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Financial Stability and Money Creation

A Review of Morgan Ricks: The Money Problem

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Abstract:

Should money issuance be a licensed privilege, and if so, who should issue money? Morgan Ricks argues that free-wheeling money issuance by non-licensed shadow banks was a major factor behind the global financial crisis. Still, the regulatory reform agenda after the crisis has mostly been directed at banks (with a few exceptions). This has led to an enormously complex body of regulations that threatens to bring traditional banking to its knees. Ricks would instead restore money issuance as a privilege and leave other financial institutions with a lighter regulatory regime. He is not, however, in favor of narrow banking – as favored by Irving Fisher – but would leave credit allocation with the private banking sector. In this way his proposals are both radical and conservative. He brings a refreshing look to the regulatory debate, and the book is full of novel insights. His discussion of banks and deposit regulations should be required reading for all bank regulators, although his proposal may fall on barren ground in the current political environment. Nevertheless, the book should serve both as a primer for future monetary reform proposals, but also as a starting point for a pragmatic bipartisan debate about financial reform today.

Keywords: financial regulation, banking regulation, money and credit

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The Money Problem. Perspectives on Money, Banking and Financial Regulation

- 1 “Banking, Money and Credit: A Systemic Perspective” by Yuri Biondi, <https://doi.org/10.1515/ael-2017-0047>
- 2 “A Simple Fix for a Complex Problem? Comments on Morgan Ricks, *The Money Problem: Rethinking Financial Regulation*” by Margaret M. Blair, <https://doi.org/10.1515/ael-2017-0042>
- 3 “Morgan Ricks: “The Money Problem: Rethinking Financial Regulation”” by Philippe Moutot, <https://doi.org/10.1515/ael-2017-0029>
- 4 “Financial Stability and Money Creation: ” by Thorvald Grung Moe, <https://doi.org/10.1515/ael-2018-0010>
- 5 “The Money Problem: A Rejoinder” by Morgan Ricks, <https://doi.org/10.1515/ael-2018-0018>

1 Introduction

The bankruptcy of Lehman Brothers in September 2008 sent shockwaves through the financial markets. A massive run on US money market funds followed, short term loans were called, and major financial institutions faced vanishing liquidity. The Federal Reserve and Treasury stepped in to avoid a complete meltdown. Morgan Ricks describes this scramble for liquidity as a classic coordination game characterized by self-fulfilling bank runs in his recent book “The Money Problem”. But he claims that his analysis of bank runs is fundamentally different from the canonical model of Diamond and Dybvig (Diamond & Dybvig, 1983). Instead of their highly abstract model with banks but no money (Ricks, 2016, p.90), he wants us to think of a bank runs within a different game theoretic model (“the stag hunt”, p. 66), where the existence of money-claims leads to unstable and multiple equilibria.

The growth in money-claims (or short-term funding) is, according to Ricks, the main source of instability in our financial system, but surprisingly little has been done to address this vulnerability. Most of the regulatory reform after the crisis has dealt with regulating deposit-issuing banks, while relatively little has been done to rein in the issuing of money-equivalents from the shadow banking sector.¹ The extraordinary expansion of shadow banking credit has rather been supported by preferential bankruptcy treatment and lax rehypothecation rules (Perotti, 2013).

The complexity of banking regulation reforms has been driven by vague concepts such as systemic risk and financial stability, while retaining the skeletons of the internal risk models that were discredited during the crisis (Bayoumi, 2017). Part of the problem, according to Ricks, is a confused view of banking that primarily considers banks as “intermediaries”. This underplays their special role as issuers of money equivalents and elastic suppliers of credit. Following the financial intermediation view, banks become one among many financial institutions that do essentially the same thing: *financial intermediation*.²

Ricks wants us to focus on the real problem of financial instability: panics and runs in the money markets. Addressing this head on could simplify and scale back the staggering complex regulation for other financial institutions. His proposal for a reformed monetary system would see banks and most money market funds regulated under the same umbrella as “Member Banks”. They would issue a new “r-currency”, with full government backing. Other financial institutions would be prohibited from issuing any short-term instruments.

Ricks proposal combines elements of 100 % deposit insurance (Black, Miller, & Posner, 1978, p.390) with a ban on short-term financing for investment banks and broker-dealers (Simons, 1936, p.17). Licensed member banks in his new system will, however, retain their lending capacity, so money will be lent into existence as today.³ Ricks claims that private investment specialists (in member banks) will allocate capital better than the government (Ricks, 2016, p. 16). Commercial banks would thus retain a key role in his reformed system, whereas investment banks would have to shift to longer term financing.

Ricks proposal is both radical and traditional. Restoring the money issuing privilege of banks is a noble objective but will certainly face massive resistance from investment bankers on Wall Street. As Blair observes: “A license to engage in banking is literally a license to create money” (Blair, 2017, p.3). On the other hand, Ricks situates his proposal well within the mainstream view of private credit allocation, independent central banks and balanced budgets, thus preserving the current division of labor between private and public credit.

Since the book appeared two years ago, the Basel reform process has been finalized (FSB, 2017a) and the US Government has started to dismantle Dodd-Frank legislation. There certainly does not appear to be great appetite for new legislative initiatives right now, especially along the lines proposed by Ricks.⁴ However, short term financial markets remain fragile and regulators are quite concerned over potential liquidity shocks, ref. the current focus on OTC derivative markets and the resilience, recovery and resolvability of central counterparties

(FSB, 2017b). His proposals may seem far off today, but another financial crisis could swing the pendulum back towards his blueprint for monetary reforms. A thorough reading of Ricks book is therefore worth the effort.⁵

In the following I will first sketch out Ricks core thesis and outline his blueprint for reform. I will then review some aspects of his reformed system and relate them to current regulatory discussions. Finally, I compare his proposal with some alternative proposals for monetary reform before I review the merit and feasibility of Ricks' reform proposal.

2 Core thesis

Ricks claims that financial instability is basically a problem of monetary system design (Ricks, 2016, p.223). The recent financial crisis was in large part a run on short-term fragile funding structures (Bernanke, 2013; Gorton, 2010) and this funding crunch was in large part the driver of the macroeconomic disaster that followed. Despite some money market fund reform and attempts by the Federal Reserve to strengthen the resiliency of the US repo market, Ricks claims that unstable funding structures remain largely intact (Ricks, 2016, p.248).⁶ Thus, "free banking" – or the ability for non-banks to freely issue short-term "money-equivalent" instruments, remains in place (Ibid., p. 259).

