the heterodox analysis of money advanced by Randall Wray, Mark Forstater, Stephanie Kelton (Bell), Scott Fullwiler and others associated with the University of Kansas City-Missouri long before the eruption of the GFC (Wray 1990; 1998). Largely ignored by mainstream orthodoxy, it stimulated quite heated disputes within the broad heterodox camp – in particular, among the Post-Keynesians[5] One of the main bones of contention has been the unease that the adherents of "endogenous money" have with MMT's neo-chartalist focus on the role of the state in the historical development of money and how it is produced in the modern capitalist system. Leaving aside the details of MMT's painstaking analysis[6], we might say that the most contentious issue has concerned MMT's consolidation of government and central bank accounts in advancing their basic assertion that the state spends money into existence. Nersisyan and Wray (2016, this issue) address this question; but this is not the place to re-examine this dispute. However, could it be that some Post-Keynesian proponents of 'endogenous money' were intuitively uneasy and unsettled by the apparent conceptual affinity between MMT's emphasis on the state and monetarism's 'exogenous' money?

However, Tymoigne's (2016, this issue) contribution would seem to imply that there is a relatively simple way of resolving the issue. His explication of MMT can be read as, among other things, clearly exposing the false antinomy underlying the old "exogenous-endogenous" debate. As "a monetarily sovereign government" comprises two entities "one should include the role of the Treasury in monetary policy and the role of the central bank in fiscal policy". Compelling support is adduced from past key participants in the operational links between the Treasury and Federal Reserve. "The fact that they cannot go directly to the Federal Reserve Bank to borrow does not mean that they cannot go indirectly to the Federal Reserve Bank, for the very reason that there is no limit to the amount that the Federal Reserve System can buy in the market. … Therefore, if the Treasury has to finance a heavy deficit, the Reserve System creates the condition in the money market to enable the borrowing to be done, so that, in effect, the Reserve System indirectly finances the Treasury through the money market …. So it is an illusion to think that to eliminate or to restrict the direct borrowing privilege reduces the amount of deficit financing. Or that the market controls the interest rate. Neither is true." (Eccles 1947, p. 8)" In short, "one way or another the Treasury will get financed by the Fed because only the Fed supplies the funds that the Treasury uses" (Tymoigne 2016, this issue).

One might also add that the polemics involved in the Post-Keynesian critique of monetarism tended to obscure that in the most general sense the creation of money involves essentially

[5] See, for example, Lavoie's (2013) "friendly critique" for a comprehensive list of references and Tymoigne and Wray (2013) for a response.

[6] See especially Fullwiler (2008).

the same processes in both the state and private banking systems. The institutional arrangements between treasuries and central banks and between the latter and private banks and borrowers transform debt into a means of payment. If money is spent into existence, the sanctity of an immutable separation of fiscal and monetary policy is exposed for what it is – the historically entrenched expedient that is invoked to check the popular exercise of monetary sovereignty.

Aside from this heretical exposure of the hegemonic "illusion" of a natural separation of the Treasury's fiscal and the Fed's monetary operations, it may be asked what significance this has for the conduct of monetary policy.[7] Can the laws, rules and conventions that limit or prohibit the direct monetary funding of deficits be dismissed as mere "self-imposed" constraints (Wray 2012, pp 141-142)? Notwithstanding the erosion of the sacrosanct fiscal-monetary separation by central banks' extraordinary measures taken to try to deal with the aftermath of the GFC, it remains a central plank in capitalism's institutional structure. Despite these increasingly manifest contradictions of this separation, all efforts are devoted to maintaining the illusion of fiscal policy determined by government and of monetary policy that is a matter of the technocratic management of neutral money by independent central banks.[8] Unless this firmly established institutional complex is significantly modified the heretical exposure of the illusion will remain, as the cliché has it, "purely academic".[9]

Despite their differences, modern heterodoxy is united in their respective critiques of the heirs of the earlier generation of "cranks". Whilst concurring that "there is something rotten" in the current system, Nersisyan and Wray (2016, this issue) are unable to support recent proposals for "full reserve banking" and the supply of "debt-free money" by a truly sovereign monetary authority unfettered by self-imposed constraints. As money is credit it is consequently, they argue, a liability for the issuer; therefore "debt-free" money cannot exist – it is a "non-sequitur". However, there would appear to be some ambiguity in the notion of "debt-free". The credit theory of money argues that all money is credit in the *generic* sense that its value can only derive from the existence of a dischargeable debt that is denominated in the same metric of abstract value (money of account). In other words, money is not merely exchanged for goods; but settles the debt that is involved in their sale at a money price. However, this is not what the advocates of "debt-free" money appear to have in mind; rather, they are concerned with *particular* debts. First, they object to the banks' exploitation of their franchise to create money and right to profit from the debt contracts with their borrowers. This privileged profit-making should be removed and the supply of money replaced by an exclusively sovereign issue. Second, they wish to remove the interest payments on bond-financed state spending. In this sense, for example, "greenbacks" issued by the US

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[7] Hegemony: to establish a belief that social arrangements are immutably fixed in the nature of things.

