Sovereign Money in Critical Context
Explaining monetary reform by using typical misunderstandings

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Intro

As sovereign-money reform has been gaining more attention, more economists from various schools of thought have felt called upon to comment on it. As expected, mainstream commentators consider monetary reform unnecessary, assuming that reform measures already adopted, such as higher bank equity, were adequate. As was also to be expected, Neoaustrians reject a central-bank monopoly on money, seeing it as statist centralism falling prey to mischievous politics.

What has come as quite a surprise are the critics from among the political left who are beholden to demand-side Keynesianism, trade-union and welfare economics, or some sort of Marxism. In a recent blog *Why banks must be allowed to create money,* Ann Pettifor spoke out against Martin Wolf's call in the *Financial Times* for stripping banks of their power to create the money supply.[1] Pettifor expressed her apprehension that a transition from bank money to sovereign money would result in credit shortages and high interest rates, choking off the economy (which is in line with what most mainstream economists presume).[2]

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[1] Pettifor, Ann: Out of thin air - Why banks must be allowed to create money. http://www.primeeconomics.org/?p=2922, 25th June 2014. – Wolf, Martin: Strip private banks of their power to create money**,** *Financial Times*, 24th April 2014.
[2] Similarly Wray, Randall 2012: *Modern Money Theory*, Palgrave/Macmillan, pp.79.

Some Keynesians see sovereign-money reform as supply-side monetarism, and control of the money supply as a present-day equivalent to the gold standard.[3] Positive reactions from the political left do also exist. For example, *Libération* in France ran a story in favour of the Chicago Plan Revisited.[4] But others, such as *taz* in Germany and *WOZ* in Switzerland, have repeatedly featured articles criticizing sovereign money as a supposedly deflationary project of tight money that benefits the rich and impoverishes large parts of the population. Supporters of Modern Money Theory even see fractional reserve banking as a wonderful machinery that does not need to be changed—which is fully in accordance with mainstream views and present-day banking doctrine.

This adds up to a bizarre left-wing defence of the present money system as it is at the heart of financial capitalism. The left-wing defenders of the banking industry's monetary privileges criticize a fictitious tight-money high-interest regime benefitting the rich, while at the same time ignoring how the present loose-money, low-interest, high-debt regime directly feeds the GDP-disproportionate accumulation of financial assets, resulting in a distributional bias that actually benefits capital revenue at the expense of earned income.

Many economists today, basically from all schools of thought, have become critical of credit and debt bubbles leading into crises, but they stop short of recognizing the monetary system as the root cause of those credit and debt bubbles.[5] They belittle or even consider irrelevant certain dysfunctions of the present system of fractional reserve banking, in particular, overshooting money supply, inflation, public over-indebtedness and lack of money safety, and, again, they do not attribute these problems to the inherently unstable and unsafe monetary system of fractional reserve banking. Not sufficiently understanding the links between money and finance seems to be part of the legacy of neoclassical economics as much as of the political left, since Marx, in the third volume of *Capital,* in vain tried to come to grips with the controversy over currency and banking theory and their relevance to the economy.

Misrepresentations of the sovereign-money approach

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.[6] Apparently not all commentators are taking the

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[3] Cf. Flassbeck, Heiner / Spiecker, Friederike 2014: Vollgeld, das moderne Gold. http://www.flassbeck-economics.de/abo-preview-unser-geldsystem-xiii-vollgeld-das-moderne-gold.

[4] Benes, Jaromir / Kumhof, Michael 2012: The Chicago Plan Revisited, *IMF-working paper*, 12/202 August 2012, revised draft February 2013. Also cf. sovereignmoney.eu/100-per-cent-reserve-chicago-plan.

[5] Being more or less critical about the financial system, but largely uncritical or even affirmative of the monetary system, is also typical for Modern Money Theory. Cf. Huber, Joseph 2014: Modern Money Theory and New Currency Theory, *Real-World Economics Review*, no. 66, 2014, 38–57. http://www.paecon.net/PAEReview/issue66/Huber66.pdf.

[6] 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,

time to get to know what it is all about, with the result that the circulated information often contains a number of typical misrepresentations.