Ricks presents his core thesis in the Introduction – "A Design Sketch" (Ibid., p. 12–24), summarized in Table 1.

Table 1: A summary of Ricks' financial reform proposal.

<ul style="list-style-type: none"> – Our existing monetary framework is outdated and defective - and revamping it is a prerequisite to financial stability – Issuance of short-term monetary instruments by non-bank financial institutions (shadow banks) is the major cause of financial instability – Shadow banks can issue massive amounts of near-monies without a banking license, while only licensed banks can issue deposit instruments – Panics constitute far and away the biggest threat our financial system – Avoiding panics should be the predominant focus of financial stability policy – Financial instability is mostly a problem of monetary system design – We need to rethink, from first principles, the basic design of our monetary institutions
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Ricks therefore wants us to rein in the shadow banks and confine money creation to a newly designed chartered banking system (Ibid, p. 223). He claims that his proposal is less radical than it sounds, since issuing deposits always has been a heavily regulated business. Re-establishing the privilege of money creation would remove a chief source of instability and pave the way for a much simpler regulatory framework for other financial institutions.

We can stop thinking of financial instability as an endlessly complex and shape-shifting adversary. And we can reject the defeatist notion— usually stated with an air of worldly wisdom— that financial crises and their economic consequences are inevitable, that they are the price we must pay for financial capitalism. We are dealing instead with a discrete and well- defined project of institutional engineering. (Ibid., p. 263)

Ricks core arguments for financial reform can best be accessed by reading chapter 1 - *Introduction* ("A Design Sketch") and chapter 9 – *A More Detailed Blueprint*. For readers in a hurry, these two chapters will do. Additional material is provided in Part II *Design Alternatives*, where chapter 6 criticizes the risk-based capital regulation and chapter 7 discusses the moral hazard problems connected with extended lender of last resort policy, while chapter 8 describes the economics of the "public-private partnership" model (PPP), including the guiding principles for bank activities and portfolios. Specifically, Ricks also discusses why derivatives are a singularly paradoxical way of issuing money (Ricks, 2016, p.208), one that maximizes risk-taking while minimizing money issuance. Chapter 10 concludes and offer some critical observations on the limitations of the Orderly Liquidation Authority (OLA) policy in the US.

3 Blueprint for reform

Ricks provides a detailed blueprint for his monetary reform proposal; the key elements of his proposal are:

Money

- Money creation is restored as a sovereign prerogative
- Broad money consists of cash and r-currency (accounting money)
- Cash is r-currency in bearer form; r-currency is physical currency in registered form
- R-currency consists of (traditional) deposit money and bank money equivalents
- Transaction accounts (deposit money) offers no interest; money equivalent accounts could offer some interest to induce people to hold them⁷
- Licensed member banks issue money (r-currency) in exchange for loans
- Other financial institutions cannot issue money-claims or short-term debt instruments, excluding trade credits⁸
- Money supply goals are set by the government; aggregate size of member banks is entirely a function of the monetary policy goals
- All r-currency is guaranteed by the State; Government get seigniorage income⁹
- Seigniorage fees will vary to induce private managers to participate in the system
- Government gives up some seigniorage revenue to compensate member banks for operating the payments system
- No distinction between inside and outside money; both are sovereign fiat currency¹⁰

Credit

- Member banks are chartered by the government and owned by private shareholders
- Member banks primary function is to lend the money supply into circulation and to manage the payment system¹¹
- Portfolio restrictions and capital requirements apply to licensed member banks
- Member banks cannot participate in derivatives markets (apart from risk-reducing hedging)¹²
- Portfolio restrictions need to be lenient enough to accommodate the desired money supply
- Portfolio restrictions and (simple) capital requirements needs to be calibrated to neutralize incentive problems connected to full government guarantee

Governance

- Reformed system could be operated by a monetary authority with a dual mandate, for example full employment and price stability (but no need for a central bank)
- Separate agencies needed for regulation, supervision and insolvency
- No need for settlement system in central bank; all payments settled in r-currency
- Some refinancing open-market operations in r-currency might be required, including sale and purchase of T-bills

These reforms imagine a public-private partnership model of money management with strict portfolio restrictions, especially on derivative trading (Table 2).

Table 2: Public-private partnership (PPP) model.

US deposit banking law roughly corresponds to our theory of what a PPP regime should look like. There is, however, one major exception - an area in which bank regulatory practice has diverged sharply from the theory sketched above. That area is derivatives. The risk taken in derivatives dealing is very large in relation to the amount of cash that changes hands. Once we accept that deposit banks should be required to abide by portfolio and activity constraints, it is hard to see why they should be in the business of derivatives dealing. (Ricks, 2016, pp.207–208).

During the 1990s the Office of the Comptroller of the Currency (OCC) began to relax the rules for derivatives trading for commercial banks, gradually opening up for pure trading (and not only hedging activities). These rulings relied on a generic conception of banking as financial intermediation that gave little guidance to what would be considered appropriate banking activities and portfolios. This left the OCC “with nothing but ad hoc judgments and gut feelings” (Ibid., p. 210).

Our monetary theory of banking, on the contrary, suggests that derivatives dealing is properly the domain of nonbank financial firms (Ibid., p. 208). We want the banking system to maximize its ratio of monetary liabilities to portfolio risk. Banks within this system should therefore be confined to diversified portfolios of fairly high-quality credit assets, and they cannot get into the derivatives business (Ibid., p. 211)

Ricks argue that his reformed monetary system represent a new and better approach to fixing our fragile and run-prone financial system. By restricting money issuing to heavily regulated member banks and prohibiting short term funding in the rest of the financial system, shadow banking as we know it today, will “cease to exist” (Ibid., 259). Ricks draws inspiration from traditional wisdom, especially a 1939 memorandum titled “A Program for Monetary Reform,” prepared by six distinguished US economists.¹³ However, he takes issue with their favored policy proposal (100% reserve banking), but support their diagnosis of the problem, i. e. that private money creation is the chief defect of the banking system.

Throughout our history no economic problem has been more passionately discussed than the money problem. Probably none has had the distinction of suffering so much from general misunderstanding – suffering from more heat than light. As a result, not only is our monetary system now wholly inadequate and, in fact, unable to fulfill its function; but the few reforms which have been adopted during the past three decades have been patchwork, leaving the basic structure stillunsound. (Douglas et al., 1939)

Implementing his reformed monetary system, Ricks contend, “could very well obviate the need for most other forms of financial stability regulation. That is to say, the reformed system could set the stage for a major scaling back of our current financial regulatory apparatus” (Ricks, 2016, p.259).