[8] See Mann's analysis of the efforts to place independent central banks in what the political theorist Schmitt called a 'state of exception' (Mann, 2013).

[9] For a comprehensive account of the historical development of chartered public (later central) banks and how their relations with the state vary in relation to the political systems in which they are located, see Calomiris and Haber (2014).

government during the Civil War and the "Bradbury" notes issued by the British Treasury to avert a crisis during the First World War were free of *particular* debts. As Nersisyan and Wray also explain, in the current self-imposed institutional arrangements, the creation of money that was "debt-free" in the particular sense would require a zero-interest rate policy and that this could be achieved by means other than those advocated by proponents of full reserve banking and a sovereign money monopoly.

"Disregard theory but at your own peril" warn Fontana and Sawyer (2016, this issue) in the most direct and comprehensive critique of the proponents of Full Reserve Banking (FRB) – in particular Positive Money in the UK. Their errors are traced to a failure fully to understand the Post-Keynesian and monetary circuitist analyses of endogenous money, which leads them to analytical errors, including: lending activity creates seigniorage privilege for commercial banks; inflation is always and everywhere a monetary phenomenon; the inability of distinguishing the actual from the planned supply of bank loans; and money to be spent from money hoarded; and the debt-free money proposition.(Fontana and Sawyer 2016, this issue). Moreover, it is claimed that FRB is likely to exacerbate financial instability and also that the *de facto* dominance of monetary policy that would enhance the power of unelected central bankers over fiscal policy and democratic decision making.

As Positive Money have provided a detailed response in this issue, we will not address Fontana and Sawyer's particular arguments. Nonetheless, we might ask what "disregarding theory" means. The "theory" that advocates of FRB are criticised for disregarding is the "mainstream heterodoxy" referred to above, as opposed to orthodoxy. However, heterodox accounts are not "theory" in the same sense as the orthodox theory of money which is ultimately based on classical/neo-classical logic and axioms. These invoke timeless and universal verities – rationality, evolutionary functional efficiency and so on – which, in turn, as Keynes perceived, imply the immutability of existing arrangements.[10] However, the structures identified in heterodoxy – the "monetary circuit", "endogenous money" and MMT's "modern money" – are, like all macroeconomic statements, empirical generalisations or "stylised facts" about actually existing institutions.[11] Latter day cranks wish in some way to change the institutions which would perforce mean that some heterodox "theory" would no longer apply. The question of the consequences of institutional changes that the removal of the banking system's franchise to create money, or the sovereign issue of money that was not based on tax revenue or interest payments, entails a different set of questions, as, for example, Nersisyan and Wray (2016, this issue) implicitly acknowledge in their discussion of how, given existing institutional arrangements between the US Treasury and Federal Reserve, debt-free money would require a zero interest policy.[12] It is obvious that this would have ramifications for the existing distribution and exercise of economic power in capitalism.

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[10] See Smithin's account (this issue) of how Robertson's parable to illustrate the velocity of circulation reaches logical but perverse conclusions

[11] Ingham (1996).

[12] In the MMT blog in which the critique of debt-free money originated, Wray discuses Seidman's " coherent proposal for a debt-free" stimulus which would entail 'gifts' and

Focusing on the interwar proposals for dealing with the overweening power of banks and the economic dislocation that they were alleged to have caused, Dow (2016, this issue), drawing attention to the affinity with those of today, examines their impact on the plans for economic reform of two populist political parties in Canada during the 1930s. Social Credit adopted the more radical analyses of Gesell and Major Douglas whereas the Cooperative Commonwealth Federation (CCF), closely associated with the League for Social Reconstruction, followed Keynes's proposals for fiscal expansion. Dow links the differences to their respective ontologies – that is, their general understanding of how capitalism worked and might be reformed and improved. These are thoroughly but also succinctly explored. Social Credit was intolerant of banking and finance activities; whereas, the CCF, following Keynes, was more accepting of their essential role in capitalism as a "monetary production economy" – a difference that is echoed in some of the contributions to this issue. CCF aimed to reform the financial system by using the endogenous nature of money and credit within nationalised banks to achieve and maintain stable full employment. The more radical condemnation of the banks and market for debt and their replacement by state issued money was judged to be irrelevant, as Nersisyan and Wray (2016, this issue) and Fontana and Sawyer (2016, this issue) argue today.