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 based on quantity theory of money in combination with analyses of monetary circulation and financial cycles. Both pursue the same general goals such as full control of the money supply in order to tame inflation, asset inflation, bubbles and crises, and to generate a decent amount of seigniorage for public budgets. Under technical and operational aspects, however, 100% reserve and plain money is about two different systems, with 100% reserve for the most part not really achieving what it promises to achieve.[7]

Another typical mistake is to over-interpret the meaning of putting an end to bank money as curtailing important banking functions such as making loans, or account management and payment services. It is the banks' role to fulfill such *financial* 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.

One related mistake is to maintain that account management and payment services will be taken from the banks to be integrated into the central bank. Certainly not. Customer money accounts will be taken off the *banks' balance sheets*, because the money in those accounts is the property of the customers, not the property of the service-providing banks. But banks can continue with managing customer accounts and payments.

Similarly, some assume that sovereign money is about nationalization of banking. Again, this is wrong and misses the point - which is nationalization of money, i.e. extending the existing monopoly of coins and notes to money on account, thus also including money on mobile storage (e-cash).

Former socialist programs included the nationalization of companies, of banks in particular. The historical lesson to be learned was, however, that the important thing is what banks

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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).

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

actually do and how they do it, including whether and how they create bank money, rather than the question as to whether banks are private, co-operative, municipal, or state-run.

Having a certain mix of those forms is certainly not a bad thing. In this respect, current initiatives in the US for creating public banks are understandable to a degree, particularly within the setting of a banking sector that consists of a few large global banks ever more detached from real-economic needs on the local level.[8] Seen against the background of historical experience, however, the expectations of public banks are clearly too high. Moreover, seeing public banks, or business models of green-ethical banking, as an alternative to monetary reform, makes for an unnecessary and unwise political divide and is a distraction from what is of utmost importance at this point in the history of money and banking, i.e. a transition from bank money to sovereign money, or to put it more precisely, the second regaining of monetary sovereignty by replacing bank money on account with central-bank money on account. The first regaining was in the 19th century when an overshooting supply of private banknotes had increasingly marginalized government coins, so that, in order to regain control, those private notes had to be replaced with central-bank or government-issued notes .

Scope of monetary reform. Monetary, fiscal, financial, and economic policies

Sovereign money, it should be noted, is about *monetary* reform, not about some wholesale re-structuring of the *banking* industry, of *financial* markets, or of public households' *fiscal* concerns. In a sovereign-money system, banks can 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. Equally, seigniorage in a sovereign-money system can be expected to be much higher than present central bank profits under fractional reserve. The one-off transition seigniorage coming with sovereign money can even help to pay down sovereign debt to much lower levels. Monetary reform, nevertheless, is no answer to fiscal problems of the state. It cannot be a substitute for taxation, and it will not release politicians from the tedious task of ensuring balanced budgets.

Some people do not want to know about sovereign money because it does not by itself solve this or that special problem of banking, finance, and public households. Indeed, monetary reform does not make redundant a number of banking and financial reforms such as transparent accounting and balance sheets, re-regulation of certain financial contracts and trading practices, higher capital requirements, improved procedures of bank resolution, or elements of separate banking. It would equally be misconceived, however, to think such reforms would make monetary reform redundant.

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

The typical case in point is banking regulation according to Basel III (bank equity and liquidity requirements in relation to various classes of assets and liabilities). Basel III supporters believe that implementing such higher requirements would solve the problem.[9] However, one has good reason to expect all 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 much leaner and less bureaucratic than they are. Most of the reform measures presently implemented will ultimately prove to be ineffective as long as fractional reserve banking continues to exist. To become effectual, and lastingly so, measures of banking and financial reform need to be based upon a stable, well-managed monetary system.

One reason for misrepresenting monetary reform seems to be neglect of the difference between a split-circuit reserve system and a single-circuit money system. As a consequence, commentators overlook the fact that money creation and money lending/spending are two different functions, but carried out *uno actu* 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 there can be a debt-free money base or money supply.

According to currency teaching, monetary and banking functions ought to be kept apart, as much as are monetary and fiscal functions. The reasons for this separation are functional as well as constitutional. 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 control the quantity of money. Lending and spending money, however, ought to be left to the individual actors (state, corporate, private).