4 Review

There is much to sympathize with in Ricks’ reformed monetary system. He wants to restore the special role of banks, impose portfolio restrictions on member banks (primarily on real estate and derivatives activities), and prohibit short-term borrowing in the non-bank financial sector. The new Member Banks would issue r-currency fully backed by the State, but their asset side would still be composed of loans and capital market instruments that could fail. Banks would lend the money supply into existence.

Ricks brings together new and old elements of banking theory in a novel mix. He acknowledges his intellectual debt to Simons, Friedman and Keynes, while mixing in some market-friendly ingredients on the way. This calls for a critical review. In this section I will deal with some aspects of his proposal and relate them to current regulatory discussions, including the role of banks, how to police the borders of banking, how much money we need, and who is best suited to spend it into existence. At the end I will deal with two additional issues raised by Ricks, the need for lender of last resort and the international aspects of a reformed monetary system.

4.1 What should banks do?

Ricks wants to restore “the first banking law” of money issuance: *The privilege to issue deposit instruments*. It follows that unauthorized firms should be prohibited from issuing the same instruments (Ricks, 2016, p.5). The primary job of banks would be to issue money, and not to link savers and borrowers. Their lending volumes would be subsumed under the overall monetary policy goals (see Table 3 on banking charter privilege).

Ricks correctly describes banking as the business of “issuing large quantities of money-claims that are continuously rolled over” (Ibid., p. 2) as opposed to the more traditional view of banking as deposit-taking.¹⁴ The traditional view of banking has been weakened lately by official central bank statements acknowledging that “banks create money whenever they lend to someone in the economy” (McLeay, Radia, & Thomas, 2014). But despite such statements, there has not yet been a general acceptance of Ricks’ view that “issuing money” should be the primary role of banks.¹⁵

As Ricks notes, it has been remarkably difficult to agree on “what banks should do”: “why would any business choose to fund itself with large quantities of money-claims instead of exclusively with longer-term

debt and equity? These basic questions turn out to be surprisingly hard to answer” (Ricks, 2016, p.53).¹⁶ So hard, that even the European banking regulator (EBA) have asked the European Commission for guidance:

The key terms ‘deposits’, ‘other repayable funds’, ‘grant credits’, ‘from the public’ are not defined in the CRR (capital requirements regulation). Therefore, there remains a degree of variation between the Member States as to the interpretation of the term ‘credit institution’ and therefore the entities to which the requirement to obtain a banking licence applies in the Member States. (EBA, 2014, p.2, cursive added)

This lack of a clear definition of deposits and banking make it hard to police the borders of banking and open up the field for “ad hoc judgments and gut feelings” (Ricks, 2016, p.210). Since the definition of “shadow banking” is equally unclear (Ibid., p. 96), the expansion of shadow banking has been almost inevitable.¹⁷ There has in reality been no restrictions on issuing deposit equivalent instruments (Table 3) - the hallmark of shadow banking (Ibid., p. 6).

Table 3: What privilege does a banking charter convey?

There are distinct historical parallels to the current debate about money issuance. In the US, there was an attempt to federalized money (note) creation with the National Bank Acts of 1863 and 1864. This led to a classic regulatory arbitrage with a strong growth in deposit banking, as State banks shifted from bank notes to checkable deposits. In the UK, the Bank of England was granted a monopoly on note issuance with the Banking Act of 1742. This led to the establishment of first small, and later larger joint stock banks that would issue deposits instruments - but not notes. Thus, in both England and the United States, a formalistic distinction between bank notes and deposits had a pivotal influence on banking history (Ibid., pp. 230–33). Ricks quotes the economist Charles Dunbar, who observed in 1917 that: *Legislators have generally failed to perceive the similarity of the two kinds of liability, and the claim for equal consideration which can be made, with some show of reason, on behalf of depositors.*

Ricks notes that the growth of shadow banking is just another twist of the historical failure to grasp the nature of money. The history of banking “is one of exasperating formalism” where lawmakers and scholars alike have been blinded by institutional forms rather the substance (Ibid., p. 223). Ricks instead wants to “deal with money creation comprehensively and functionally” (Ibid., p. 252). His new R-currency is a theoretical construct that could take different forms, e. g. as a digital central bank currency (more on this below) with commercial banks hired as private investment agents to lend the money into existence. Ricks’ new public-private partnership institutions will once and for all settle the boundaries of money creation.

Whereas I sympathize with Ricks attempt to bring order in the monetary chaos, I wonder if his favored model is too ideal. We need to put the monetary reform discussion in context, and relate it to social relations, power structures and the hierarchy of money, ref. the chartalist literature by Goodhart, Ingham and Wray.¹⁸

Ingham (2004) notes that to identify different forms of money by their “moneyness” - as done by Ricks - is a basic “category error” which has persisted since the classical Greek commodity theory of metallic coinage. This “has produced enormous analytical difficulties and quite bizarre intellectual contortion in orthodox economics (Ingham, 2004, p.24).¹⁹ Following the tradition of Innes, Knapp and Keynes, Ingham argues that money needs to be understood as “a social relation of credit and debt denominated in a money of account” and “a form of sovereignty and as such it cannot be understood without reference to an authority.” The State sets “the monetary tone” and decides which private monies to accept at par with its own currency (Ingham, 2004, p.25). In fact, private monies may circulate in parallel as functional-equivalents to currency, especially in good times, but during a crisis the flight to safety may re-establish a hierarchical preference.

Hyman Minsky describes the monetary system as a pyramid of liabilities, with those of the central bank at the top. Private bank liabilities are convertible on demand into central bank liabilities, *by agreement with and declaration by the State* (Wray, 2012, p.19; my emphasis). Schumpeter adds that this production of ‘credit-money’ is an essential feature of capitalism, whereby private debts are ‘monetized’ in the banking system (Biondi, 2018; Ingham, 2003). In this context, two kinds of monetized private debts emerge: credit money by banks that has been authorized by a licence; and escalating (parallel) credit monies by un-licensed shadow banks. Actually, the latter may have relied either on unrealistic faith in their private issuer, or on an implicit expectation of a governmental bailout - as Market Maker of Last Resort (MMLR) (Carney, 2013). But according to Keynes (building on Knapp, 1905) it is the state that determines what will serve as money (of account), as well as dictating what “things” will be accepted as money (Keynes, 1978, p.4):

The State, therefore, comes in first of all as the authority of law which enforces the payment of the thing which corresponds to the name or description in the contracts. But it comes in doubly when, in addition, it claims the right to determine and declare what thing corresponds to the name, and to vary its declaration from time to time –

when, that is to say, it claims the right to re-edit the dictionary. This right is claimed by all modern states and has been so claimed for some four thousand years at least.