Leaving aside the scheme for dealing directly with the perceived effects of the banking system, the perceived threat of debt-deflation after the GFC -- and the consequent risk-averse behaviour of the banks (repair of balance sheets and unwillingness to invest) – has revived the search for alternative forms of monetary and financial arrangements such as complementary currencies and local exchange schemes. These are addressed in various ways by Amato and Fantacci (2016, this issue), Lucarelli (2016, this issue), Gomez (2016, this issue) and North (2016, this issue)

In order to outline a plan for the more efficient resolution of the bankruptcies that are caused by the deflationary stampede for liquidity during crises, Amato and Fantacci (2016, this issue) imaginatively builds on Keynes's understanding of the perverse consequences of the "liquidity preference" that is made possible by money as a store of value. Current procedures for resolving bankruptcy are constrained by "deeply ingrained concepts of money and credit and by the structure of monetary and financial institutions in which they concepts are embodied … narrowly understood as an entitlement to a predetermined quantity of money" (this issue). However, the right of the creditor to be paid in money from the liquidation of the insolvent company's assets counter-productively intensifies the debt-deflation which is further exacerbated by central banks' current loose money policies.

To counter this impasse, Amato and Fantacci outline the plans elaborated by the Italian Ministry of Justice which are in accord with his own analysis of the virtues of complementary currencies. This is derived from Keynes's Bretton Woods proposal for a clearing union and his aim to create a system in which money could operate "as it ought to be" (Amato and Fantacci this issue)). On one level, Amato and Fantacci suggest, the policy recommendations arising from a criticism of the negative effects of money as a store of wealth appear simple: if the problem is money's character as a store of wealth, then the solution is the eradication of this function which Gesell's demurrage aimed to achieve. According to Keynes this moved in the right direction, but it was impaired by "the 'abstract furies' that often characterise the

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'transfers' (Seidman 2013).. This might also be considered in relation to 'helicopter money' and Keynes's bottles in old mines. (http://neweconmicperspectives.org/2015/12/debt-free-money-banana-republics-part-two)

improvised theoreticians, transforming 'brave heretics' into 'monetary cranks'" (Amato and Fantacci this issue). For example, the deleterious consequences of money's progressive depreciation by 'stamped scrip' would outweigh any advantages.

In line with Keynes's preference for a "middle way", the Italian scheme is directed at *particular* problems posed by bankruptcy and involves, according to Amato and Fantacci (this issue), a novel articulation of credit and money that "overturns the traditional logic of liquidation". Creditors would have at their disposal a "credit", denominated in a complementary unit of account, to be used *only within* the bankruptcy sales circuit for the purchase of assets that could then be redeployed in production and exchange. As in Keynes's clearing union model contained in his Bretton Woods plan, the complementary media would remain locked into the exchange network.

This scheme raises questions about the relationship between Keynes's "money as we know it" and as "it ought to be …as a mere intermediary, without significance in itself, which flows from one hand to another, is received and is disposed with when its work is done" (Keynes 2000, p. 152). The latter is, of course, how money is conceptualised in the quasi-barter economy of classical economics which, as Keynes insisted, gave us a defective understanding of capitalism's "monetary production economy[13]. Would this balkanisation impede the longer-term, yet to be decided, deployment of liquidity in more efficient enterprise? In other words, can such schemes be any more than merely temporary expedients?

Lucarelli (2016, this issue) vigorously rejects the conventional answer to this question in his conceptual analysis of three types of complementary currency projects: territorial; community; and economic, and in his in-depth examination of the large scale Sardinian "Sardex" network. He notes that despite the European Commission's support of the extensive developments of alternative/complementary currencies since 2008, discussions of these initiatives take place outside the narrow academic arena, tending to reinforce their association with cranks. However, Lucarelli dispels this misconception with a thorough counterpoint to any of the "abstract furies" that led Keynes to place Gesell with the cranks. He advances a "simple stock-flow model of a pure credit economy with complementary currency" which claims that the velocity of money can be boosted with the use of a zero interest rate to eliminate surpluses without the need to impose an explicit negative interest rate to discourage hoarding. The reader might consider this model in relation to the critiques of crankiness in Nersisyan and Wray (2016, this issue) and Fontana and Sawyer (2016, this issue).

Despite Amato and Fantacci's (2016, this issue) and Lucarelli and Gobbi's (2016, this issue) advocacy, it is perhaps significant that the most successful applications of such proposals do in fact occur in precisely those economies where banking systems and state money have been particularly derelict and incapable of providing the necessary resources for production and exchange, as we can see in Gomez and Dini's (2016, this issue) analysis of Argentina.[14] They argue that Argentina is exceptional in the persistence and scale of complementary and

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[13] See Smithin (2016, this issue) on the realisation of money profits.