More generally speaking, there are conflicting political-economic views of what monetary, fiscal, financial, and other economic functions more precisely entail, and how the interplay between related policies should best be institutionalised. Sovereign-money reform does not by itself forestall that complex matter, except, as explained, the strict separation of money and banking, i.e. keeping apart monetary and financial functions. For the sake of good monetary policy, sovereign money and central banks should equally be kept free of demands from fiscal and more general economic policies. Unavoidably, however, some interdependencies and some overlaps will always exist. The matter will thus remain controversial to a degree, and differ over time and currency area. Monetary reform should not try to, and in actual fact cannot, predetermine things in this respect.

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

As regards the scope of monetary reform, an often raised critical question concerns how to ensure that sovereign money is channelled into useful financial investment, geared towards

[9] As an example cf. Admati, Anat / Hellwig, Martin 2013: The Bankers' New Clothes, Princeton University Press.

real-economic rather than casino-style purposes. This is a question of utmost importance indeed. It would, however, be beside the point to expect monetary policy alone to solve the problem. A comprehensive full answer also involves additional banking and financial policies.

Nonetheless, sovereign money by itself *does* contribute to solving the problem. A well-measured money supply will, by itself, contribute to achieving a much better balanced interconnectedness between the real-economic and the financial circulation of money because a disproportionate speculative demand for money could no longer be met by instant, all-too-cheap additional bank money, but it would quickly become rather expensive, thus discouraging leverage for gambling and betting on a large scale.

Furthermore, even if a sovereign-money system does not, per se, 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 as genuine seigniorage, parliament and government decide on the first use of that money. When 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 public budgets, companies, households, and banks and other financial institutions. One could think of conditionality of central-bank credit. Before the radical deregulation of financial markets from the 1970–80s, purpose-related credit ceilings set by the central banks were not uncommon. Their doing so, however, represents a borderline case between monetary and financial policy.

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 all lending and funding activities of banks and financial institutions, or such as some macro-prudential rule – as is jargon for regulation – that might overrule bank lending for financial leverage. Again, however, such general guidance and regulation is not part of monetary reform and would have to be implemented separately. Whatever the favourite ideas of individual monetary reformers may be, a common understanding exists not to overload the program for monetary reform and not to overstretch it into still more far-reaching banking and financial-market reforms.

All participants in the discussion 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).[10] They have not even raised the question as to which form and to what extent financial transactions are indispensable and useful, and in which form or volume they become economically harmful. Keynesians and Marxists may be aware of the problem, but neither do they have viable answers.

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

Equally unsettled is the question about to which anchor of scarcity to tie the money supply. In this respect, likening a sovereign-money system to a gold standard, or to any other commodity standard, is misleading again. The economic value of money—its purchasing power—derives from the overall productivity of the economy, from the entirety of goods and services on supply and demand, but cannot be tied to the price of single commodities taken as a proxy for all of these goods and services, all the less so when that price is administered rather than market-borne. Building upon quantity and circulation theory of money, the monetary problem is about a GDP-commensurate money supply that avoids inflationary and asset-inflationary abundance as well as deflationary scarcity of money.

Sovereign money will be tied to the dynamic target of potential productivity growth, i.e. the growth potential of the economy at full capacity. GDP growth will probably continue to serve as a central indicator, even though as just one among others more. Should growth one day peter out, no more additional money would have to be created. In contrast to present credit-and-debt money, debt-free sovereign money is perfectly compatible with scenarios of ongoing growth as much as with possible no-growth scenarios. Managing the money supply in correspondence with the economy's real growth potential can only be achieved if money creation is separated from banking, and 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 entity that pro-actively decides on the entire money supply. This puts central banks in the role of vicarious agents, re-acting 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

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[10] 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. - Hudson, Michael 2012: *The Bubble and Beyond*, Dresden: Islet Verlag. - Hudson, Michael 2006: Saving, Asset-Price Inflation, and Debt-Induced Deflation, in Wray, L. Randall / Forstater, Matthew (eds.) 2006: Money, Financial Instability and Stabilization Policy, Cheltenham: Edward Elgar, 104–124. - Hudson, Michael 2012: *The Bubble and Beyond*, Dresden: Islet Verlag.

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.

Monetary reform represents New Currency Theory, but is not a mechanical replication of the historical British Currency School, just as little as was G. Fr. Knapp's theory of chartal money, or I. Fisher's theory of money circulation and financial cycles. The gold standard may have been 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 recognizing 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 lending, investing and spending, still is the far better monetary-policy approach than the reserve-position doctrine and the base-rate doctrine as they have been practiced under pure conditions of fractional reserve banking since the end of the gold standard.

