Sovereign Money in Critical Context

Responding to criticism of monetary reform from a variety of economic viewpoints

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Introduction

As monetary reform has been gaining attention, economists from various schools of thought have felt called upon to comment on it. There is genuine interest in the matter, but also a great deal of critical objections. This paper deals with such criticism, using the opportunity to clarify what sovereign-money reform actually is about. Quite a few experts

- either don't see the relevance of monetary reform and consider the present system to be essentially functional,
- or they start from misrepresentations of what monetary reform is about and thus reach hasty conclusions about why a sovereign-money system would not work.

As expected, most mainstream commentators consider monetary reform unnecessary, assuming that reform measures already adopted, such as higher bank equity, are adequate.¹ As was also to be expected, ultraliberals such as Neoaustrians reject full chartalism (sovereign money only), seeing it as statist centralism and government meddling.²

Less predictable has been criticism from among the political left that is beholden to demandside Keynesianism, trade-union and welfare economics, or some sort of Marxism. They mistake sovereign money for a new gold standard, or for another supply-side doctrine, and assert that a transition from bank money to sovereign money would result in credit shortage and high interest rates, choking off the economy—which actually is in line with what most mainstream economists presume.³

Why monetary reform is not easy to bring home to economists

Neutrality of money

Why do most mainstream experts not recognise the relevance of monetary reform? By mainstream economics I mean neoclassical equilibrium theory and assimilated Neokeynesianism, or to put it differently, American textbook standard economics. By these standards, money does not appear to be particularly important. Mainstream economics for the most part rests on the assumption of neutrality of money. Making money may actually be seen as the major motive driving the economy. But the economy as such is conceived of as a system of production factors, employed for producing output, and for exchanging the

¹ For example, Anat Admati / Martin Hellwig 2013: *The Bankers' New Clothes*, Princeton University Press, pp. 187. - Avenir Suisse 2014: Empty Hopes for Full Reserve Banking, by Rudolf Walser and Jörg Baumberger, www. avenir-suisse.ch/en /36345/empty-hopes-for-full-reserve-banking.

² For the Neoaustrian position cf. the writings of Jesús Huerta de Soto and the publications by the Ludwig von Mises Institute, Auburn, Alabama (http://mises.org).

³ Cf. Ann Pettifor: Out of thin air - Why banks must be allowed to create money. http://www.primeeconomics. org/?p=2922, 25th June 2014. - Charlotte van Dixhoorn: Full Reserve Banking. An analysis of four monetary reform plans, Sustainable Finance Lab, Utrecht, June 2013. - Heiner Flassbeck and Friederike Spiecker 2014: Vollgeld, das moderne Gold. http://www.flassbeck-economics.de/abo-preview-unser-geldsystem-xiii-vollgelddas-moderne-gold. - Thomas Fricke: Hochzeit für Geldverbesserer. Vollgeld, Freigeld, Free Banking und andere Radikalvorschläge, Study commissioned by The Greens/EFA in the European Parliament, publ. by Sven Giegold, MEP, April 2014.

output on markets that are seen as huge barter systems. The function of money in this is to facilitate exchange. Exchanging products and services for money overcomes the otherwise existing constraint of coincidence of wants. Beyond this, however, money is considered to be of little importance. As John Stuart Mill put it in the middle of the 19th century, money seems to be just a veil over the economy with no structural impact on it. Rapid changes in the money supply represent what economists call a shock. This may, for example, boost inflation, but markets are supposed to be resilient and are expected to rebound to a state of equilibrium.

If one believes in neutrality of money, then of course dysfunctions of the money system are not an obvious subject of concern, despite all financial crises. As a consequence, most mainstream economists find it difficult to see why monetary reform might be of relevance. Economic textbooks may well have 600–1,000 pages, but the passages on the monetary system usually count 10–20 pages; which is even a smaller percentage than the fractional reserve base in the present banking system.

Neoclassical economics, however, has not always left the monolithic impression as is the case today. Already classical economics had engendered, for example, the monetary Currency School and its controversy with the Banking School in the first half of the 19th century. Equally, there are a number of neoclassical teachings that in one way or another recognise the non-neutrality of money and put particular emphasis on the monetary and financial system, including a chartalist stance towards money. Good examples in this respect are Irving Fisher as well as the Early Chicago School (Simons, Knight, Viner, P.Douglas, and others), lateron Maurice Allais and Milton Friedman. But that was in the 1930–60s. From this period also dates the Freiburg School of Ordoliberalism (Eucken, Röpke, and others). These scholars held neoclassical views with a portion of institutional economics and were referred to as neoliberals. They developed a program of organised capitalism, or constitutional market economy, including a basic framework for the monetary system, in contrast to the ultraliberal program of global deregulation of banking and finance of the recent past.

The Austrian School is another neoclassical theory that considers the money and banking system to be of fundamental importance. In contrast to the aforementioned teachings, however, Austrians as well as Neoaustrians today reject modern fiat money. From Menger and Mises to Hayek and Huerta de Soto, they consider gold-based currencies as neutral, and thus desirable from their point of view, whereas fiat money created at the discretion of central banks and banks is seen as non-neutral. Deliberate additions to the money supply are supposed to distort price relations and patterns of allocation and distribution. The Austrians, however, never explained how to verify undistorted price relations. Furthermore, they do not give due consideration to the sphere of the economy where structural changes and disproportional trends on monetary grounds can best be shown, i.e. the financial economy, in particular housing and stock bubbles.

Keynesianism and its offspring (Postkeynesianism, Monetary Keynesianism, Circuitism, Modern Money Theory (MMT)) differ from neoclassical teachings in that they intend to analyse modern economies from the outset as *monetary economies*. Keynes had adopted a number of elements of an advanced understanding of modern money and banking. He supported chartalism (i.e. the state theory of money) and established the research program of a monetary theory of production. The latter can be seen as an alternative program to the Austrians' capital theory of production. The slogan 'Money matters' was coined by Friedman but could equally have been originated by Mises or by Keynes.

In Keynesian lineage, it is especially the Monetary Circuit Theory that emphasizes the 'power of banks' in the framework of the present fractional reserve system. The banking industry is seen in a superordinate, powerful and privileged position – superordinate because modern economies, before being able to transact goods and services at all, rely on the prior creation of primary credit and financing; powerful because this gives a high level of economic clout and political influence; and privileged because this enables the banking and financial industries to appropriate a significant share of the economic product, a share that is widely seen as incommensurate with the services provided by this industry.⁴

Assumption of functionality of the existing money system

Many economists today, basically from all schools of thought, question various aspects of banking and the financial economy, but stop short of recognising the monetary system as the root cause of those questionable aspects.

The historical Currency School towards the middle of the 19th century was the first to attribute financial instability and crises systematically to an overshooting, sometimes also shrinking, supply of bank money.

The Austrian School in the decades around and after 1900 held a similar opinion on the dysfunctions of reserve banking, but blamed them all on central-bank interference and government meddling, while seeking salvation in free banking on a renewed gold standard. They reject any idea of chartalism. Today's Neoaustrians still haven't got a clue about the legal and institutional foundations of modern monetary economies.

Keynesianism and the various currents of Keynesian filiation, by contrast, might have been expected to be responsive to criticism of the monetary system. In general, however, this is not the case. Schools of Keynesian descent describe the monetary system not always in an entirely accurate way; or they come up with reinterpretations of the monetary system, such as those put forward by MMT, that are problematic and misleading in their own way.⁵

⁴ Graziani, Augusto 1990: The Theory of the Monetary Circuit, *Économies et Sociétés*, Monnaie et Production, 7/1990, 7–36 (8, 29). –2003: *The Monetary Theory of Production*, Cambridge University Press, 58–95.

⁵ For critical discussions of MMT see Lavoie, Marc 2011: The monetary and fiscal nexus of neo-chartalism. A friendly critical look, University of Ottawa, Dep. of Economics, available at www.boeckler.de/pdf/ v_2011_10_27_lavoie.pdf. – Roche, Cullen 2011: A Critique of MMT, Modern Monetary Theory, http://pragcap. com/mmt-critique, September 7th, 2011. – Fiebiger, Brett 2011: MMT and the 'Real-World' Accounting of 1-1>0, PERI Working Paper Series No.279, University of Massachusetts Amherst. www.peri.umass.edu/

Keynes and Keynesianism partially lagged behind their own insights in that their views are based

- on the category of loanable funds rather than primary credit creation, i.e. saying that 'investment equals savings' rather than 'investment equals some part of the savings obtained on the secondary capital market plus additional primary bank credit or primary bank purchases of securities'.⁶
- on the money or credit multiplier model, while in actual fact it is about a system which fractionally re-finances the facts pro-actively created by the banks
- on the assumption that reserve positions or base-rate policies are effective tools of monetary policy
- on an incomplete understanding of chartalism as explained below.