Ricks wants to reestablish the State's monopoly of money issuance in partnership with private lending agents ("Member banks"). However, it is not entirely clear what is achieved with his R-currency scheme, apart from centralizing all money creation in a huge "monobank". Its design may also be understood as an integrated network of credit institutions, a sort of currency platform (like a telecommunication grid over which credit institutions operate). Minsky's pyramid of liabilities is truncated into one "very liquid and acceptable IOU" - "r-currency" - issued with a sovereign guarantee. But as Minsky noted: Banks do not have a monopoly on "money creation"; *anyone can create money; the problem is to get them accepted* (Wray, 2012, p.20; my emphasis). The challenge will therefore be to stop all these "anyones" from issuing their own IOUs, as illustrated with this quote from Henry Thornton:

When confidence rises to a certain height in a country, it occurs to some persons, that profit may be obtained by issuing notes, which purport to be exchangeable for money; and which, through the known facility of thus exchanging them, may circulate in its stead. (Thornton, 1802)

Judge (Judge, 2016, p.5) is also skeptical of Ricks' regulators ability to police the boundaries of "R-currency" creation since:

Shadow banks will reappear, in one form or another, and private money creation will emerge, whether driven by insufficient authorized money or the high cost of holding such money. ... The inherent dynamism of financial markets ensures that policymakers will never succeed in identifying and addressing all sources of systemic instability in advance.

4.2 Boundary issues

Ricks wants to ban fragile short-term funding for all financial firms – other than member banks. The aim is to confine "issuance of instruments that have moneyness properties (like checkable deposits and their close substitutes)" to banks (Ricks, 2016, p.235). The challenge is obviously how to define, and police licensed "R-currency" and by implication what will be "unauthorized banking".

Ricks provides a draft legal text (in Appendix to Chapter 9) where money ("money claims") is defined as "any debt instrument that is payable in cash or its equivalent and that has a maturity of less than one year" and "any sale and repurchase agreement that functionally resembles such debt instruments" (Ibid., p. 243). Trade credits would not be banned²⁰ and there are also exceptions for groups of less than five persons and smaller loans (under \$1,000,000).

Ricks is well aware of the risk of circumvention and possible creation of money substitutes, but he is confident that "confining money creation is neither conceptually nor practically different from other types of economic regulation". In fact, he asserts that "detecting hidden run-prone financing ... is an order of magnitude easier than current forms of financial regulation, including capital regulation" (Ibid., pp. 235–236; quoting Chicago economist John Cochrane). Still, the boundary problem will have to be tackled.

There is certainly merit in Ricks attempt to segregate "proper" banking from shadow banking. Unfettered issuance of "cash equivalent instruments - the hallmark of shadow banking - often with funding coming from the traditional banking system, has blurred the regulatory lines and exposed traditional banks to new and unpredictable risk (Moe, 2015; Unger, 2016). Despite the claim from the Financial Stability Board that "shadow banking has been transformed into resilient market-based finance" (FSB, 2015), the system remains fragile and the issuance of money-like instruments continues – without a licence.

Ricks proposal for outright prohibition on short-term funding for non-bank financial firms draws heavily on Henry Simons, who put forward similar proposals in the 1930s. Ricks acknowledges his intellectual debt and admires Simons' perceptive observations of the fragility of a financial system based on short term funding.²¹ He adds that "Simons' concerns look remarkably prescient: "he was describing shadow banking" (Ibid., p. 172). The "shadow banking problem" is, according to Ricks, "the central challenge of financial reform today."

Separating the two types of banking invites evasion, and while Ricks recognizes the challenge posed by *near-monies*, he tends to downplay it. Simons, on the other hand, was more concerned with the "boundary problem", and wrote to Irving Fisher – who wanted to establish 100 % reserve banks (narrow banking), that his new system "would encourage credit extension outside the regulated system: "Standing by itself, it would promise little but evasion, and would deserve classification as merely another crank scheme" (Ricks, 2016; p.172; Simons, 1936; fn. 17). Simons was also quite realistic about realizing his ideal financial system based on just equity and cash: "To propose abolition of all borrowing, or even of all borrowing at short-term, is merely to dream" (Ibid., p. 16). Ricks' proposal highlights the fragility of short-term money issuance by non-bank financial institutions, but he "doesn't share Simons' occasional defeatism" in policing the monetary boundary (Ricks, 2016, p.173).

4.3 Private or public money?

“Why should the government involve itself in monetary matters to begin with?” (Ricks, 2016, p.9). The restoration of sovereign money is predicated on the assumption that “money matters” and that the Government should have some control of the money supply - however defined (Schwartz, 1987). Ricks view is inspired in part by early monetarist writing where the money supply was important - but often entirely determined by the Government’s budget policy (Friedman, 1948). Today the situation is almost reversed, with little attention to the supply of money, most of the money supply issued by private banks (except for some cash), and government deficits formally outlawed in some countries, in principle at least. Ricks claims that his proposal should be “compatible with a variety of fiscal environments, including a balanced budget” (Ricks, 2016, p.172), but he favors a “Public-Private Partnership” model where private agents would lend the money into existence. Base money and the money supply merge into one “r-currency” and the Government sets a target for the amount of “r-currency” compatible with e. g. inflation and unemployment.

The reformed system proposed by Ricks (Table 5) is very different from our current monetary system, summarized in Table 4.

Table 4: Current system.

Monetary Instrument	Privileged Issuance?	Sovereign vs. Private
Physical Currency	Yes	Sovereign
Bank deposit	Yes	Sovereign (insured) and Private (uninsured)
Cash equivalents	No	Private (mostly)

Table 5: Ricks’s proposal.