The historical Currency School tried to answer the question of inflation and bubbles. At the same time, however, they did not give due attention to the complementary problem of deflation. They rightly looked for an anchor of scarcity to tie the money supply to, but gold—which seemed to be the obvious answer at the time, also given the prior bullionist debate—actually was the wrong answer, the more so as it just applied to cash, blinding out demand deposits, i.e. non-cash money. Today, the obvious candidate to serve as a monetary anchor of scarcity is the growth potential of the economy at full capacity, a dynamic target that includes some leeway between real and nominal GDP, i.e. basically allowing for low inflation rates, but not allowing for disproportionate asset inflation.

Misinterpreting sovereign money as monetarism

A common feature of left-wing criticism of sovereign money seems to be to label it as monetarism. The background for this is the confrontation between labour-friendly demand-side Keynesianism that was predominant from the 1950s to the 1970s, and the following capital-friendly supply-side economics from about 1980 up into the 2000s. The supply-side approach is commonly known as Reaganomics and Thatcherism, with regard to development policy also as Washington Consensus. These policies are characterized 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, thus, was often enough inimical to the interests of a wide range of stakeholders, in particular, marginalized segments of employees and the non-active population.

Demand-side approaches, by contrast, are rooted in earlier under-consumption theories of the business cycle, stressing, based on Keynes, the importance of effective demand by mass purchasing power. On a large scale, sufficient demand will not come from conspicuous-consumption expenditure of the well-off, but it involves 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 bureaucratization, and high levels of taxation. Beyond critical thresholds, this interference becomes paralyzing and counter-productive despite all good intentions.

Confronting supply-side with demand-side economics involves political partisanship. Neither of the two, however, makes for general political and economic theory. In this respect, the confrontation might rather be seen as a deadlock. From a systemic point of view, the economic factors attributed to each side are, trivial to say, complementary, acting as mutually both enhancing and limiting factors in a cybernetic supply-and-demand loop.

It should, moreover, be noticed that the confrontation between supply-side and demand-side strategies basically does not include a specific monetary aspect. Correspondingly, sovereign money by itself does not come with an automatic commitment in this respect. Both strategies, and any real-world compromise struck between the two, can be pursued under fractional reserve banking as well as in a sovereign-money system. Within the boundaries set by a sovereign-money system itself, capital-friendly demand-side policy can as much put its mark on it as labour-friendly supply-side policy, similar to, say, parliamentarism which entails changing majorities. A properly run sovereign-money system, however, will prevent overshooting credit and debt bubbles, thus curbing excessive asset inflation (financial-market capitalism) as much as excessive government debt (welfare statism).

Friedman's attitude was not totally different, but he contributed to developing the supply-side doctrine. Monetarism thus was placed straightaway in the supply-side camp, although—in view of the early Chicago School (Knight, Simons, Viner, and others)—there was no necessity inherent to the matter. But Friedman was a celebrity at the time, and the narrative of the supply-side demand-side discourse thus confronts Friedman-style supply-side monetarism with demand-side Keynesianism ever since. This does not do full justice either to Keynes or to 'monetarism' if stripped from Friedman's supply-side bias. 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, although one can have doubt whether Keynes himself would have approved of the realities of permanent loose-money deficit spending and debt accumulation.

As regards sovereign-money reform, demand-side fixation on supply-side Friedman-style monetarism misses the more general and historically more far-reaching point, which is quantity theory of money in combination with analyses of money circulation and financial as well as economic cycles. According to monetary quantity and circuit thinking – going back at least to the physiocrats and to monetary innovators around 1700 – an increase in the money supply enables the actualization of an economy's productive potentials, whereas if such potentials are lacking or have fully been exploited, additional money supply will result in inflation, or asset inflation, in terms of both quantities and prices of financial assets.

In reverse, a shrinking money supply will induce deflation, with under-utilization of *all* economic factors. The problem with deflation is not that consumers won't consume because they expect goods and services to become still cheaper. Consumers do not normally behave like financial-market gamblers. The problem is that lower prices—already a result of a cyclical downturn with debt deflation—mean shrinking receipts, adding to stagnant investment, more unemployment and a decline in wages. In the short run, deflation is to the benefit of consumers and money owners in general, while, over time, because of shrinking production and mass purchasing power, it will result in general decline.