Keynes, moreover, did not systematically explain economic crises by over-investment and over-indebtedness, or say, in Marxist terms, over-accumulation of stocks of capital exceeding current profits that could service these stocks. Keynes, following Gesell, saw the main culprit in liquidity preference, formerly called hoarding of money, as if it were still about a cash-based economy. In the *General Theory* the equation of 'investment = savings' reappeared as a central element. In a fiat-money bank-credit economy, however, this applies only partially, i.e. it applies to secondary on-lending of demand deposits, but in no way to bank credit and bank purchases of securities. Holding liquidity rather than spending it became a central concern in Keynesian crisis theory through to Circuitism. It may have contributed to paving the way for seeing perpetual deficit spending and debt accumulation as an expression of 'functional finance' (Lerner).

Even where Postkeynesianism, Circuitism and MMT describe banks' credit creation in an accurate way under operational aspects, they apparently consider the present money and banking system to be functional rather than dysfunctional. In other words, they do not attribute financial instability and crises to the monetary system of fractional reserve banking. Accordingly, they see no reason to think about monetary reform.

Here, too, there are individual exceptions. One is James Tobin, who developed an approach to 'narrow banking' different from, yet similar to, 100%-reserve banking.⁷ Tobin, very

fileadmin/pdf/working_papers/ working_papers_251-300/WP279.pdf. – Walsh, Steven and Stephen Zarlenga 2013: Evaluation of Modern Money Theory, http://www.monetary.org/mmtevaluation. – Huber, Joseph 2014: Modern Money and Sovereign Currency, *real-world economics review*, no.66, 2014, 38–57.

⁶ Both Michael Kumhof and Steve Keen have recently published articles on this subject: Kumhof, Michael and Szoltan Jacab 2014: Models of Banking. Loanable Funds or Loans that Create Funds? *International Monetary Fund, Working Paper*, 30 July 2014. – Keen, Steve 2014: Endogenous Money and Effective Demand, *Review of Keynesian Economics*, Vol.2, No.3, Autumn 2014, 271–291. – Reply to Keen in the same issue by Lavoie, Marc 2014: A Comment on 'Endogenous Money...', 321–332.

⁷ James Tobin 1987: The Case for Preserving Regulatory Distinctions, *Challenge* 30(5):10–7, available at https://www.kansascityfed.org/publicat/sympos/1987/S87TOBIN.PDF. A similar narrow banking approach was proposed by John Kay 2009: Narrow Banking. The reform of banking regulation, publ. by the Centre for the Study of Financial Innovation, London.

Keynesian in this, thought of a 100%-coverage of deposits by sovereign bonds. Whether this would really have served the purpose of curbing the creation of bank money cannot be dealt with here.⁸

Another exception is Hyman Minsky and the financial instability theory. Credit and debt bubbles not only feed from secondary on-lending of existing money, but prior to this from primary bank credit ever more adding to overshooting money supply. In order to restrict the power of banks to create primary credit, i.e. bank money, Minsky at one time (in connection with the final repeal of the Glass-Steagall Act in the 1990s) thought about a special arrangement of separate banking, namely the separation of money and payment services from the lending and investment business of banks.⁹ It would seem, however, that Minsky did not give further consideration to that idea. His view of fractional reserve banking remained unclear. He attributed recurrent financial instability to a cyclical pattern of the risk behavior of banks and financial markets rather than reflecting the role of the monetary system in this.¹⁰ Instead, he promoted the idea of the state as 'employer of last resort'. This in fact comes down to the Keynesian concept of compensatory government expenditure that is expected to result in jobs.

Wrong identity of money and credit

Both Tobin and Minsky stayed within the conceptual limits of a split-circuit system based on deposits and reserves. They did not overcome this horizon in favour of a single-circuit plain sovereign-money system beyond bank money and reserves. This hints to another reason why the mainstream and economics of Keynesian descent consider the present money and banking system to be functional: neglect of the difference between a split-circuit reserve system and a single-circuit money system, or to put it differently, their apparent inability to dissolve the wrong identity of money and credit as already criticised by the historical Currency School. The confusion of token fiat money and bank credit is a core element of banking doctrine.

As a consequence, commentators overlook the fact that money creation and money lending/spending are two different functions, but carried out in one act in the present credit-money or debt-money system based on fractional reserves. The wrong identity of credit and money also leads critics to deny that in a modern money system the money base or money supply in circulation can be debt-free (not, of course, the loans or securities issued by use of that money). As long as economists stick to the absolutised axiomatic identification of money with credit, their support for monetary reform is likely to be lukewarm at best.

⁸ On questions regarding the monetary reform approach of 100%-reserve banking cf. sovereignmoney.eu/100per-cent-reserve-chicago-plan.

⁹ Jan Kregel 2012: Minsky and the Narrow Banking Proposal, *Public Policy Brief*, Levy Institute of Bard College, No. 125, 2012, 4–8.

¹⁰ Hyman Minsky 1986: Stabilizing an Unstable Economy, New Haven/London: Yale University Press, pp.223, pp.294.

Partial rather than full chartalism

Apart from deeming the present system functional rather than dysfunctional, there are further explanations for the prevailing intransigence regarding criticism of fractional reserve banking. One such further explanation is partial chartalism, in contrast to complete or full chartalism. Full chartalism includes the three monetary prerogatives of

- 1. currency (determining the official unit of account)
- 2. money (creating and issuing the means of payment denominated in that currency)
- 3. seigniorage (taking the benefit from creating and issuing new money).

Partial chartalism dates back to the 'state theory of money' by Knapp (1905). The name of the theory is somewhat misleading because most people will take it for a 'theory of state money' which however it isn't. According to Knapp, a currency needs to be backed by the power of a stable nation-state, otherwise it won't succeed. The doctrine, however, does not demand that the money, the regular means of payment, must be state money issued by a state agency such as the treasury or the central bank. For money to gain the status of an official means of payment, it suffices that the tax office or the courts accept, or even demand, to be paid in that money. Partial chartalism keeps national, state-guaranteed currencies, but cedes the creation and control of money (means of payment) as well as seigniorage-like privileges largely to the banking industry. Knapp, much like his contemporary Mitchell-Innes, were typical national market liberals of the 19th century. They saw bank money as a benign and under-control part of what they took for a sovereign currency system. Keynes and his heirs – including Postkeynesians as well as Circuitists and MMTers – have retained such a position of partial chartalism up to the present day. Consequently, if today's bank money is mistaken for a subset of sovereign money, sovereignmoney reform does not seem to make sense.

As regards MMT, an additional reason for their intransigence is their version of Postkeynesian sector balances.¹¹ Models of public-private sector balances were originally devised for spotting imbalances.¹² In MMT, however, the meaning of imbalances is reinterpreted and includes a tendency to fuse fiscal with monetary functions. MMT contends that sovereign debt poses no problem because it equals private fortunes (strangely enough, not asking whose). Moreover, government expenditure (public-sector expenditure) is identified with sovereign-money creation, while private payments to the public sector (taxes) are reinterpreted as the deletion of sovereign money, analogous to paying back credit to banks.

 ¹¹ Cf. Wray, Randall 2012: *Modern Money Theory*, Palgrave/Macmillan. - Mosler, Warren 1995: Soft Currency Economics, www.gate.net/~mosler/ frame001.htm. - Tcherneva, Pavlina 2006: Chartalism and the tax-driven approach, in: Arestis, Philip / Sawyer, Malcolm (eds.), *A Handbook of Alternative Monetary Economics*, Cheltenham: Edward Elgar, 69–86. - Fullwiler, Scott T. / Kelton, Stephanie / Wray, L. Randall 2012: Modern Money Theory: A Response to Critics, http://papers.ssrn.com/sol3/papers.cfm? abstract_id= 2008542.
¹² Cf. Wynne Godley and Marc Lavoie 2007: *Monetary Economics*, London: palgrave/macmillan.

If public debt and public expenditure equal sovereign-money creation, and if a sovereign government allegedly can create as much of it as it deems decent, then it seems to follow that a sovereign government is always solvent and need not default. Deficit spending and sovereign debt thus appear to be monetarily and financially irrelevant and economically only beneficial, while monetary reform, again, appears to be irrelevant and unnecessary.

