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The 'Socialization of Investment'

By Robert Hockett

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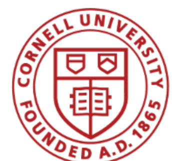

The 'Socialization of Investment'

On a Keynesian Side-Note & Its Possible Realization

Robert Hockett*

Abstract: *Keynes provocatively mentioned, but did not much elaborate upon, what he called 'the functionless[ness of] the [modern] investor,' 'the [future] euthanasia of the* rentier,*' and 'the [future] socialization investment' in his* General Theory *of 1936. What might he have meant? I think I might know, and in this piece provide both (a) a positive account of contemporary finance-capital and the markets through which it flows, and (b) a normative case for specific reforms in the spirit of a more 'radical' Keynes than is currently taught. I call the upshot a '*Capital Commons*.' My argument starts from a simple observation with which I think both the Keynes of the* General Theory *and, yet more surely, the Keynes of the (deeply Wicksellian)* Treatise on Money of 1930 *would agree: This is that the overwhelmingly greater part of any contemporary 'developed' country's finance-capital is now publicly generated, in a sense that I carefully elaborate, even when privately 'gate-kept' or managed. This arrangement features certain advantages where capitalizing (pun intended) on the comparative risk-bearing and project-evaluative advantages of the public and private sectors in financing production is concerned. But it also poses a danger. The danger is that pervasive yet still underappreciated recursive collective action predicaments endemic to all monetary exchange economies, combined with the decoupling of profits from production made possible by (a) Wicksellian bank-money's endogeneity and (b) the stratification of capital markets in such economies, render this division of labor both (c) vulnerable to counterproductive speculative excess and hence (d) sustainable, when at all, only by chance. The only way to get public finance-capital allocation reliably right, and thus to get credit modulation and long-term productive investment reliably right, is thus to manage public capital publicly and private capital privately. I show how to do this, and hence how to 'socialize investment' along Keynesian lines in a manner sufficiently attentive to both public and private sector comparative advantage, through the simple organizing framework of a public balance sheet conceived as a consolidated central bank / public finance ministry balance sheet.*

* © 2024. Edward Cornell Professor of Law, Cornell University; Adjunct Professor of Finance, Georgetown McDonough School of Business; Senior Counsel, Westwood Capital, LLC; Co-Director, Cornell Research Academy for Development, Law, and Economics CRADLE). Formerly Federal Reserve Bank of New York and International Monetary Fund. Thanks to my colleagues, past and present, at these institutions, and to my 'Sounding Board' on most matters developmental, economic, financial, industrial, and infrastructural: Dan Alpert, Kaushik Basu, Sarah Bloom Raskin, Blanca Braun, Rana Faroohar, Ron Kim, Paul McCulley, Perry Mehrling, Bob Shiller. Special thanks to my CRADLE colleagues Kaushik Basu, Manju Smriti, and Pengfei Zhang.

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The owner of capital can obtain interest because capital is scarce, just as the owner of land can obtain rent because land is scarce. But whilst there may be intrinsic reasons for the scarcity of land, there are no intrinsic reasons for the scarcity of capital.

- J.M.K.[λ]

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λ Epigram taken from Chapter 24 of J.M.K.'s *General Theory*, more on which below.

Introduction: Three Keynesian 'Throw-Away' Lines and Their Possible Import

So influential, and so widely 'bastardized,'[1] did Keynes' *General Theory*[2] and its Hicksian (IS-LM) interpretation[3] quickly become within months of its publication, that many intriguing asides, and then afterthoughts, shared first in the course of and then near the end of the master's first exposition quickly fell by the wayside. Among these were three provocative phrases seemingly alluding to a common contemporary prospect.

The phrases to which I refer are 'the functionless investor,' 'the euthanasia of the *rentier*,' and 'the socialization of investment.'[4]

The prospect to which these three phrases seem to me to allude comprises both the availability, and the possible social necessity, of a form of public investment financed by forthrightly public finance-capital – that is to say, finance-capital at last widely recognized to be, as nearly all finance-capital under endogenous Wicksellian '*bank* money' and Fichtean-Knappian '*fiat* money' arrangements must be, effectively *social* capital.[5]

Of course, Keynes did not put things this way. Nor did he elaborate, either in the *General Theory* or in any other widely read publication preceding or following that work, anything even remotely specific along such lines. In the main, he and his followers spoke merely of what later came to be called countercyclical fiscal and monetary policies aimed at employment 'pump-priming' during slumps and money-tightening during booms.[6]

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[1] The allusion is to Joan Robinson's reference to 'bastard Keynesians' in J. Robinson, *What Has Become of the Keynesian Revolution?* in her AFTER KEYNES, pages 1–11 (1973).