The quantity theory of money, one of the oldest and most proven elements of economics, is as essential as ever. Accordingly, the key to sound money and stable finances is to gain control of the money supply. 'Money matters' was coined by Friedman, but the meaning has basically been shared by so many economists with otherwise rather diverse views, including Keynes. His position on the quantity theory of money was definite: 'This theory is fundamental. Its correspondence with facts is not open to question'.[11] Some later Keynesians seem to have skipped that.

Among those who basically adopted quantity theory are both the Currency and the Banking School of the early 19th century. Rhetorically, their controversy was not about tight or loose money, but about which regime would best achieve the optimum quantity of money, i.e. a chartal system or a free banking system. Further teachings include the state theory of money of the late 19th century (chartalism again), classical and neoclassical economics (which tend to be banking-doctrinaire, but leave no doubt about quantity theory), the Austrian School of old and the Neo-Austrians today, I. Fisher's circulation and cycle theory, the early Chicago school (that was behind the 100%-reserve approach, including young Friedman), and up to

[11] Keynes, John Maynard 1923: Tract on monetary reform, London: Macmillan, 74.

much of present-day Postkeynesianism. Even A. Lerner, the 'functional-finance' trailblazer of never-ending deficit spending and debt accumulation, felt obliged to pay lip service to inflationary limits to money-printing as do, though just incidentally, his present-day followers in Modern Money Theory.

The relevant aspect under which all of these schools of economic thinking differ, is the question as to whether money is neutral. For example, classical and neoclassical economics treat money as a mere medium of exchange, on markets that are seen as barter systems. Money at this seems to be a 'neutral veil' on the economy, in that investing and spending more money will lead to bigger markets, while too much money, i.e. active money beyond productive capacity, results in inflation without further structural impact. Markets for goods and services, labour, and capital, are analyzed in the same way. To the Austrian and Neo-Austrian Schools, by contrast, an increased money supply has a structural impact, in that it changes price relations and patterns of allocation and distribution. Money thus is non-neutral. Outside economic model worlds, no one doubts non-neutrality of money. Following legal powers to direct, money is the other equally powerful instrument of rule and control. This not only applies to the allocation and distribution of funds, but also to the creation and first use of money.

Friedman's view is often identified with a neoclassical position, apparent, for example, from his famous helicopter that drops lots of banknotes down to the people, which simply would result in a rise in prices. At the same time, however, he maintained that the money supply was of structural importance to various factors that play a role in economic cycles. On this basic point, the Austrian School, Keynes and Friedman's monetarism are not really at odds with each other. They differ on how the impact takes shape. For example, Friedman's notion of the 'non-accelerating inflation rate of unemployment' is but another way of saying that full employment, supposed to induce higher wages and prices, adds to inflation; which is one-sided supply-side doctrine as long as there is no plausible productivity-based theory about the optimum repartition of capital revenue and earned income.

Keynes established the idea of a monetary theory of production. His work, nevertheless, remained somewhat ambiguous about the creation of credit/debt and money. His attitude towards fractional reserve banking was not as critical as were Fisher and the early Chicago School, including Friedman. Keynes believed in central-bank control of banks' credit creation by way of reserve positions and base-rate policies. In the *General Theory* the equation of 'investment = savings' re-appeared 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.

The question of (non-)neutrality of money also relates to deflation. Classical and neoclassical economists tend to see this question 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. The Austrian School 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 prices). Since the Great Depression at the latest, however, most economists have been persuaded to see deflation as a general threat to production, employment and prosperity. Incidentally, Friedman and Schwartz' *Monetary History of the US* (1963) was a milestone in the process of recognizing the counter-productive results of deflationary central-bank policies – one hint to the fact that both Friedman and Keynes were more complex minds and not so streamlined as the trench warfare between supply side and demand side would have one believe.