Key components of monetary reform, elements of New Currency Theory

At this point, I would like to sum up important elements of what I call New Currency Theory, elements that are more or less implicit to sovereign-money reform:

Money is non-neutral, or to put it more expressly, money is of fundamental structural importance. Advanced economies are financialised economies based on corresponding monetary regimes. Money and banking have a great deal of control over the economy through the creation, first use and allocation of money, which in turn has implications for the distribution of income. The monetary system governs finance, as finance governs the entire economy. Besides legal command powers, the control of money – not only concerning its allocation and distribution, but also its creation and first use – is the major means of exerting economic and political power.

Rather than being functional, the present-day monetary system of fractional reserve banking proves to be dysfunctional in a number of respects:

- Quantities of bank money are out of control. Central banks have no control over banks' credit and deposit creation, because it is the banks that have the lead, and central banks must accommodate the banks' demand for reserves and cash, otherwise payments and the economy would come to a standstill.
- Markets do not reach some self-limiting state of equilibrium because modern fiat money has no natural anchor of scarcity (no inherent value base). Banks can create any amount of bank money. There are short-term restrictions, but none over time. As banks have immediate advantages from creating money, they will not stop doing so until the next crisis imposes corrections.
- Reserve banking thus creates an overshooting money supply (during crises temporarily stagnant or even shrinking), which results in inflation or asset inflation leading to bubbles and crises.
- As one consequence, the purchasing power of the money and its foreign exchange value are unstable.
- In a banking crisis, bank money turns out to be unsafe. It may disappear in that failing banks cannot meet their liabilities, else they have to be bailed out by deposit insurance and the government.

- A build-up of monetary and financial assets in disproportion to GDP creates a distributional bias in favour of capital income, resulting in a reduced share of earned income.
- A regime of bank money deprives governments of their sovereign prerogatives of money and seigniorage, and makes government finance dependent on banks and bond markets to a much higher degree than would otherwise be the case.

All of these dysfunctions allow us to conclude that fractional reserve banking is the root cause of financial instability and crises, even though it is not the sole cause. All those malfunctions are substantial reasons why there is a necessity for monetary reform in order to overcome these dysfunctions through a transition from bank money to sovereign money, aimed at the control of money creation and ensuring a quantity of money in circulation that is commensurate to the growth of the economy at full capacity.

The starting point is not gold, nor reserve positions (as in earlier reform approaches such as a 100%-reserve on deposits), and certainly not interest-rate policy, but the Currency-School separation of money and credit, thus keeping apart the central banks' monetary functions and banks' financial functions, as much as monetary and fiscal functions. The separation includes putting an end to bank money in public circulation as well as to reserves in interbank circulation, in favour of a single-circuit plain sovereign-money system beyond bank money and reserves.

New Currency Theory relies on full chartalism, with all three components of currency, money and seigniorage. This is an imperative of economic functionality as much as of state law. The monetary prerogatives of a state are of constitutional importance comparable to the sovereign monopolies of legislation, territorial administration, jurisdiction, taxation and the use of force.

The key components of monetary reform are

- Restoring monetary sovereignty or sovereign money, respectively, by ensuring the prerogatives of currency, money, and seigniorage to a respective state or community of states.
- Independent monetary authority: conferring responsibility for the entire stock of money to an independent monetary authority (in the US maybe the Treasury, in Europe the central banks, the ECB resp., under public law).
- No more bank money: putting an end to bank money (demand deposits) as it is credited into current accounts on a basis of fractional reserves.
- Full seigniorage (gain from money creation) to the benefit of the public purse by spending long-term additions to the stock of money into circulation debt-free through public expenditure (genuine seigniorage) as well as by loaning some of the money short-term to banks (interest-borne seigniorage).

The sovereign-money approach is being documented in a growing body of literature, in scholarly books and articles, as well as on the websites of reform initiatives and in condensed versions for a larger audience.¹³

Typical misrepresentations of monetary reform

The following passages will now deal with typical misrepresentations of monetary reform. There exist more such misrepresentations, but considering them all might be overly wearisome.

Sovereign Money and 100%-Reserve

One of the most widespread mistakes—shared, it must be said for fairness, by quite a few monetary reformers—is identifying, and thus confusing, the 100%-reserve approaches of the 1930s with the present-day concept of sovereign-money reform. The mistake involves confusing a split-circuit reserve system with an integrated single-circuit money system entirely beyond demand deposits and reserves. Both approaches certainly belong in a common category of monetary reform. Both pursue the same general goals such as control of the money supply in order to tame inflation, asset inflation, bubbles and crises, and to generate a decent amount of seigniorage for the public purse. Under technical and operational aspects, however, 100% reserve and plain money is about two different systems, with 100% reserve in several aspects not really achieving what it promises.¹⁴

Nationalisation of money, not of banking. Alternative business models of banking

Some critics assume that sovereign money is about nationalisation of banking, or centralisation of banking under the roof of the Treasury (in the US) or the national central bank (elsewhere). This is wrong and misses the point - which is nationalisation of money. Fisher put it this way: 'Nationalisation of money, yes; of banking, no.¹⁵

Nationalised money is no unheard-of thing. It was, mutatis mutandis, the normal state of affairs throughout the centuries back to around 700 BC. Still today, most people think we have nationalised money, while in actual fact we have bank money. Monetary reform wants to replace bank money with sovereign money-on-account and sovereign e-cash. This step is analogous to the introduction of the national-bank monopoly on banknotes in substitution

¹³ Positive Money 2014, Zarlenga 2014, Huber 2014, Jackson 2013, Jackson/Dyson 2013, Ryan-Collins/Greenham/Werner/Jackson 2012, Werner 2012, Robertson 2012 97–155, Dyson/Graham/Ryan-Collins/Werner 2011, Zarlenga 2002 651–685, Huber/Robertson 2000. For bibliographical details see the list in the end of this paper. As to initiatives campaigning for sovereign-money reform cf. http://internationalmoneyreform.org; esp. American Monetary Institute (www.monetary.org), Sensible Money Ireland (http://www.sensiblemoney.ie), Positive Money Britain (www.positivemoney.org), Monetative Germany (www.monetative.de), MoMo Switzerland (vollgeld-initiative.ch, vollgeld.ch).

¹⁴ For further explanations and discussion cf. https://sovereignmoney.eu/100-per-cent-reserve-chicago-plan.

¹⁵ Fisher, Irving 1935: 100% Money, Works Vol. 11, ed. by William J. Barber, London: Pickering & Chatto, 1997, p. 58.

of private banknotes in the 19th century. The latter were declared unlawful and phased out. Banking, however, was not nationalised but remained a largely private business.

In the 20th century, under the influence of state-socialist ideas, nationalisation of banking has occurred in different places. The lesson to be learned was that the important thing is what banks actually do, including whether they create bank money of their own, rather than the question as to whether banks are private, co-operative, municipal, or state-run.

Having a certain mix of property rights is certainly not a bad thing. In this respect, current initiatives in the US for creating public banks or state banks are understandable to a degree, particularly, as is the case in many countries, within the setting of a banking sector that is dominated by a few large global banks ever more detached from real-economic needs on the spot.¹⁶ Nevertheless, according to all experience past and present, the expectations on public banks – such as important savings on interest, budget surpluses, or easy funding of many things of public interest – are clearly too high.

Other recent developments worldwide include ecological, ethical or sustainable business models of banking, as represented by the Global Alliance of Banking on Values. Alternative business models of banking are welcome, but are no substitute for monetary reform. Monetary reform is not about another business model of banking, but about a different money system. The question of business models and the question of monetary reform are two different issues. They neither include nor exclude each other and thus can get along with each other quite well. If, however, alternative banking is seen as an alternative to monetary reform, this makes for an unnecessary and unwise political divide.

There is a similar constellation with the movement for complementary currencies (CCs). Some of its activists were afraid that a money monopoly of the state (full chartalism) might threaten CCs in the same way as it puts an end to commercial bank money. Communitarian currencies, however, can fulfil useful functions at the local level, in particular in linking the formal and the informal economy, or as special-purpose currencies, as long as they remain complementary and do not lay claim to representing the future of money in general. Most people in the CC movement, rather than seeing the monetary reform movement as a competitor, now see it as an ally. The actual result is not distraction from monetary reform, but additional support for it.