Monetary Instrument	Privileged Issuance?	Sovereign vs. Private
R-Currency	Yes	Sovereign
R-Currency Equivalents (incl. Member Bank Deposits)	Yes	Private (insured)
Other R-Currency Equivalents	No	– Forbidden by non-bank financial institutions – Restricted for non-financial actors

Today, central banks issue physical currency (cash) while licensed banks issue deposits account money, with limited deposit guarantee. Issuance of “cash equivalent” monies (“near monies”) requires no licence. Since the use of cash is diminishing in most developed countries, the share of private money creation has increased. In some countries, most money creation is already private. *Should we worry?* The interesting thing is that this dramatic shift in *money creation* has received relatively little public attention, while the focus has been mostly on *credit allocation*. It has been a long-held view that this is best done by the private sector; however, since the recent financial crisis public opinion have shifted somewhat.²²

Ricks wants to retain a large role for the private sector in allocating credit, while curtailing their role in the money supply. This is achieved by hiring privately owned member banks as “lending agents” - for a fee and providing a full sovereign guarantee for all the money they lend into existence.²³ “The monetary authority enters into a joint venture agreement with private managers that have expertise in credit granting (Ricks, 2016, p.159).

This will, according to Ricks, improve credit allocation, and more importantly insulate the lending process from political influence. Member banks will only issue high quality loans and underwrite high quality bonds, and they will not be permitted to invest in equity securities, real estate, or commodities.²⁴ The challenge will obviously be to calibrate the (simplified) capital requirements and seigniorage fees without impairing member banks’ money creation function (Ibid., p. 21). The aggregate lending volume will then be determined by the monetary policy goals set by the Government (Ibid., p. 22). This could become interesting if lending is too low; will the capital requirements be relaxed?²⁵

4.4 How much money?

The monetary authority would set a money growth target in the new system, compatible with the macroeconomic policy mandate, e. g. a dual mandate of full employment and price stability. Since there would be no “inside money”, money issuance of (outside) r-currency would be fully determined by Member banks issuance. However, fine tuning could be performed, like today, with open market operations (Ibid., p. 228).²⁶

Ricks favors the lending approach to issuing money; “it has big advantages over the spending (by Government) approach”. “Under the lending approach the government never spends money wastefully on real goods and service”; instead private member banks would buy financial assets, at a much lower transaction costs. The Government will also receive a smoother seigniorage revenue stream from member banks, instead of taking direct credit risk (Ibid., p. 152).

There are at least two problems with a “spending approach”, according to Ricks: First, there would be no necessary connection between the optimal path of the money supply and the desired level of government expenditure over any given period: “Buying battleships for purely monetary purposes would be a waste of resources” (Ibid., p. 149). Second, if the government would spend the money directly into circulation it would be impossible to separate monetary policy from fiscal affairs - as “they would be hopelessly entangled.” Contrary to Abba Lerner and Milton Friedman (1948) who preferred the government expenditure way of creating money, Ricks argues that “yet another reason to prefer lending rather than spending the money supply into circulation; it makes monetary policy independence possible (Ibid., p. 156).

What about QE - quantitative easing - where central banks issue money when it buys credit instruments from banks or the private sector? This should only be considered if the government budget deficit dwindles or bank lending stalls. Such purchases would expose the monetary authority to credit risk, perhaps even towards private borrowers. This is not a favored course of action by Ricks:

If the monetary authority is a bad credit investor, resources will be poorly allocated. Compounding this dilemma is another problem: whenever the monetary authority is investing in private credit, there is the potential for political controversy and the appearance (or reality) of favoritism. Such controversies, in turn, could end up undermining the cherished independence of the monetary authority. (Ibid., p. 159)

Ricks reformed monetary system thus blends well with the mainstream view of balanced budget, private credit allocation and central bank independence. Member banks retain a pivotal role in the new system, although in a revised and truncated role.

4.5 R-currency infrastructure

How will Ricks monetary system be organized? Since all banks issue the same guaranteed r-currency, the traditional clearing and settlement system can be drastically simplified. Payments between bank customers will involve credit and debiting accounts with the monetary authority in the same currency - as if “there were just a single member bank effecting payment through ledger entries” (Ibid., p. 225). Unused balances in r-currency can be exchanged in a cap-and-trade system. Since there is limited credit risk, banks don’t need to hold reserves of base money (as today) or pledge collateral. Indeed, there is no such thing as “base” money in the system (Ibid., p. 23). The system is a “pure accounting system” where individual banks run up debit or credit balances vis-à-vis each other, very similar to the current Target 2 settlement system for the Eurozone (for countries).

The system could in fact be run by the central bank as a monolithic payment system, where everybody would have a central bank account in r-currency, and all payments would be conducted on the books of the central bank. This resembles an account based central bank digital currency system, as is currently debated among some central banks (Mersch, 2017; Sveriges Riksbank, 2017). However, Ricks wants the private sector to retain its pivotal role in credit allocation, and in his system the Government therefore outsources the money creation to private agents: *Privately owned member banks are chartered by the Government to issue money.* Citizens will hold r-currency deposits accounts in private Member banks and these claims will be 100 % insured by the State.²⁷

The private member banks can be part of a financial holding company, but any such affiliation would be subject to strict limitations on affiliate transactions (Ibid., p. 226). In theory, then, affiliate distress shouldn’t produce significant losses for a member bank. Specifically, banks would have to discontinue funding their broker-dealer affiliates, and securities firms would have to end their unstable short-term funding; they would have to “term out their funding structure” (Ibid, p. 25). This will be costly, but as Ricks correctly observe, “there appears to be little reason to regard Wall Street’s current funding model as sacrosanct— particularly in view of the events of recent years” (Ibid.).

4.6 Lender of last resort

Don't we already have a good enough answer to the panic problem? Could not central bank liquidity support, in combination with capital regulations, be viewed as a sound and adequate response to the panic problem? No, say Ricks, and argue that LOLR is a flawed answer to panics (Ibid., 184). It constitutes a massive wealth transfer to the banks that "screw up", it creates bad incentives and it certainly distorts pricing. And there is the inherent problem of separating solvency and liquidity problems (Madigan, 2009). The very existence of LOLR is a major source of the financial system's excesses.²⁸ It has created a huge imbalance between the stock of near-monies waiting to be rescued in a crisis, and the State's capacity to backstop a run on such liabilities (Moe, 2012).