Basically, calling the problem of the optimum quantity of money and the control of the money supply 'monetarism', was not inappropriate – were it not for Friedman's ill-conceived wedding of this general and politically open notion of 'monetarism' with his supply-side views. This was in fact a big disservice to his monetary cause. His second 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 (causing a shift to equally ineffective short-term base-rate policy. Friedman then contented himself with demanding deposit interest to be paid on demand deposits). One other error of his was his preference for mechanically rule-bound policies, in particular a fixed money growth rule of annually 3–4 per cent – as if a present-day central bank were capable of controlling banks' annual additions to the quantity of money, and as if monetary input were the only and one-way cause of economic and financial cycles, as Austrian-school scholars believe, rather than see them as variables in a feedback loop that itself is part of much wider system dynamics. 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 remains the simple core of truth, which fact made Friedman's monetarism connectable. It should not be forgotten that monetarism was preceded by high inflation, temporarily in the double-digit range, from the 1950s through the 1970s. Thereafter, since its decline in the 1980s, inflation has all the more been replaced by asset inflation and crises-prone credit-and-debt bubbles ever since. One-eyed demand-side Keynesians would do better to face this reality head-on also as a *monetary* problem rather than to discredit it as monetarism.

As regards sovereign money, its mission is full control of the money supply in order to achieve a growth-commensurate quantity of money in circulation, avoiding the cliffs of loose-money inflation/asset inflation on the left as well as the shoals of tight-money deflation on the right.

Assumptions of money-printing and central-bank failure by neoaustrian and neoclassical critics

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 in a sovereign-money system and to pursue flexible monetary policies. Ultraliberals, in particular 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.

Neoaustrians tend to demonize central banks and government, while idealizing at the same time 'free banking' and 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 central bankers and other humans under stress and strain. History is full of mischief under various political regimes and institutional arrangements. Take, however, 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 spirit of the time than other contemporaries. Nevertheless, most court judgements appear to be fairly reasonable applications of the law. Some may be criticised, but are observed, and all in all the system works well enough. 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 the bank of the state and continue to be the bank of the banks. They are law-bound in fulfilling their monetary responsibilities, but not subject to government directives and fiscal interests, nor to deference to the banking industry and financial interests.

Old and new Austrians and most neoclassical economists have great difficulty in understanding currency theory and in recognizing that currency, money, and seigniorage are sovereign prerogatives of constitutional importance. In this respect, they are pure banking theorists, proclaiming money creation as a citizen's right and as a cornerstone of economic freedom. This point of belief is where first Menger's and lateron Hayek's lucidity reached its limits. In the real world, and for transactional reasons alone, successful free citizen 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.

Another aspect of ultraliberal criticism is accusing a central-bank money monopoly of introducing bureaucratic centralism with its pretense of knowledge, as Hayek put it. Yes, a central planning bureaucracy normally does not by far know as well as markets know. This is certainly one of Hayek's lucid insights. What he and his followers did not want to know, however, is banks' and the capital markets' perpetual failure to reach some point of self-limiting equilibrium, for modern fiat money can be created out of nothing at the stroke of a key. Hayek set his hope on banking competition, but this would not solve the problem better than today because the banking sector's use and misuse of its privilege to key-strike money into existence is a collective practice – which fact is why most Neoaustrians want to limit the money supply by a new gold standard.

Accusing 'central' banks of 'centralism', and sovereign money of establishing a system of bureaucratic central planning, is a far-fetched 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 are 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).

But how can the central bank know how much money will be adequate in a half year's or one year's time? It cannot and need not know exactly. Mathematician John von Neumann's motto '*Better broadly right than precisely wrong*' is a good guideline not only for central banks. Complex systems have tolerances, and a few ticks more or less will not change the general level of interest.

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 in the fractional reserve system 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-active 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.

Meeting these requirements is no trivial task, but it is manageable, in a discretionary rather than mechanically rule-bound way, all the more, as monetary policy in a plain sovereign-money system has no monetary transmission problem from central bank to banks as is the case in the present fractional reserve system. Financial and business cycles will still exist to some degree, with a little delay between monetary and financial/real-economic givens. But monetary policy will fully reach economic actors and markets.

Assumptions of money and credit shortage by left-wing Keynesians and Marxists

Apparently, criticism of sovereign money follows a pronounced left-wing right-wing pattern. While Neoaustrians and similar ultraliberals are suspicious of loose money and inflation in a statist regime, left-wing Keynesians and Marxists come up with projections of tight money and a deflationary scenario of untamed capitalism with low wages and high interest.