Putting an end to the banking industry's monetary powers, not to its finance functions

Another typical mistake is to over-interpret the meaning of putting an end to bank money as curtailing important financial functions of banks such as making loans, financing investment, funding government, capital and consumer expenditure, or providing services of account

¹⁶ Cf. Brown, Ellen Hodgson 2013: The Public Bank Solution. From Austerity to Prosperity, Baton Rouge, LA: Third Millennium Press.

management, money exchange and cashless payment. It is the banks' very role to fulfill such *finance* functions in a sovereign-money system no less than before.

The difference would be, however, that banks will no longer have the *monetary* function of creating money and determining the existing stock of money. This will entirely be the function of the central bank in its capacity as the monetary authority of the realm. Banks will in fact be stripped from the monetary powers they have captured. They will again be money intermediaries und thus purely financial institutions. Basically, they would be free to carry on with everything they do now, except for creating and deleting money at their discretion. Banks should be free service providers, money lenders and investors, but they must no longer create themselves the money on which they operate, because this is an economically dysfunctional neo-feudal privilege. Separating monetary functions from finance functions is in actual fact about another important separation of powers.

One related mistake is to maintain that in a sovereign-money system account management and payment services will be taken from the banks to be integrated into the central bank. Hypothetically, this could be done, but in practice this would represent an unnecessarily costly and burdensome restructuring. The decisive thing is that all money will be sovereign central-bank money, while the account management and payment services can and should still be carried out as a part of the banks' money services. In a plain single-circuit money system, customer current accounts are taken *off the banks' balance sheets* and exist as separate money accounts. The money in these accounts is not bank money anymore, but sovereign central-bank money which is the safe property of the customers. It cannot disappear, and the payment system is not threatened in a banking crisis. Customers' sovereign money accounts can be managed in different ways, for example, as individual fiduciary accounts, or in a bank's customer-transaction omnibus account with the central bank. In both cases, the banks continue with managing customer accounts and payments.

GDP-proportionate quantity of money. Misunderstanding sovereign money and currency teaching as a new gold standard

The money supply in a sovereign-money system is limited at any time, but flexibly so in that it will perpetually be re-adjusted to the economic situation. Likening sovereign money to a gold standard thus is beside the point. Modern fiat money needs to be tied to an anchor of scarcity, or better say, to a real value base. This, however, in order to be functional, and as also the Circuitists have pointed out, cannot be gold, or a basket of commodities, or the value of land. The economic value of money is its purchasing power, i.e. what money can buy, and thus derives from the overall productivity of the economy. The price of gold, land and other assets is derived from current productivity and income relations, not the reverse. Accordingly, the obvious candidate to serve as a real value base is economic output, or, regarding additions to the stock of money, the growth potential of the economy at full capacity. This is a dynamic target. It is not about implementing deflationary tight money or

inflationary loose money. It is about a productivity-related money supply and about additions to the stock of money proportionate to economic growth.

GDP growth and inflation/deflation will probably continue to serve as central indicators, even though as just two among others more. Should growth one day peter out, no more additional money would have to be created. In contrast to the present credit-and-debt money, debt-free sovereign money is perfectly compatible with scenarios of possible nogrowth as much as with ongoing growth.

Managing the money supply in correspondence with the economy's real growth potential can best be achieved if the creation of bank money, which is basically 'unlimited', is put to an end, thus enabling the central bank to pursue effectual monetary quantity policies. Today, the banking sector is the monetary entity that pro-actively decides on the entire money supply. This puts the government and the national bank in the role of vicarious agents, reacting to and fractionally re-financing the facts the banks have accomplished. This disables effectual central-bank policies, both for quantity and for interest-rate policies. Certainly relative restrictions exist to the banks' capacity for creating additional money, such as actors' willingness to take up new loans or issue new debentures, certain regulatory requirements and, primarily, the constraint for all banks to expand their balance sheets largely in step with each other. Over time, however, no real obstacles arise because in the course of the process the banks create themselves and each other what it takes to fulfil the conditions.

New Currency Theory is not a mechanical replication of the historical Currency School. The gold standard – adequate, if at all, to a traditional steady-state economy – was obsolete from its beginning in the 1830–40s. Seen from a temporal distance, the truly important thing with the historical Currency School was not gold, but recognising the fundamental importance of gaining control of the quantity of modern fiat money. Achieving this by way of separating the creation of money from its use is still the far better monetary-policy approach than the reserve position doctrine and the base rate doctrine as they have been practised since the end of the gold standard.

The historical Currency School tried to answer the question of inflation, bubbles and crises. At the same time, however, they did not give due attention to the complementary problem of deflation. They rightly looked for a real value base to tie the money supply to, but gold, which seemed to be the obvious answer at the time, also given the prior bullionist debate as well as poor banking and market statistics, actually was the wrong answer. This is all the more true as in the final legislation the gold standard was applied only to cash, blinding out demand deposits, i.e. non-cash money-on-account—the truly important thing for the times to come then up to the present day.

Monetarism. Muddling up quantity theory with supply-side doctrine

Sovereign money vis-à-vis supply-side and demand-side doctrines

A common feature of left-wing criticism seems to be labelling sovereign money as monetarism, whereby monetarism is identified with capital-friendly supply-side economics as opposed to labour-friendly demand-side Keynesianism.

The supply-side approach from about 1980 up into the 2000s is commonly known as Reaganomics and Thatcherism, with regard to development policy also as Washington Consensus. These policies are characterised by a high degree of market fundamentalism, thus representing a program of low government interference, in particular low taxation and regulation, possibly including repression of trade unions, all of this in support of capital interests that eventually would invest in real-economic supply. This then would include the creation of jobs and earned income, so that income would 'trickle down' from capital to labour. No doubt that real-economic investment is fundamental and needs conditions conducive to business. The reality of those policies, however, turned out to be primarily supportive of *financial* capital, investment banking, and a casino-style financial economy ever more detached from real-economic needs. The orientation towards shareholder value (and manager and trader value, it must be said), has often enough been inimical to the interests of a wide range of stakeholders, in particular, marginalised segments of employees and the non-active population.

Labour-friendly demand-side Keynesianism, by contrast, was predominant from the 1950s to the 1970s. It is rooted in earlier under-consumption theories of the business cycle, stressing the importance of effective demand on the basis of mass purchasing power. On a large scale, sufficient demand will not come from the conspicuous-consumption expenditure of the welloff, but it involves broad-based high wage levels and, to a degree, social-security schemes and welfare benefits. Demand-side policies are effective in keeping the economy running and may contribute to extensive growth. However, they are largely ineffective with regard to boosting productivity and competitiveness on the basis of innovation and structural change. Demand-side policies involve high levels of government interference, labour and welfare regulation, juridification and bureaucratisation, and high levels of taxation. Beyond critical thresholds, this interference becomes paralysing and counter-productive despite all good intentions.

Confronting supply-side with demand-side economics can be seen as the present-day pattern of the diverging interests of capital and labour. It involves partisanship—which is all right. It must be emphasized, however, that sovereign money does not by itself come with an automatic commitment to a demand-side or supply-side position. Both political positions, and any real-world compromise struck between the two, can be pursued today under fractional reserve banking, and likewise also in a sovereign-money system, similar, for example, to parliamentarism which entails changing majorities.

A properly run sovereign-money system, however, will prevent overshooting credit and debt bubbles, and this threatens vested interests on both sides of that political spectrum. For once, it threatens the casino section of the financial economy, but also the alliance between many a government's disproportionate appetite for debt and the banking industry's readiness to print them as much money as they please—money that sooner or later also ends up in the global casino. The prospect of having that hidden alliance between financial capital accumulation and public debt accumulation being curbed causes unease on both sides, and this actually seems to be a major reason for left-wing opposition to monetary reform.

Orthodox demand-siders criticise sovereign money for allegedly representing a tight-money high-interest regime benefitting the rich, while they ignore at the same time how the present loose-money, low-interest, high-debt regime directly feeds the GDPdisproportionate accumulation of financial assets, which results in a distributional bias that actually benefits capital revenue at the expense of earned income. This comes down to a bizarre left-wing defence of the present money system as it is at the heart of financial capitalism, including the banks' illegitimate monetary privileges.