[2] The reference, of course, is to J.M. KEYNES, THE GENERAL THEORY OF EMPLOYMENT, INTEREST, AND MONEY (Macmillan 1936).

[3] See of course J.R. Hicks, *Mr. Keynes and the 'Classics': A Suggested Interpretation*, 5 ECONOMETRICA 147 (1937).

[4] See of course KEYNES, supra note 1, Chapter 24. See also Chapter 12 on the dysfunctions wrought by, and the ultimate social superfluousness, of investor liquidity liquidity preference.

[5] *Idem*. More, of course, on the names and terms just inroduced, as well as on their significance for my present purposes, in due course. Broadly speaking, 'Wicksellian' alludes to Knut Wicksell's late 19th century modeling of endogenously issued 'bank money,' especially when not pegged by fiat to any metallic standard. 'Fichtean-Knappian' alludes to the fact, made much of by Fichte and Knapp in the early 19th and 20th centuries, respectively, that in post-Westphalian states since the mid-16th century, nation-states or their instrumentalities have legally determined both what shall count as monetary media and how their purchasing power is to be maintained. *Law* thus figures decisively in stamping post-Westphalian money systems with their Fichtean, Wicksellian, and Knappian characters, meaning in turn, we shall see, that for thinkers like Marx, Wicksell, and Keynes for whom 'money matters' rather than constituting a neutral 'veil,' law also must matter. For the moment, see generally K. WICKSELL, GELDZINS UND GÜTERPREISE (1898); G.F. KNAPP, STAATLICHE THEORIE GELDES (1905); and J.G. FICHTE, DER GESCHLOSSENE HANDELSSTAAT *(1800)*. And again, more will be said below.

[6] There is of course a massive and ever-growing literature of 'Keynesian,' 'new-Keynesian,' 'post-Keynsian,' 'Keynesian-Neoclassical Synthesis,' writing and theorizing that has accumulated over the past 90 years. The reader is invited simply to 'Google' such phrases for more on these and other 'schools' responsive to THE GENERAL THEORY.

But if we take seriously Keynes's laconic asides and then closing remarks in the *General Theory* – particularly in Parts IV and VI, and especially in the iconic Chapters 12 and 24 thereof – along with his empirically rich and explicitly Wicksellian accounts of both money and capital in the 1930 *Treatise on Money*, I think it possible to construct both a plausible model and a powerful brief that Keynes *might* have composed – and would surely have approved – for reforming contemporary finance in certain materially productive, hence socially salutary ways that I shall here elaborate.

I call this rendition of a broadly Keynesian socialization of investment 'the Capital Commons.'[7]

Ultimately it will not concern me all that much whether Keynes 'really *would*' have agreed with all I shall say here on behalf of the feasibility and desirability of my Capital Commons. I am, in good Aristotelian fashion, uncertain as to the truth-values of counterfactual propositions at all events;[8] and it is in any case not uncommon for thought-revolutionizing or 'paradigm-shifting' scientists to leave the earth before finding the time to rope all of their thoughts into simultaneously complete and internally consistent systems that can equip them to evaluate fully the accuracy or plausibility of their own later interpreters such as I shall here play.[9]

This was the fate, after all, not only of Keynes, but also of Marx well before him.[10] Hence if I can but put forth a picture of contemporary finance-capital and its possible uses that is both positively accurate and normatively attractive while also

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7 See generally Robert Hockett, *The Capital Commons: Digital Money and Public Finance in a Productive Commercial Republic*, 39 REV. BANKING & FIN. L. 345 (2019-20), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3715862. Also HOCKETT, THE CITIZENS' LEDGER: DIGITIZING OUR MONEY, DEMOCRATISING OUR FINANCE (Palgrave Economics 2022). It is possible that Keynes had something a bit different in mind – viz., the outright nationalization of Britain's larger instustries, which then accounted for about 2/3 of Britain's industrial output. See, e.g., his contribution to the 'Yellow Book' outlining an economic plan for Lloyd-George's Liberal Party. See LIBERAL INDUSTRIAL INQUIRY, BRITAIN'S INDUSTRIAL FUTURE (1928). But I shall argue for present purposes that Keynes's view of the role to be taken by the new IBRD and IMF that he helped to design at Bretton Woods in 1944 suggest that he would have been amenable to what I shall argue and design here as well. Cf. Robert Hockett, Global Money (Yale U. Press 2025); and Robert Hockett, *Bretton Woods 1.0: An Essay in Constructive Retrieval*, 16 N.Y.U. JOURNAL OF LEGISLATION & PUBLIC POLICY 401 (2013).