Within the latter scenario, critics from the political left warn against an impending money and credit shortage. This criticism is based on wrong conclusions drawn from a basically correct understanding of the role of savings for financing loans and other banking transactions in a sovereign-money system. Savings, in a broad meaning of the term, include all items in today's near-money aggregates (M2/M3). In the present system, 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 banks have to pay for this is some low interest on customer deposits, which is more than offset by higher lending rates or 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 they 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, i.e. liquid money in exchange for a claim on money. Before being able to transact, banks have to earn or take up the money, through all available channels: from own and external customers, from other banks and financial institutions, or from the issue of debentures and maybe equity. Furthermore, it is often forgotten 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 quite naturally 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 freely be created at any amount, and given that central banks in a sovereign-money system have full 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 – definitely big enough to be GDP-proportionate, not for serving disproportionate bubble demands, no matter whether these originate in real estate, stocks, sovereign bonds, commodities, or derivatives.

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, however, money and bank credit are two separate things. Under present-day conditions of fractional reserve, they are identical, and credit shortage and money shortage are one and the same. Cyclically stagnant or even shrinking credit=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.

Banking-minded defenders of the present system love to liken it to a 'breathing organism' that is 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.

Availability of money does not automatically translate into availability of credit (loans and other ways of financing). Actors can spend their money on capital expenditure or on consumer purchases, on some sort of financial investment, or they can simply hold the money. In Keynes, liquidity preference became a central factor. To a certain extent, preferences are also of a cyclical nature. Since the devastating impact of the Great Depression of the 1930s, a variety of interventions have been developed for getting investors and consumers to spend rather than to hold their money. Boundaries between economic, fiscal, and monetary policies have more or less been blurred in the process.

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 once in a while. Normally, though, present-day preoccupation with growth policies will become less important, and 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 a real problem. Savings, besides being one source of funds, will simply be useful buffers in various situations of economic and private life. If there were, nonetheless, a credit crunch (shortage of lending), it would not be caused by a money shortage and should thus not be dealt with by monetary policy, but by other actors and different measures.

This is not the place to discuss means and ways of economic policy. Suffice it to say that in a sovereign-money system, the varying degree of behavioural preferences is not correlated with the existing stock of money, but uniquely with behavioural preferences in general, and somewhat changing preferences in the course of real-economic and financial cycles in particular. Should governments continue to feel under political pressure to do something about it, this is primarily a task of *economic* policy. It may include, for example, structural or industrial or market policy, innovation policy, labour-market policy, income policy, welfare policy, etc. It may affect *fiscal* policy as far as questions of balanced taxation are involved. But it can no longer be seen as a question of *monetary* policy. Governments would probably face difficulty carrying on with perpetual high deficit spending and debt accumulation. If they were trying nonetheless, this would come with correspondingly high borrowing costs, analogous to disproportionate demand for financial leverage. Such a perspective is clearly worrying to left-wing demand-side as well as to ultraliberal supply-side conservatives.

Boundaries between *economic* and *fiscal* policies are difficult to draw and to maintain; but less so between these two and *monetary* policy. Under fractional reserve and Keynesian-style interventionism, however, fiscal and monetary policy have become closely intertwined because deficit spending and debt accumulation are immediately linked to primary credit/debt creation = money creation. It thus 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 understandable. Today, almost a hundred years after the Great Depression, one has reason to wonder whether the era of such muddling policies of little 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 much higher level of productivity and wealth. Free-handed money printing and accumulation of ever higher mountains of debt can never be a sustainable solution.

To demand-side Keynesians and Marxists, such considerations, rather than being an insight, are an imposition, and this fact is a major reason for left-wing opposition to monetary reform. A well institutionalised sovereign-money system not only threatens the casino section of the financial economy, but also the unholy alliance between many a government's disproportionate appetite for debt and the banking industry's readiness to print them basically unlimited amounts of money—money that sooner or later also ends up in the global casino.

Furthermore, fractional reserve banking has, in fact, not only be been instrumentalised for purposes of fiscal and economic policy, but equally, maybe even more so, for banking and financial-markets' private business policies, in particular geared at real estate and investment banking. Both channels – disproportionate investment banking and MFI financial leverage, as well as government debt funding – have been justified for many decades on the grounds of bringing about growth, in particular, during recessions, bringing investors and consumers out of their shells. 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 proportionately from earned income to capital revenue.