Monetarism and quantity theory

Identifying monetarism with supply-side economics is flawed, but it is clearly Friedman himself who is to blame. He is responsible for that ill-conceived wedding of monetarist ideas with supply-side ideas. This was a big disservice to his monetary cause. Another big mistake, then, was to give policy advice on how to implement monetary quantity policy under conditions of fractional reserve banking—which implementation is next to impossible and was unavoidably bound to end up in a complete failure. This then caused a shift to the equally ineffective short-term base-rate policy, and Friedman contented himself with demanding interest to be paid on demand deposits. Friedman's supply-side partisanship and his inconsistent attitudes with regard to fractional reserve banking have done lasting damage to the notion of monetarism.

Nonetheless, quantity theory and certain basics of money circulation made Friedman's monetarism connectable at the time. It should not be forgotten that monetarism was preceded by high inflation, temporarily in the double-digit range, from the 1950s to the 1970s. Thereafter, since its decline in the 1980s, inflation has all the more been replaced by asset inflation and crisis-prone credit-and-debt bubbles. Demand-side Keynesians would fare better by facing this reality head-on as a *monetary* problem rather than discrediting it as monetarism.

Quantity theory is a simple and robust piece of economics. It says that an increase in the money supply enables the actualisation of an economy's productive potentials, whereas if such potentials are lacking or have been fully exploited or are blocked by structural

mismatches, an additional money supply will result in rising prices. Traditional quantity theory just referred to a direct link between a given quantity of circulating money and its effect on prices. Any up-to-date quantity theory, historically after Keynesianism and Monetarism, will certainly have to refer to *all* kinds of prices, their mutual impact on each other, and their feedback on the money supply. Beyond the prices of consumer goods, services and producer goods, this also includes asset prices and asset inflation; interest and interest-borne inflation; and wages and wage-induced inflation.

In reverse, a shrinking money supply will induce deflation, with under-utilisation of all economic factors, in particular labour. The problem with deflation is not so much that consumers won't consume because they expect goods and services to become still cheaper. Consumers do not normally behave like traders. The problem is that less consumptive and productional demand—already a result of a cyclical downturn with debt deflation—mean shrinking receipts, adding to reduced capital expenditure, more unemployment and a decline in earned income overall. In the short run, deflation is to the benefit of consumers and money owners in general, while, over time, because of shrinking production and declining mass purchasing power, it will result in general decline.

Classical and neoclassical economics represents deflation as a simple mirror image of inflation, allegedly not altering price and wage relations and structures of allocation and distribution. Any glimpse of the real-world effects of debt deflation and austerity is evidence to the contrary. Since the Great Depression, most economists have been persuaded to see deflation as a general threat to production, employment and prosperity. Incidentally, Friedman and Schwartz's *Monetary History of the US* (1963) was a milestone in the process of acknowledging the counter-productive results of deflationary central-bank policies.

The Austrian School, by contrast, developed a special variant of neoclassical thinking—still more fictitious in a sense—in that a constant money supply (gold) would result in ongoing investment and productivity growth, while prices and wages would readapt by way of beneficial downward elasticity (stable or lower incomes benefitting from still lower consumer prices). However, as New Keynesian Economics and Behavioral Economics have shown, consumer prices and wages tend to be 'sticky' rather than elastic. This, rather than resulting in a decline in consumer prices and wages, induces a downward spiral of investment and other capital expenditure, less employment (overall volume of working hours), correspondingly less earned income (diminished mass purchasing power), lower tax revenue, and still weaker demand, both consumptive as well as productional. This in turn means increased social segregation, in particular labour market segmentation.

In view of the Early Chicago School—and this actually is where Friedman's monetarism came from—there was no inherent necessity for combining monetarism with a supply-side position. The early Chicago view, and also the respective position of Fisher, can be described as a neoclassical variant of the quantity theory. Subsequently, Friedman's monetarism, if stripped from the supply-side doctrine, represents a strong version of quantity theory: 'Inflation is always and everywhere a monetary phenomenon'.¹⁷ This statement may have been overshooting the mark. Inflation can also be caused or amplified by price shocks, compound interest and disproportionate wage increases which are not necessarily due to monetary reasons in the first instance. But actually all theories dealing with inflation, asset inflation and bubbles in some way rely on quantity theory. Riese, the main proponent of Monetary Keynesianism, correctly described Friedman's monetarism as 'neo-quantity theory'.¹⁸

Friedman's quantity view is in fact not far from a neutral-money neoclassical position, apparent, for example, from his famous helicopter that drops lots of banknotes down to the people. If there are under-used capacities and no factor mismatches, helicopter money will help to create additional employment and income, but if too much money is dropped at once, this, as Friedman assumed, simply would result in a rise in prices without changing the patterns of allocation and distribution. Keynes may have contradicted the neutrality of dropping money, but his position on the quantity theory was definite: 'This theory is fundamental. Its correspondence with facts is not open to question'.¹⁹

Having taken recourse to quantity theory certainly isn't the problem one can have with Friedman. The problem is his lopsided commitment to developing the supply-side doctrine as well as a number of questionable prescriptions regarding monetary policy. But even with Friedman, monetarism was intended as a program for providing a growth-optimal money supply, avoiding deflationary tight money, as is the Austrians' program, as well as inflationary loose money, as is the typical Keynesian program. The quantity theory of money, one of the oldest and most proven elements of economics, is as essential as ever—and one simple conclusion from this is that the key to sound money and stable finances is to gain control of the money supply.

Monetary policy

Central-bank bashing

Both ultraliberal and left-wing critics of sovereign money, albeit for opposing reasons, are distrustful of a central bank's ability to provide an optimum quantity of money and to pursue flexible monetary policies. Neoaustrians foreknow the replacement of overabundant bank money with equally overabundant central-bank sovereign money, thus a continuation of loose money. The political left, by contrast, expects sovereign money to be tight and merciless.

¹⁷ Friedman, Milton 1991: Monetarist Economics, Oxford, UK/Cambridge, Mass: Basil Blackwell, p.16; —1992, Money Mischief, New York: Harcourt Brace Jovanovich, p. 198.

¹⁸ Riese, Hajo 2001: *Grundlegungen eines monetären Keynesianismus*, Bd.1, Marburg: Metropolis, 48–53.

¹⁹ Keynes, John Maynard 1923: *Tract on monetary reform*, London: Macmillan, 74.

Neoaustrians tend to demonise central banks and government, while at the same time idealising 'free banking' and competition on financial markets if only left unhampered by government interference. Neoaustrians see central-banks' institutional independence as a formal fig leaf, concealing political dependencies and opportunism. There are certainly good reasons to be realistic about humans in any function whatsoever. History is full of mischievous monetary policy under various political regimes and institutional arrangements. Nonetheless, take the judiciary as an example of what separate-power independence realistically entails. There are wrongful convictions, and judges are basically no less influenced by the circumstances of time than other contemporaries. Nevertheless, most court judgements appear to be fairly reasonable applications of the law. The independence of the judiciary is an indispensable part of liberal and democratic rule of law. Typically, judges as well as central bankers show a high degree of milieu-specific re-socialisation, i.e. soon after assuming respective responsibilities, they start to put their function above party membership.

With independent central banks in a sovereign-money system this will be similar. They will in actual fact be another, fourth branch of government—the monetary power—wielding a state's monetary prerogatives over the currency (unit of the realm), the money (all means of payment becoming legal tender), and the seigniorage (the gain from money creation). They will again act as bank of the state and continue to be bank of the banks. Similar to the judiciary, central banks must act on the basis of a well-defined legal mandate, be answerable to the government, parliament and public, but not subject to government directives and fiscal interests, nor to deference to the banking industry and financial interests.

Old and new Austrians and many neoclassical economists have great difficulty in understanding currency theory and in recognising that currency, money and seigniorage are sovereign prerogatives of constitutional importance. In this respect, they are pure banking theorists, proclaiming private money creation as a cornerstone of economic freedom. In the real world, however, and for transactional reasons alone, successful 'free currencies' will over time always end up as the money of a handful of large banking corporations, subject to corporate market bending and volatile exchange-rate speculation, foreseeably worse and still more vulnerable than today's national currencies because no strong enough sovereign state, or community of states, would back up those currencies anymore.

Accusations of bureaucratic centralism and inflexibility of monetary policy

A criticism mainly put forth by mainstream economists and Neoaustrians is accusing a central-bank monopoly on money of introducing bureaucratic centralism; hence the

expectation of an inflexible and inadequate supply of sovereign money. No agency, except the market, is supposed to be capable of providing an optimum amount of money.²⁰

This argument surely backfires. It insinuates fictitious realities regarding the flexibility and adequacy of the money supply in the present banking regime. Today, first and foremost, it is the large banking corporations that are huge monetary bureaucracies, much bigger than any central bank. Moreover, if there is no habitual co-operation between a bank and a customer, obtaining bank credit actually involves cumbersome and time-consuming bureaucratic procedures. Larger loan exposures are anything but blitz-credit. One should not mystify the flexibility and responsiveness of fractional-reserve banks.