Ricks has deep misgivings about the recent drive to extend central bank liquidity support beyond banks, operating as "dealer of last resort" if required (Mehrling, 2011) or extending LOLR to broker-dealers, central counterparties or other collateral management companies (Carney, 2013).²⁹ This shift in LOLR policy "generate subsidies and have troubling incentive effects" (Ricks, 2016, p. 199). The panic problem cannot be solved by extending liquidity support as market liquidity vanishes, nor can it be managed adequately by creating special resolution tools for complex financial firms. "Other institutional designs need to be considered" (Ibid.)³⁰

4.7 International issues

Ricks recognizes that there is an international dimension to implementing "unauthorized banking" in the US: "What is to stop overseas entities from issuing such instruments outside the jurisdiction of US law?" (Ibid., p. 237). Nothing! And this is part of the problem, according to Ricks. Foreign banks issue (short-term) dollar loans all the time in the Eurodollar market. This is so common that we take it for granted. But the market is fragile, so much so that a former IMF managing director noted way back that: "The explosive growth of this lending now saddles the world with a debt problem that fundamentally threatens the international financial system" (Witteveen, 1983).

We could dismiss the fragile Eurodollar market as other countries' problem (Ricks, 2016, p. 238). But the recent crisis made it abundantly clear that this activity is also of concern to US monetary authorities; the Fed lent massive amounts of dollars to foreign central banks to help them prop up their domestic banking systems.³¹ According to Ricks, "the Eurodollar markets are incompatible with financial stability" (Ibid., p. 239).

If we accept Ricks position that money creation should be a "sovereign prerogative", it follows that overseas money creation (of dollars) is unacceptable. What can we do about it? Ricks suggest three approaches:

- US authorities could deny clearing to foreign banks that issue dollar denominated money claims, or
- US authorities could seek agreement with foreign central banks to prohibit their domestic banks from issuing dollar denominated money claims³²
- Alternatively, US authorities could seek a global "Money Claim Accord" (MCA), similar to the Basel Accord for capital requirement

"Money creation would be recognized as a sovereign prerogative; each country or currency area would have jurisdiction over its own broad money supply" (Ibid., p. 240). Ricks is quick to add that this MCA accord would not represent capital controls, since overseas financial institutions would be free to own and deal in dollar-denominated securities.³³ The accord would "only" restrict overseas money creation - money-claim issuance - and nothing else. This should be in the interest of Governments that wish to restore jurisdiction over their broad money supplies (Ibid., p. 240).³⁴

Ricks description of the Eurodollar market dilemma illustrates the challenges facing his monetary reform proposal. The market has long been subject to scrutiny and reform proposals. But the risk involved in this off-shore dollar creation has either gone unrecognized or been poorly understood (Truman, 2011, p.7). Ricks describes his approach to restricting overseas money creation as fairly "modest and narrowly tailored" (Ibid., p. 240). That would be an understatement!

5 Alternatives

Before concluding this commentary, I will briefly compare Ricks proposed monetary system with four alternatives, i. e. narrow banking, Tobin's deposited currency, central bank digital currency, and local community banks. They all illustrate different aspects of Ricks proposal, including the mechanism for credit allocation and monetary control.

5.1 Narrow banking

The basic idea of narrow banking is to divorce the issuance of monetary instruments (deposits) from risky assets.³⁵ Under the original and purest version of narrow banking, called 100 % reserve banking, banks would hold nothing but base money (Ricks, 2016, p.169) A proposal for a 100 % reserve bank was proposed in the 1930s by Irving Fisher and Henry Simons, but the idea was not embraced by Congress, who instead put an upper limit on the reserve requirement in the new 1935 banking law. Ricks is inspired by their diagnosis but reject their narrow banking solution. “The main problem has to do with ... whether such a system can issue “enough” money” (Ricks, 2016, p. 170), especially if the Government’s is running balanced budgets. If the supply of government debt is exhausted, the central bank might even have to buy private credit assets - not a “particularly appealing option” according to Ricks (and Milton Friedman) (Ibid., p. 171). An alternative could be to let the narrow banks invest in private credit assets like commercial paper, but this would undercut the very idea of narrow banking (Litan, 1987), resembling more to the functional separation between commercial and investment banking. Capital allocation would therefore be done by investment banks or mutual fund structures that would be funded (and constrained) by available long-term funding. The narrow banking proposal would thus be a rather rigid system; capital allocation would be constrained by available savings and the money supply fixed by the Government.

5.2 Tobin’s deposited currency

Tobin’s proposal introduces a bit more flexibility in the monetary system, by allowing a more diversified group of financial institutions to coexist. Deposited currency accounts would be offered to the public, alongside regular commercial bank deposits (with deposit insurance) and traditional investment banks. Deposited currency accounts could be offered “in the central bank or in branches of it established for the purpose and perhaps located in post offices” (Tobin, 1985, p.25), and would offer the public “a perfect store of value in the unit of account” (Ibid.).³⁶ Tobin would impose portfolio restrictions on commercial banks, like Ricks, but limit the deposit guarantee (as today). Thus, his proposal would be more flexible than the narrow banking proposal and include a more diversified set of financial institutions.³⁷

5.3 Central bank digital currency (CBDC)

Central banks are currently considering various options for issuing digital currency, as a supplement to issuing physical cash (Barrdear & Kumhof, 2016; Coeuré, 2018; Committee on Payments and Market Infrastructure & Markets Committee, 2018; Mersch, 2017). This could be done in either a value-based card system or an account-based system. An account-based system has interesting parallels to Ricks r-currency system, since the central bank would then issue safe money to the public, either through agent banks or on its own. Private banks would, however, continue to issue the bulk of the money supply, as current thinking among central bankers certainly is not to limit the role of banks noticeably. That leaves them with a conundrum since a shift of money balances from commercial banks into central bank digital currency would drain base money from the system and leave the central bank with surplus cash. Either the central bank will have to start investing itself (or through state banks) or they would have to inject the surplus balance back into the money market - in order to keep the interest rate steady. Ricks notes rhetorically, that if central banks could do the capital allocation - “then why have any deposit banks at all - why not just let everyone hold an account at the central bank?” (Ricks, 2016, p. 171). However, he prefers a system where r-currency is issued with full government backing, almost like Central Bank Digital Currency (CBDC), but the capital allocation will remain with private banks.³⁸

5.4 Community banks/alternative finance

A less radical view would be to encourage alternative financial structures, such as cooperative or savings banks through simpler and more supportive regulations (Butzbach & Von Mettenheim, 2015). Hyman Minsky favored a proactive government policy toward small community development banks, since “the capital development of the nation and of communities is (better) fostered via their provision of a broad range of financial services” (Minsky et al., 1993). Since the key role of banking is lending, Minsky felt that local banks were better positioned to do the capital allocation required for healthy growing communities. These local banks would be allowed to offer a variety of financial services, including investment services. However, they would be subject to portfolio restrictions similar to Ricks member banks, in order to protect depositors. *Do we still need community banks?*³⁹

Or are community banks largely obsolete remnants of the past (Sandbu, 2018)? There seems to be bipartisan agreement to simplify the rulebook for smaller banks. However, most banking regulations continue to favor the bigger banks, unless something like Ricks proposal is enacted. We clearly need a simpler and more equitable financial system.