8 See generally DAVID LEWIS, COUNTERFACTUALS (HARVARD U. PRESS 1973); also JAN ŁUKASIEWICZ, ARISTOTLE'S SYLLOGISTIC FROM THE STANDPOINT OF MODERN FORMAL LOGIC. (Oxford U. Press 1957).

9 See, e.g., Keynes's 31 March 1937 letter to Hicks.

10 It is intriguing that Marx is oft-quoted as saying that he was no Marxist while Keynes is oft-quoted as saying that he was no Keynesian. The problem appears to be not uncommon. Cf. L. Wittgenstein: 'The only seed I am likely to sow is a certain jargon.' The fact that Keynes and Marx share this fate finds a complement in what follows, in that both pioneered models of economic dynamics in which, rather than functioning as a mere veil, 'money matters' – a proposition that entails *law's* mattering as well, for reasons we shall see in due course.

counting as being at least '*in the spirit*' of the Keynes of both 1930 and 1936, I shall have met the task I am here setting myself.

Here, then, is how I'll proceed. First I will show that, in any monetary exchange economy in which (a) capital tends to flow via decentralized market exchange and (b) money is Wicksellian, what I call the 'macro-modulatory' task that the Keynes of the *Treatise* and *General Theory* assigned to the central bank or monetary authority in our capital markets is impossible reliably to achieve without that authority's engaging in at least one form of what I call 'macro- [if not indeed micro-]*allocative*' monetary policy as well.[11]

This is in owing, I'll further indicate, not to any exotic or hitherto undiscovered feature of endogenous bank money, capital, or contemporary financial markets, but simply to a particularly virulent variant of the familiar collective action problem – 'predicament' here would be more apt – long known to economic orthodoxy. This is a variant that I dub the '*Recursive* Collective Action Problem,' or 'ReCap' for short.[12]

ReCaps, I will then indicate, are rife in a multitude of iterative contexts characteristic of contemporary decentralized financial markets. And the indefinite repeatabilty of their iteration, hence the indefinite extensibility of the finance-capital endogenously generated by each iteration where money is credit-based,

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[11] The distinction between and relations among what I call 'credit-modulatory' policy on the one hand and 'credit-allocative' policy on the other are fundamental to much of my work of the past 15 years, and failure to attend carefully to their relations accounts for a surprisingly large portion of the most salient financial and macroeconomic calamities of the past century. For essential background, see, e.g., Robert Hockett, *A Fixer-Upper for Finance*, 87 WASHINGTON UNIVERSITY LAW REVIEW 1213 (2009), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1367278 (introducing the distinction and proposing 'regulation as modulation' as preferred model of financial supervision); Robert Hockett, *The Macroprudential Turn: From Institutional 'Safety and Soundness' to Systemic 'Financial Stability' in Financial Supervision*, 9. UNIVERSITY OF VIRGINIA LAW & BUSINESS REVIEW 1 (2015), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2206189 (interpreting the move toward macroprudential finance oversight as reflecting long-awaited implicit recognition of the distinction's regulatory importance); and other sources cited further infra.

For discussion of the practical inseparability of the conceptually distinct allocation and modulation functions, and of the consequences of this inseparability for the sustainability of our present practice of assigning allocation to finance ministries such as the U.S. Treasury and modulation to central banks or monetary authorities such as the U.S. Federal Reserve System ('Fed'), see Hockett, sources cited supra, note 7. Also HOCKETT, SPREAD THE FED (Palgrave 2024); and Hockett, *Central Bank Independence with (Principled) Central Bank Allocation*, in POPULISM AND THE FUTURE OF THE FED (James Dorn ed., Cato 2022). For a more popularly accessible discussion of the conceptual distinction between money modulation and allocation as well as the difficulty of maintaining the distinction in practice, see Robert Hockett, 'Money in Context, Part 1,' *Law & Political Economy*, April 8, 2020, available at https://lpeproject.org/blog/money-in-context-part-1/; and Robert Hockett, 'Money in Context, Part 2,' *Law & Political Economy*, April 9, 2020, available at https://lpeproject.org/blog/money-in-context-part-2/.