[14] For the most incisive theoretical account of the proliferation of forms of money in the wake of political disintegration, see Woodruff's account of post-1989 Russia (Woodruff 1999; 2013).

alternative monetary circuits and that this is not adequately explained by the main approaches to the nature of money. Argentine monetary plurality is the result of the long history of high inflation and the particular ways in which governments and economic agents experienced money as a social construction. Gomez and Dini focus on two of them: provincial currencies issued by subnational governments that circulated within their territories and community currencies created by grassroots organisations for the voluntary use of social networks. The monetary forms were introduced as units of account to denominate the value of debt/credit relations and were accepted as a means of payment and media of exchange. However, the function of store of value was relatively limited as never-used commodities to trade and were not linked to reserves of intrinsic value. They partially relied on the extrinsic value of the monetary circuits they sustained.

North (2016, this issue) explores the use of alternative and complementary currencies as a means of combating the ongoing monetary and financial crisis in Greece. As a preamble, he uses Marx and Engel's concept of Utopianism to distinguish the "cranks" from the "brave heretics" in evaluating the various responses to the crisis. As the banks are unlikely to forgo their profitable money creation, an exclusive monopolisation of the issue of money by the state as advocated, for example, by Positive Money is considered to be "utopian". Given the strength of the neoliberal adherence to the Euro, the reintroduction of the drachma as a national currency is equally improbable. As a temporary measure to provide a means of exchange and payment, state-issued parallel currencies might be a viable proposition if they were not used as a prelude to Grexit. While grassroots currencies are not particularly well developed, North concludes that "brave heretics" should continue to establish parallel and complementary currencies that would revitalise the economy without the threat to the Eurozone that the reintroduction of a national Greek currency and state-issued parallel currencies would pose.

In conclusion we might briefly consider the sociologist Max Weber's reminder to the economic theorists of his day, invoked by North in his analysis of monetary alternatives for Greece: "Money is not a 'mere voucher for unspecified utilities', which could be altered at will without any fundamental effect on the character of the price system as a struggle of man against man. 'Money' is, rather, primarily a weapon in this struggle, and prices are expressions of the struggle; they are instruments of calculation only as estimated quantifications of relative chances in this struggle of interests." (Weber 1978[1956], p. 108).[15] This tells us that the evaluation of alternative forms of money is not merely a technical matter and should never be considered in isolation from the structures of power in which they are necessarily embedded. Aside from the question of which agents make the decisions, the level of money supply and the means by which this is achieved have different distributive consequences – most obviously, for example, for debtors and creditors. Of course, cranks may be identified by what are perceived as analytical and conceptual errors; but their schemes also frequently attract the designation due to the radicalism of the challenge to the existing state of affairs and the established power for money creation and control. The two criteria are not always clearly distinguished in the debates.

Crises such as those of the interwar years and post-2008 unleash the centralising and decentralising tendencies in capitalism, stimulating the same responses and the same underlying questions. In the first place, states are compelled to use their monetary

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[15] For an elaboration of this Weberian analysis of money see Ingham 2004; Streeck 2015.

sovereignty to assuage the stampede for liquidity and halt the pace of insolvencies that threaten production and employment. Given the existing structure of capitalism, it is deemed necessary to rescue Wall Street in order to save Main Street. Leaving aside the further problem that such intervention has perverse unintended consequences, the main question is whether the use of the state's monetary power should be temporary and "exceptional". Or does the effectiveness of the rescue signify that efficiency and equity would be achieved if the state were to assume more or less complete control of money creation? Our contributors have evaluated both options.

Post-Keynesians rightly stress the importance of the elasticity and flexibility of "endogenous" money production. However, we might ask whether the shared sovereignty of the public-private partnership for the production of money is the result of an evolutionary drive to efficiency, as almost all mainstream economic theory at least implies. Or is the present system the historically contingent outcome of the struggle for and balance of power between finance and the state that might be said to define capitalism (Ingham 2011)? The question is easier to pose than to answer; but for the current debates, it is arguably the most important. Can we be sure that the current system of complex state-market relationships in money and finance is the best possible for attaining and maintaining full employment? It is closely tied in to another fundamental issue in the "socialist calculation" debate that emerged around the time of the first cranks and heretics encounter and is equally pertinent today (see for example, Levy and Paert; Boettke 2000) . Mainly on political grounds, Keynes and his heretical army firmly rejected centralised state planning; but the Austrian economists had the most cogent argument. Latter day advocates of state money such as Positive Money do not appear to have asked the question: can we ever know enough to accurately calibrate the supply of money in a large scale economy to achieve desired ends? Or in the face of unsurmountable ignorance, uncertainty, and inevitable unintended consequences, is decentralised decision-making in a private banking system's reflexive adaptation to errors and changing circumstances the best we can achieve? It would be ironic if Post-Keynesian critics were to recruit Austrians as allies in their skirmish with the advocates of "sovereign money".

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