6 Getting there

Ricks' proposal for monetary reform is both radical and traditional. Restoring the privilege of money issuance could simplify the current complex regulatory system but would impose severe restrictions on member banks and non-bank financial institutions. But banks would continue to allocate credit and lend money into existence. The new "public-private partnership model" thus preserves the current division of labor, where the State has delegated most of the money issuance to private banks.⁴⁰

Ricks emphasizes that "the reformed system bears a close resemblance to our existing US system of money and banking" (Ricks, 2016, p. 240). Federally insured deposits are issued by licensed banks with portfolio constraints and capital requirements, there are strict limitations on affiliate transactions and banks pay a risk-based deposit insurance fee. The new system could, according to Ricks be implemented gradually from this "base" through a series of incremental reforms (Ibid., p. 241):

- Introduce the "unauthorized banking law"
- Apply reserve requirements to Member Banks issuing deposits (a critical mechanism of the proposed design)
- Fully insure all deposits
- Charge simplified risk-based fee to deposit banking
- Reinstate regulation of interest rates on deposits
- Tighten portfolio restraint on deposit banks (including a "swap push-out" rule)⁴¹
- Supplement the Basel Accord with an international "Money Claim Accord"⁴²

Ricks claims that these steps are "far from revolutionary" and that the "reformed system is essentially conservative in its basic design" (Ibid., p. 242). Some would certainly disagree, especially the prime brokers who lose access to short term money market funding or the commercial banks who cannot no longer engage in derivatives trading.⁴³ The cost of hedging and short-term financing would certainly increase, but that would be an intended consequence of the new policy. And all of these policy changes could in principle be enacted by changes in domestic banking regulations.

The international dimension may be harder to implement. Ricks argues that "the money-claim accord is no less feasible than a capital accord" and that Governments should be much more inclined to "establish jurisdiction over their broad money supplies than in aligning capital regulation across borders" (Ibid., p. 240). Well, that remains to be seen. Despite several attempts to deal with the Eurodollar "problem" (Camdessus, Lamfalussy, & Pado-Schioppa, 2011), global liquidity continues to be privately created through cross border operations by both bank and non-bank financial institutions (BIS, 2011).

Somehow Governments don't seem to be so preoccupied with restoring their monetary sovereignty? One reason may be the conceptual blinders that underpin the current system of private money creation (Desan, 2014). But concern over "hot money" and the volatility of short term capital flows and its impact on domestic monetary policy clearly indicate a wish to reform. However, mainstream economic theory with its emphasis on balanced budgets and independent central banks rule out - almost by definition - policy options that could have tilted the balance more towards public money creation (Wray, 2014). And the gradual extension of the safety net to even more shadowed banking claims goes unrecognized until the next crisis will require massive government support (Moe, 2015). Another reason may be the strong lobbying power of banks and the financial sector at large that prevents any meaningful monetary reform along the lines Ricks proposes (Blair, 2017). Even though I sympathized with much in Ricks reformed monetary system, I therefore don't think it has much chance of success, at least in the current political climate.

With Basel III completed, the vigorous push for regulatory reform we witnessed after the financial crisis has ended. Regulators are now preoccupied with extremely complex and detailed cross-border bankruptcy agreements and living wills that will remain untested until the next crisis. The massive risks in the derivatives market has been somehow transferred to central clearing institutions, that will require massive public liquidity support if they fail (Committee on the Global Financial System, 2017). The (complicated) Volcker rule in the US

that tried to restrain speculative trading among money issuing banks, is under attack from Congress, and any meaningful structural banking reform in the EU has been stalled in the European Parliament (Finance Watch, 2017). Thus, regulators will simply not be concerned with even the smaller steps of Ricks proposal, as listed above.

Ricks seem unfazed by these apparent “insurmountable political obstacles”: “The political winds can always shift” (Ricks, 2016, p. 263). Hopefully they will, making it worthwhile to reflect on what a reformed financial system should look like. My own preference would include many of the elements in Ricks proposed system, but with a stronger public bias, both through public investment banks and higher government infrastructure spending. That would shift the balance of money creation back towards the State and secure a more equitable wealth and income distribution.