The only thing representing instant money is overdraft; easy indeed, but limited, and very expensive. In a sovereign-money system, money accounts cannot be run in a debit position. Nonetheless, banks will not face difficulty in providing an analogous instant loan window, lucrative as this is.

The supply of bank money today is biased towards real estate, investment banking, including sovereign bonds, whereas small and medium-sized enterprises often face difficulties in obtaining credit, while large industrial corporations tap secondary capital markets worldwide and run banks of their own. Overall, in good times, bank credit is pro-cyclically greatly overshooting; in bad times, it is too much on the retreat. In terms of monetary policy, any central bank would actually find it difficult to do worse than the banks have been doing during the last half-century.

Banking-minded defenders of the present system love to liken it to a 'breathing organism', cyclically inhaling and exhaling according to changing levels of demand. Nice metaphor, but misleading. The real world of such 'breathing' economies is about driving the ups and downs of business and financial cycles into dangerous and quite often damaging extremes. On balance, to take the metaphor further, that organism follows a pattern of long-term hyperventilation, permanently inhaling too much, exhaling little, until reaching some state of disorder or even breakdown.

In contrast to outward appearances, central banks today are normally in a position of diminished importance. In a banking crisis, central banks are certainly effective lenders of last resort, keeping afloat banks in trouble. In normal conditions, however, central banks are limited to being mere re-financers of the facts the banks have created beforehand, without being able to control the volume of bank credit and thus the quantity of money. For conventional monetary policies to work, two preconditions for the effective transmission of central-bank impulses would have to be fulfilled. The one is that central-bank reserve

²⁰ Cf. Avenir Suisse 2014: Empty Hopes for Full Reserve Banking, by Rudolf Walser and Jörg Baumberger, www. avenir-suisse.ch/en/36345/empty-hopes-for-full-reserve-banking.

positions exert control over the supply of bank money. The other is that central-bank base rates have the lead and a decisive effect on setting the level of interest. Neither one applies.

Minimum reserve positions, where existing, are set by the central bank, but do not serve any sensible purpose. They are a relic of ineffective reserve position policies. In particular, they do not influence banks' credit and deposit creation. To the contrary, it is the banks' proactive creation of credit and deposits that determines positions of liquid reserves as well as the amount of cash the central bank needs to provide in order to maintain the payment system and thus the economy.

At the same time, base-rate policies are much less effective than is assumed. Bank demand for reserves and banknotes is price-*in*elastic. Additional deposits created by the banks in advance *must* fractionally be re-financed, no matter how expensive. Refinancing rates may entail some feedback effect in the longer run, not however in the short term. Moreover, what is a refinancing rate of 2.5% or 11% expected to transmit on the entire 100% of bank money? Certainly not much. Higher/lower base rates and interbank rates result in lower/higher interest margins of the banks. But this is a contributive factor of minor, 2.5% or 11%, importance. It will not deter banks from extending their balance sheets, for as regards the 100% of bank money, lending interest and expected capital gains are always much higher than rates on fractionally obtained central-bank money plus paying deposit interest to customers.

One thus has to conclude that present-day base-rate rituals largely represent a myth, an occasion for noise trading, obscuring actual conditions – that is, that the prerogatives of money and seigniorage have far-reachingly descended to the banking industry, while the money supply is out of control as in actual fact neither banks and markets nor the central banks exert control over the quantity of money.

Pretense of knowledge? How central banks will provide an adequate money supply

The unfavourable opinion of many economists on central banks is partially due to a mere ideology of extra-territoriality and infallibility of markets, partially it is based on the experience of ineffective central-bank action under the present-day banking regime, and partially it is based on Hayek's thesis of bureaucracies' 'pretense of knowledge'.

Yes, a central planning bureaucracy normally knows far less than markets know. There is, however, not only the crowd intelligence of markets, but also phenomena of market foolishness, including, as M. Wolf put it, 'banks' often foolish lending'.²¹ The quantity of money—which is not fixed in a sovereign-money system, but variable according to the potential of GDP—*must* be under some central control because markets perpetually fail to provide an adequate quantity of money. Lending and spending money, however, ought to be

²¹ Martin Wolf, The Federal Reserve is right to turn on the tap, *Financial Times*, 9 Nov 2010.

left to the individual actors (state, corporate, private). It thus is misleading to liken the role of central banks to the role of a planning administration in a centrally planned economy. A central bank in a sovereign-money system remains immediately linked to the bank demand for money, thus to the markets, and is also immediately responsive to an array of market indicators. Accordingly, the central banks' money supply is no less endogenous than that of banks. The only money supply that can properly be called exogenous were coin- and bullionbased currencies. Since the end of the gold standard, all present-day money is endogenous, no matter whether issued by a bank or a central bank.

Accusing 'central' banks of 'centralism', and sovereign money of establishing a system of bureaucratic central planning, is a far-fetched mere association anyway. A transition from bank money to central-bank money is a step analogous to the replacement of private bank notes with central-bank notes in the 19th century. Sovereign money is about extending the traditional government monopoly of coins and the modern central-bank monopoly of paper money to digital money-on-account and mobile storage (e-cash).

Why so much ado about this? Admittedly, there would be two important differences. Firstly, legal-tender paper money did not rule out the use of bank money (demand deposits) for cashless payment. In a plain sovereign-money system, the *entire* money supply would consist of legal tender issued by the central bank (cash *and* money-on-account). Secondly, central-bank notes have never been spent, but have always been loaned into circulation, thus actually boosting the present credit-money system, for which cash is no longer constitutive, but is just a residual exchange form of the original non-cash money supply created by the banks. In a sovereign-money system, loaning new money into circulation can and will continue to a degree, but should be limited to minor additions to the money supply in the form of short-term central-bank loans to banks, used as a kind of fine-tuning monetary policy instrument. The major and long-term additions to the money supply should be spent into circulation debt-free by public expenditure (genuine seigniorage, in contrast to interest-borne seigniorage).

Nonetheless, an important question remains: how can a central bank know how much money will be adequate in a half-year's or one-year's time? The answer is: a central bank cannot and need not know exactly. A saying attributed to the mathematician John von Neumann was '*Better broadly right than precisely wrong*'. This is a good guideline not only for central banks.

Central banks have been trying for decades to pursue monetary quantity policy, but have been unable to because the realities of pro-active bank money creation have undermined the effectiveness of *any* kind of monetary policy, no matter whether based on reserve positions or on short-term base rates. In a sovereign-money system, by contrast, central banks will be able to pursue effective quantity policies, pro-actively before the fact as well as continuously re-adjusting upon the fact. What it takes is

- an array of reliable long- and short-term market indicators
- regular long-term additions to the money supply based on a not-too-bad estimate of how much the future GDP-proportionate increase in the money supply will require, and
- a perpetual short-term re-adjustment of the quantity of money in circulation by applying a variety of monetary policy instruments for temporarily releasing or absorbing money.

With sovereign money, a central bank will pursue moderately counter-cyclical quantity policies, i.e. adding money to the upswing, stop doing so upon increasing signs of overheating, and start adding money again in a later stage of the downswing. It should be noted that with sovereign money, in contrast to the present fractional reserve system, the money supply does not grow or shrink in one act with banks' lending and investment activities. As a result, the money stock will not be shrinking in a downswing. Sovereign money thus opens up the perspective of effective quantity policy of the steady hand.

Achieving this is no trivial task, but it is manageable and it clearly enables central banks to manage the stock of money in a way that is highly flexible, literally overnight if need be. It should be done in a discretionary rather than mechanically rule-bound way.

Assumptions of tight money and credit shortage. Savings and additions to the money supply

As mentioned above in connection with supply-siders and demand-siders, and the hidden connection between the accumulation of financial capital and public debt, monetary reform is looked at with suspicion by both sides. Ultraliberals and many mainstream economists expect a sovereign-money system to bring about loose money and inflation in a statist regime. Keynesian critics, in particular from the political left, come up with projections of tight money and a deflationary scenario with high unemployment, low wages and high interest. They warn against an allegedly impending money and credit shortage. A sovereignmoney system, however, is not about implementing tight or loose money. It is about a productivity-related money supply and about additions to the stock of money commensurate to economic growth. Accordingly, monetary reform is about making sure that there is always an adequate stock of money, neither too much nor too little.