Most socialists and labour-unionists have become realistic enough to think twice on public deficit spending and debt. Some others, however, have taken the opposite path of declaring sovereign debt as monetarily and financially irrelevant and economically only beneficial. A case in point is Modern Money Theory (MMT).[12] On the basis of thinking in terms of much over-'consolidated' private-public sector balances, which actually represent imbalances, MMT backers have developed self-deceptive conclusions on sovereign debt and sovereign solvency. Sovereign debt is said to pose no problem because it equals private fortunes (strangely enough, not asking whose); moreover, public expenditure would equal money

[12] 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. For critical discussion 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/fileadmin/pdf/ working_papers/ working_papers_251-300/WP279.pdf.

creation as much as levying taxes would equal money deletion (analogous to reserve banking); sovereign debt would equal sovereign money, and a sovereign government allegedly can create as much of it as it deems decent. A sovereign government thus is always solvent and need not default. Ask any bond or forex trader what they think.

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.

Expectation of too-high interest levels

If one is afraid of tight money, fear of high interest rates suffocating economic activity follows. This is, so to say, the supply-side employment concern of demand-side scholars. If, however, there is a GDP-proportionate optimum quantity of money rather than tight or loose money, and a sufficient supply of loans rather than overshooting or insufficient lending, 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 or crisis, does not automatically induce the desired effect of new loans being taken up for capital and consumer expenditure, which would stimulate growth and employment. This will not happen until over-investment has far enough been written down, and debt has far enough been 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. Another aspect of left-wing criticism, thus, may be suspecting sovereign money of questioning cosy but problematic habits of economic, fiscal, and monetary policies; which questioning is certainly not unfounded, and applies to the supply side as much as to the demand side.

Part of the picture is to rope monetary policy in for purposes of growth and employment policies. This, too, is not specifically Keynesian. It is done, to a larger or lesser extent, by most governments and central banks, the mandate for this often being cast in law or central-bank statutes. The ways pursued are either putting more money into circulation, for example through quantitative easing, or trying to ensure low interest rates. Both approaches are also being pursued in the present crisis. However, the main result of providing cheap central-bank money and issuing additional money by absorbing sovereign bonds is, once more, simply deferring rather than solving the problems of over-investment and over-indebtedness. In this case, moreover, this primarily refers to the financial economy. 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.

For such policies to work, two preconditions for effective transmission of central-bank stimuli would have to be fulfilled. The one is that central-bank reserve positions exert control over the supply of bank money. The other one is that central-bank base rates have the lead in 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. In particular, they not influence banks' credit and deposit creation. Just to the contrary, it is the banks' pro-active 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 transactions and the economy. The banks, on the other hand, need to pay any interest on central-bank money, because their demand for reserves and banknotes is price-*in*elastic. Additional deposits created by the banks in advance must fractionally be re-financed. Whether this is done at lower or higher base rates and interbank 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 on the one hand are always much higher than rates on fractionally obtained central-bank money plus paying customers deposit interest, on the other hand.

As a result, base rates do not lead or determine the level of interest. Rather, base rates reactively follow the range of interest rates, as these are largely determined on capital or asset markets. The savings-glut hypothesis of low interest rates, or call it asset-bubble hypothesis—i.e. very low interest rates caused by an over-abundant supply of funds coinciding with very low demand due to the financial crisis—is much more consistent with the facts. One thus has to conclude that present-day base-rate rituals 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.

Trying to administer interest rates is not exactly market-compatible anyway. Interest rates following from the supply of and demand for money are meaningful market signals. They should not be distorted, especially not in a sovereign-money system. They must rise and fall according to the market situation. If bond yields of euro states from 2000 through to 2008 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 scarcity.

In a sovereign-money system, interest-rate policy would foreseeably not be a central feature, because the supply of central-bank credit to banks, accordingly central-bank interest rates, would continue to be of minor importance. For the rest, interest rates would not need to be administered. They follow straight from the GDP-commensurate quantity of the money supply, 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. The assumption that a sovereign-money system would induce an unfavourably high level of interest rates is actually one taken out of thin air. Sovereign money, as said before, is no gold standard.

In a sovereign-money system, interest rates will continue to rise or fall, to a degree, in the rhythm of business and financial cycles. Accordingly, a central bank's monetary policy will continue to reflect such cycles. Today's base-rate policy 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 cycle. 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. With sovereign money, in contrast, a central bank will add money to the upswing (before and upon the fact), and stop adding money, or even absorb some money, in the downswing. Sovereign money thus opens up the perspective of effective monetary quantity policies of the steady hand.

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