Notes

- 1 Ricks mentions the money market reform in the US but considers it wholly inadequate (p. 251)
- 2 Ref. The call for «level playing field» regulation among all financial institutions, especially in the EU. There is an ongoing debate in the EU about “the regulatory perimeter of banking”, especially vis-à-vis shadow banking activities and recently FinTech firms (Enria, 2018). Inconsistent interpretations across countries reflect the divergent banking traditions in the EU
- 3 This lending includes public sector loans and securities, including for reserve management. Therefore, member banks will invest in “high quality loans and bonds, but not in equity securities, real estate or commodities” (Ricks, 2016, p.16).
- 4 The Volcker rule is under attack in the US, while proposals for structural bank reform in the EU has been stalled in the European Parliament (Finance Watch, 2017)
- 5 Reviews of Rick’s books have generally been favorable, commending his analysis for its “simplicity and elegance” (Blair, 2017) and for “asking the right questions” (Judge, 2016), while also questioning the feasibility and wisdom of his “grand vision” (Ibid.)
- 6 The new Basel liquidity regulations - the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR) are important, but inadequate policy reforms according to Ricks (FSB, 2017b)
- 7 Cash-equivalents = money- claims that are not demandable and therefore do not function as an exchange medium (ibid., p. 204)
- 8 There are no money market mutual funds or other nonbank monetary institutions in the reformed system (Ricks, 2016, p. 226)
- 9 A fraction of member banks profit; supplants today’s deposit guarantee fees
- 10 But banks take their own credit risks on those currency-equivalent creation
- 11 (Ibid., p. 16)
- 12 Since such activities do not advance the system’s monetary function (Ibid., p. 225)
- 13 A Program for Monetary Reform was attributed on its cover page to six American economists: Paul H. Douglas, Irving Fisher, Frank D. Graham, Earl J. Hamilton, Wilford I. King, and Charles R. Whittlesey.
- 14 E.g. former Governor of Bank of England: “Banks have some key distinguishing characteristics in common. In particular they take unsecured deposits from the public at large” (George, 1997)
- 15 Funding through money-claims issuance monetises the corresponding asset portfolio, since money-claims circulate as equivalent to cash/currency. This does reduce funding costs as long as third parties trust the money claims as trustworthy and accept them as cash-equivalents.
- 16 The increased funding with money-equivalent claims works as long as third parties trust them to be cash-equivalent, which again assumes some form of government support in a crisis, ref. the gradual expansion of the safety net from traditional LLR to market support (MMLR) (Biondi, 2018; Moe, 2012)
- 17 Note that the EBA Report and Opinion «On the perimeter of credit institutions” had their origin in the desire to develop rules for banks’ exposure towards shadow banks; but as noted, the EBA concluded that this was difficult since there was neither a clear definition of banks, nor of shadow banks.
- 18 Ricks does refer to Abba Lerner and his functional finance approach (Lerner, 1947), and also notes that the state can impose its money by accepting it for tax purposes (Ricks, 2016 pp. 147–148), but these observations are not integrated further into his main argument
- 19 Thus, even though “savings-deposits, treasury certificates and even commercial paper” have moneyness qualities close to demand deposits as noted by Simons, does not imply that they are in fact money, ref. Ricks (2016), p. 40 for the relevant quotes from Henry Simons
- 20 (a)(3) The term “trade credit” means: (A) any payment obligation that is incurred as an incident to the purchase of bona fide goods or services, including any such obligation that is classifiable as “accounts payable” under generally accepted accounting principle (Ibid., p. 244)
- 21 “Simons’ insight on these matters was nothing short of astounding” (Ibid., p. 237)
- 22 For an interesting new initiative in public credit allocation, see information on the new Scottish National Investment Bank (Scottish Government, 2018)
- 23 Commercial banks would continue as privately-owned institutions; they would lend money into existence (with some new portfolio constraints and caps on r-currency holdings), and all their newly formed liabilities (money) would be fully guaranteed by the state. Since the credit risk among banks thus disappear, clearing between them would be conducted as if they were all part of the same “big bank”, thus the distinction between base money and money (held by the public) would disappear, and we would all have sovereign claims (r-currency).
- 24 Or derivatives (Ricks, 2016, pp.16, 211). These are quite strict portfolio restrictions; ref. also similar views by Charles Goodhart regarding the current malpractice of short-term funding of long-term (real estate) loans in banks (Goodhart & Perotti, 2015)
- 25 Ref. similar considerations related to the macroprudential countercyclical capital buffer (Tölö, Laakkonen, & Kalatie, 2018)
- 26 This implies that member banks operate under fractional reserve on R-Currency holdings
- 27 Citizens will also hold equity in banks, which will not be insured. Banks will also hold loans, which will not be insured either
- 28 Ricks has an interesting note on how a little recognized change in the FDIC Improvement Act of 1991 relaxed the Fed’s collateral constraints on 13 (3) lending to non-banks first led to an explosive hedge fund asset growth, and subsequently to massive rescue loans for the big Wall Street securities firms. “So, it was not the repeal of the Glass-Steagall that made the big difference after all. The liberalized LoLR may be a bigger part of the story” (Ibid., p.198)
- 29 Judge seems to favor such an extended LOLR role “wherein the government should serve as an “insurer of last resort” ... explicitly protecting a class of claimants otherwise positioned to run” (Judge, 2016, p.33)

- 30 The US Treasury released a report in February, 2018, recommending to preserve the powers created after the financial crisis to step in and wind down a failing institution (US Treasury, 2018). But this Orderly Liquidation System (OLA) remain problematic for short-term creditors, in Ricks' view, since they would be tempted to run - despite being protected in liquidation - just because the uncertainty of the whole situation. "Money-claimants have little to gain from sticking around to find out the answer" (Ricks, 2016, pp.257–258)
- 31 Chairman Bernanke's admitted in 2009 - to a question from Congressman Alan Grayson about "which foreign institutions had benefited from the half trillion US dollar swap lines"- that "he did not know"; this created a small sensation online and left many voters with an uneasy sense about these swap lines (Grim, 2009)
- 32 Foreign central banks could be interested in this, since they would otherwise be left with a potential large LOLR commitment in dollars, if their domestic banks get into liquidity problems in the Eurodollar market (Nyberg, 2011)
- 33 IMF has reviewed its institutional view of capital flow control measures (IMF, 2016) and has now a more pragmatic view on the use of capital flow measures in appropriate circumstances (IMF, 2017). OECD and the IMF has jointly submitted their views to the G20 (IMF & OECD, 2016), and the OECD Capital Code is currently under review
- 34 This resembles to the preoccupations and reform proposals discussed by Keynes among others when the IMF was established (McDowell, 2017)
- 35 A broader understanding of narrow banking would includee the classic operations performed by simple commercial banking, including plain-vanilla and short-term lending to private and public entities
- 36 This is fairly similar to an account based digital currency, see (Mersch, 2017) for a discussion
- 37 They could even be organized under the umbrella of a common holding company
- 38 Either way the central banks increase its credit exposure, either through collateral or direct exposure in a CBDC system, or through a potential credit risk towards Member Banks in Ricks' r-currency system
- 39 On community and other non-for-profit banking, see (Butzbach & Von Mettenheim, 2015)
- 40 Ricks' proposal could also serve as a model for those central banks considering digital currencies, as his proposal would combine digital sovereign money for all citizen, with continued private credit allocation
- 41 Dodd- Frank's "swaps push- out rule" would have required insured banks to "push out" some, though not all, of their derivatives dealing to nonbank affiliates. Ricks (ibid. p. 209) allows true hedging, that is, derivatives that are held to insure the risks embedded in the currently held asset portfolio.
- 42 Prohibiting foreign financial institutions from issuing money-claims denominated in non-domestic currencies
- 43 Blair notes that his cure "will not be politically easy to implement", since participants in the "shadow banking" sector, including brokerage houses, money market funds, etc. will not easily give up the right to engage in this profitable activity" (Blair, 2017)

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