A typical misunderstanding is to assume that there would be only as much money available for lending and investing as there are savings. The role of savings in a sovereign-money system is actually different from today, but the conclusion is wrong. Today, savings include all items in the near-money aggregates M2/M3. These savings in M2/M3 are of no use to third parties. They represent inactivated, thus idle bank money, allowing banks to continue expanding their balance sheets without running an additional liquidity risk. The price which banks have to pay for this is some low interest on customer deposits, which is more than offset by higher lending rates and expectations of capital gains. Savings in a sovereign-money system, by contrast, would again have a real function of funding a bank's lending and investment activities. Savings, then, are not 'put in the bank' as one puts valuables in a safe, but lent to the bank. Banks will depend on these loans to a degree, because in a plain sovereign-money system banks are no longer able to create money by way of balance-sheet expansion at the stroke of a key. Instead, such transactions will involve a swap of assets, e.g. liquid money in exchange for an interest-bearing claim on money.

Before being able to transact, banks have to earn or take up the money, through all available channels: from customers, from other banks and financial institutions, or from the issue of debentures and maybe equity. Furthermore, it is often overlooked that banks will have a continual reflux of money through customers' repayments. In a sovereign-money system, payments to banks do not result in deletion of that money, but that money continues to exist as a liquid asset. During a transition period of several years, repayment of principal to banks will become ever more available to the banks, becoming fully available when old stocks of demand deposits will finally have come down to zero.

The wrong conclusion of many critics now is to assume that these transactions represent the whole picture and that there are no additions to the money supply. Continual additions, however, come in two ways. The one is long-term debt-free issuance of additional money through public expenditure (genuine seigniorage). A certain share of that money will end up as savings in banks, investment funds, etc. The other way is, if need be, short-term issuance of money by way of primary central-bank credit to banks (interest-borne seigniorage). Given that modern money is fiat money that can be created anytime to any amount, and given that central banks in a sovereign-money system have control of the money supply, expecting money shortage in a sovereign-money system is totally unfounded. There will be no difficulty in assuring a sufficient money supply.

Some critics also insinuate that full funding of bank loans and purchases would result in inflexible, cumbersome and time-consuming procedures. Why so? Banks will provide for sovereign money as they provide for reserves today, simply in larger volumes, and they will do so before and upon the fact rather than thereafter. Compare it with today's provision of cash. This is actually much more cumbersome and costly than handling electronic digits. It might, nevertheless, be hard to find somebody who has experienced problems with drawing cash for lack of banknotes. Banks are clearly not overwhelmed by having to provide for cash and reserves today, and they won't be in a sovereign-money system. Today's banks are only overwhelmed in a bank run. In a sovereign-money system, bank runs won't exist anymore because the money is the safe property of the customers and cannot disappear when a bank goes under. (Customer loans to a bank, however, can be at stake. Some insurance fund may thus still be useful).

How to deal with above-average liquidity preference? Boundaries between monetary policy and fiscal and economic policies

Another reason for expecting shortages in a sovereign-money system may be the still prevailing identification of money with bank credit. In a sovereign-money system, money and bank credit are two separate things. Under present-day conditions of fractional reserve, by contrast, credit shortage and money shortage are one and the same. Cyclically stagnant or even shrinking credit supply (= money supply) thus is a real problem if not compensated for by government deficit spending; while permanent government deficit spending and debt accumulation have grown into an additional big problem.

It should be seen that also in a sovereign-money system, even though there is no money shortage, availability of money does not automatically translate into availability of loans and other ways of finance. Actors can spend or invest their money, or simply hold the money. In Keynes, liquidity preference (i.e. keeping rather than spending the money) became a central factor. It may be overstated in Keynesian theories, but liquidity preference certainly is one out of a number of decisive factors in the course of cycles. The problem is that temporary above-average liquidity preference may result in problems of insufficient effective demand or in a reluctance to lend or to borrow; but this is no structural property of the money system, instead, it represents a behavioural pattern.

Since the devastating impact of the Great Depression of the 1930s, a variety of interventions have been devised for getting investors and consumers to spend rather than to hold their money. Boundaries between monetary, fiscal and wider financial and economic policies have been blurred in the process. Under fractional reserve and Keynesian-style interventionism, fiscal and monetary policy have become closely intertwined because deficit spending and debt accumulation are immediately linked to primary credit/debt creation, thus money creation.

It has become common practice to instrumentalise fiscal policy and the monetary system to ends of compensatory economic policies, most often in the form of tax advantages, habitual subsidies, and debt-funded public spending programs. In the beginnings, against historical backgrounds of devastating boom-and-bust cycles, class struggle and civil war, this practice may have been acceptable as the lesser evil. Today, almost a hundred years after the Great Depression, one has reason to wonder whether the era of such muddling policies of little lasting effect and great side effects is now coming to an end. The pattern of income distribution is now again similar to that of the late 1920s, although on a higher level of productivity and wealth. Free-handed money printing and accumulation of ever higher mountains of debt never was a sustainable solution, and predictably won't be in the future. Monetary policy – as a matter of fact rather than as a normative premise – cannot solve problems that are of a genuinely fiscal nature or pertain to structures of the wider financial and real economy. Furthermore, fractional reserve banking has not only been instrumentalised for purposes of fiscal and economic policy, but equally, maybe even more so, for banking and financialmarkets' private business policies, in particular geared at real estate and investment banking. Both channels – disproportionate investment banking and financial leverage, as well as government debt funding – have been justified for many decades on the grounds of bringing about growth, in particular, bringing investors and consumers out of their shells during recessions. As can be seen from longer-term comparisons of the growth of real GDP (humble), nominal GDP (much higher), and monetary aggregates and financial assets (many times higher), such hopes have largely been disappointed, while the major effect has emerged in the form of asset inflation and shifting income distribution from earned income to capital revenue.

In a sovereign-debt crisis, one has good reason to oppose one-sided austerity programs that do not impose comparably high sacrifices on banks, funds, and other creditors. But neither side has to offer viable alternatives to debt deflation, except for problem-deferring measures such as quantitative easing and still more debt. Monetary reform, by contrast, actually offers a meaningful contribution to solving the problem. The annual seigniorage from money creation can help to balance budgets, and the large one-off transition seigniorage (that accrues from substituting sovereign money for redeemed and thus deleted bank money) would help to pay down sovereign debt by about half or more, depending on the country, without having to impose austerity and capital adjustments.

In the present system, shrinking credit equals a shrinking stock of money. Therefore, applying monetary instruments to ends of fiscal and economic policies may be justified insofar as the banking system deletes rather than creates money. In a sovereign-money system, by contrast, there will be a stable and sufficient stock of money, even in a downturn. If people, companies, banks and other financial institutions might not be prepared to spend or lend and invest enough money, and if this is supposed to present a problem, it must be tackled by fiscal means and other measures, not by creating additional money when there is already enough money.

Pragmatically, one could conceive of a mechanism to offer conditional favourable centralbank credit to banks, the condition being to use the money for funding real-economic capital expenditure and consumer expenditure. When the economic situation would improve and the actors' liquidity preference would be receding, the money can be re-absorbed. Maybe, however, this is present-day thinking, for if there is lack of effective demand despite enough money being available, such offers are redundant rather than making a difference.

In a sovereign-money system, extreme cycles will not normally happen, even though some Great Tulip Mania or South Sea Bubble, or the recent Dotcom Bubble towards 2000 highlighting the long IT innovation wave, may occur in extended historical intervals. Normally, though, politicians and the electorate will no longer make much fuss about

moderate levels of cyclical fluctuations. Since modern money can always be created as needed, money holdings are not really a big problem. Savings, besides being one source of funds, will simply be useful buffers in various situations of economic and private life.

Expectation of too-high interest levels

If one is afraid of tight money, fear of too-high interest rates follows. If, however, as is the case in a sovereign-money system, there is a GDP-proportionate optimum quantity of money rather than tight or loose money, one will conclude that the level of interest can be expected to be about right—neither too low, thus inducing inflation and asset inflation, nor too high, thus in fact choking off the economy.

The preoccupation with low interest again builds on questionable assumptions. A low level of interest, as tends to be the case in times of recession, does not normally induce the desired effect of new loans being taken up by firms and households for expenditure that would stimulate growth and employment. This will not happen—as suggested by Fisher's theory of debt deflation—until over-investment (over-accumulation of overpriced assets) has far enough come down or been written off, and debt has been far enough deflated, i.e. paid back or defaulted.

Both the supply and the demand sides have developed a number of habitual demands in such a situation. On the supply side such demands include tax reliefs, subsidies, or public guarantees; on the demand side they include public spending and active employment programs. These demands go well with each other as long as the government keeps running deficits and incurring additional debt for satisfying both sides. Today, this is not specifically Keynesian anymore. It is done by most governments and central banks, the mandate for this often even being cast in law. The ways pursued are either putting more money into circulation, for example through quantitative easing, or trying to ensure low interest rates.

However, the main result of providing cheap central-bank reserves and issuing additional money by absorbing sovereign bonds is deferring rather than solving the problems of over-investment and over-indebtedness. Reversely, in former times of 'miraculous' growth, central banks have tried to dampen overheating growth, prices, and wages by trying to tighten the money supply or by raising base rates. No such measure has ever really worked, because, as explained above, the transmission of central-bank reserve positions or base rates on banks and economic actors is largely ineffectual.

Trying to administer interest rates is not exactly market-compatible anyway. Interest rates that follow from the supply of and demand for money are meaningful market signals. They should not be manipulated. They should rise and fall according to the market situation. If bond yields of euro states from 2000 through to 2010 would have diverged according to national levels of productivity, competitiveness, and governments' creditworthiness, instead of strongly converging downwards in a rare combination of market and state failure at once,

the euro and the EU were spared a great deal of trouble. In well-constituted well-working markets, interest rates, rather than posing a problem, are part of the solution.

Today, the interest-rate mechanism does not work properly, because money and capital markets are overshooting due to a missing anchor of real value. Present-day base rate policy nonetheless tries to impose higher or lower interest rates on top of already very high or low ones, i.e. adding more to what is already much, thereby intending a reversal of the respective trend. Besides not being very effective, trying to set the base rate in this way represents highly ambivalent politics of the last straw. It may do more harm than good.

In a sovereign-money system, the central banks have full control of the quantity of money, while their influence on interest rates will continue to be as marginal as today because the supply of central-bank credit to banks, accordingly central-bank interest rates, would continue to be of minor importance. Interest rates will continue to rise or fall, to a degree, in the rhythm of business cycles and financial cycles. Accordingly, a central bank's monetary policy will continue to reflect such cycles, but base rate policy will foreseeably not be a central feature. Interest rates would not need to be administered as they follow from the GDP-commensurate quantity of money, and continue to be set largely on capital and asset markets in the course of various cycles. If there is enough competition among banks and other lenders or investors (no oligopolistic market rigging), and a stable money supply and steady additions to it that are reasonably in line with GDP growth, one can trust that interest rates will result in an adequate and stable level; otherwise, we would have to discard market economics altogether.

Objections beyond the scope of monetary reform

Banking and financial-market regulation

There is, finally, yet another category of criticism. It raises objections on the grounds that sovereign money would not solve this or that financial problem the critics consider most important. The critics possibly have a point, but this can hardly serve as an argument against monetary reform.

Sovereign money is about *monetary* reform, not about some wholesale restructuring of the *banking* industry, of *financial* markets, or of *fiscal* concerns of public households. For example, sovereign money cannot be a substitute for taxation, and it will not release politicians from the tedious task of ensuring balanced budgets. Similarly, sovereign money would no longer contribute to the present GDP-disproportionate rise in monetary and financial assets, but monetary reform does not by itself wipe out existing assets (except a large part of sovereign debt). Sovereign money would overcome the present bias towards financial capital revenue at the expense of earned income, but cannot by itself change the structure of income distribution. As will be discussed below, sovereign money improves the

position of real-economic capital and consumer expenditure in comparison to financial investment, but does not automatically prevent some of the money from flowing into the casino section of the financial economy.

In general, monetary reform does *not* make redundant a number of regulations such as transparent accounting, re-regulation of certain financial contracts and trading practices, higher capital requirements, or elements of separate banking, regarding, for example, the forms and volumes of proprietary trading. It would however equally be misconceived to think such regulation would make monetary reform redundant.

The typical case in point is banking regulation according to Basel III (bank equity and liquidity requirements in relation to different classes of assets and liabilities). Basel III supporters believe that implementing such higher requirements would solve the problem.²² However, one has good reason to expect most banking problems soon to come up again as long as the monetary system is based on bank money and fractional reserves, and equally good reason to claim that in a sovereign-money system those rules aimed at containing risk-exposure could be leaner and less bureaucratic. To become effectual, and lastingly so, banking and financial regulation need to be based upon a stable, well-managed monetary system.

The overriding importance and the scope of monetary reform should not be underrated, nor however should it be superelevated as an unreal cornucopia of financial marvels, nor wrongly portrayed as an extremely risky revolution that would turn things upside down (as some defenders of the present system deliberately insinuate for lack of substantiated arguments). Sovereign money is but the next obvious step in the ongoing modernisation of the monetary system.

How can money be put to real-economic uses rather than into the global casino?

An often raised question concerns how to ensure that sovereign money is channelled into useful investment, geared towards real-economic rather than casino-style purposes. This is an important question indeed, but before giving answers and recommending measures, one should acknowledge that financial economics so far lacks differentiated and useful real-world theories on the interplay between the real and the financial economy. Financial economists have not even thought of disaggregating equations of circulation into a real-economic hemisphere (immediately contributing to productivity and GDP) and financial circulation (indirectly contributing or not contributing at all).²³ They have not even raised the

²² Cf. Admati, Anat / Hellwig, Martin 2013: *The Bankers' New Clothes*, Princeton University Press, pp. 187. - Avenir Suisse 2014: Empty Hopes for Full Reserve Banking, by Rudolf Walser and Jörg Baumberger, www. avenir-suisse.ch/en /36345/empty-hopes-for-full-reserve-banking.

²³ Such disaggregation has been suggested by Werner (2005 185) and Huber (1998 224) in the form of subdividing equations of circulation into a financial and a real-economic hemisphere. A similar approach by Hudson is to introduce a separate FIRE sector (Finance, Insurance, Real Estate) into public-private sector balances. Cf. Hudson, Michael 2012: *The Bubble and Beyond*, Dresden: Islet Verlag. - Hudson, Michael 2006:

question as to which form and to what extent financial transactions are useful and indispensable, and in which form or volume they become economically harmful.

Against this background, one cannot expect monetary policy alone to solve the problem. A comprehensive answer also involves additional banking and financial policies. Nonetheless, sovereign money *does* contribute to solving the problem. A GDP-commensurate money supply will, by itself, contribute to achieving a much better balance between the real-economic and the financial circulation of money because a GDP-disproportionate speculative demand for money could no longer be met by instant, all-too-cheap additional bank money. Speculative leverage would quickly become rather expensive, thus discouraging leverage for gambling and betting on a large scale. Without leverage-funded self-propelling financial bonanzas, investment banking and casino-style speculation will no longer automatically offer the quick-buck prospect of elevated returns in comparison to real-economic investment.

Furthermore, even if a sovereign-money system does not by itself entail guidance on the uses of money, it entails control of the first use of newly created money. As far as new money is issued in the form of genuine seigniorage, parliament and government decide on the first use of that money. When, alternatively, new money is issued by way of central-bank credit to banks, it is basically up to the respective banks how they use the money. In general, the uses of money are outside the scope of monetary responsibility, and are in fact up to private and public households, companies, banks and other financial institutions. One could nevertheless think of conditionality of central-bank credit. Prior to the radical deregulation of financial markets from the 1970–80s, purpose-related ceilings of bank credit set by the central banks were not uncommon. In comparison, conditionality of central-bank credit is less intrusive, but is still a borderline case between monetary policy and more far-reaching banking and financial-market policies.

It needs to be seen, though, that additions to the money supply in a sovereign-money system will count for much less than the creation of primary bank credit today. Control of the quantity of money alone might therefore not yet do the job, so that additional measures would have to be considered, such as some sort of credit guidance, not only applying to the use of primary central-bank credit, but to particular lending and funding activities of banks and financial institutions. Or, to quote another example, some macro-prudential measure – as is now jargon for regulation – might overrule bank lending for financial leverage. Again, however, such guidance and regulation is not part of monetary reform and would have to be implemented separately. It is advisable to respect the boundaries of monetary functions, which entails not to overload the program for monetary reform and not to overstretch it into still more far-reaching banking and financial-market policies.

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