[12] See Robert Hockett, *Recursive Collective Action Problems: The Structure of Procyclicality in Money Markets, Macroeconomies, and Formally Similar Contexts*, 3 JOURNAL OF FINANCIAL PERSPECTIVES 1 (2013), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2239849.

deprives the relevant markets of stable equilibria absent concerted exogenously sourced action of an unapologetically allocative character. This concerted and forthrightly allocative exogenous action, I claim, is either part of what Keynes meant, or of what he could or should have meant, by 'the socialization of investment.'

After making out my associated positive and normative cases for a Keynesian form of central bank macro-allocation along the lines just described, I then briefly sketch one specific institutional means, adapted to the institutional context of the United States with which I am most familiar, of (minimally) socializing investment in the spirit of those earlier Parts of my exposition – and hence, I hope, in the spirit of Mr. Keynes.

On the theory that reforms often are easiest when they can be made simply by 'tweaking,' 'fine-tuning,' or minimally altering existing institutions, I give my proposal the form of some minor alterations to the US's existing central banking (Fed) and finance-ministerial (Treasury) arrangements. This proves to yield an additional benefit: for the Federal Reserve and Treasury *reforms* I here sketch turn out to be a partial Fed and Treasury *restorations*.[13]

1. First Things First: Capital – Productive and Otherwise

The markets that Keynes suggested we might have to 'socialize' are nowadays usually called 'the capital markets.' First things first, then: what does the term 'capital' as used in this phrase comprehend?

Here I shall mean, in the first instance, any non-human accessory to productive activity. Machines, tools, factories and modes of transport of course come to mind, for in the first instance capital is like this. It should occasion no controversy to christen this elementary form '*physical*' capital.[14]

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[13] Like reforms would be possible in any other jurisdiction of the contemporary 'developed' world, all of which feature central banks or monetary authorities and finance ministries function more or less identically to the ways in which their US counterparts do.

[14] In characterizing 'capital' thus 'in the first instance,' I believe I am following standard Anglo-American usage as found in, among other places, 'production functions,' the 'Cambridge Capital Controversies,' and so forth. This of course differs from Marxians' more searching account of capital, which is treated both as inherently monetary like what I will be calling 'finance-capital' and as the surplus product of a specific social relation – that between hiring firms or entrepreneurs and wage laborers whom the latter pay only the value of their subsistence and reproduction rather than the significantly larger value of their product. Marx of course uses the term 'means of production' where Anglo-Americans use terms like 'physical capital' or 'productive assets.' Terminological variances such as these, I fear, lead many orthodox Ango-American economists to believe that they – and Keynes – differ with Marx rather more than they actually do on many fundamental questions. See generally ROBERT HOCKETT, STATE, CREDIT, AND CAPITAL: A RECONSTRUCTION (Book Manuscript 2024).

In non-barter exchange economies like most of those in the 'developed' world, however, capital also takes non-physical, 'financial' or 'monetized' form. *This* face of capital amounts, in effect, simply to legal *claims* upon physical capital – claims underwritten by the state via legal tender laws, contract law, or both. It is the capacity to 'command' physical capital or productive resources.

It is, in other words, just purchasing or rental power, be it pre-accumulated or borrowed, that one deploys in the purchase or rental of physical inputs to productive processes – the aforementioned *physical* capital.

My allusion to the *purpose* of deployment here – the purchase or rental of physical capital used *in production* – is to be noted. Ditto the allusion to monetization, which *broadens the sphere* of possible purposes that *can* motivate capital deployment.[15]

It is *common* to name at least *some* financial or monetized capital of the variety just specified *in keeping* with its purpose. One might in such case label some instances of it 'investment capital,' which we can then distinguish from 'speculative capital' – a variant species made possible by the aforementioned monetization itself, more on which momentarily.

We can then take to employing the term 'financial [or 'finance-'] capital' as *genus* to the two distinct *species* we'll now call 'investment' and 'speculative' capital. And thereupon we can then call 'investment' capital any instance of finance-capital deployed with a view to earning returns through production, and 'speculative' capital any instance of finance-capital deployed with a view to earning returns through the winning of bets placed on price-movements in primary goods and services, secondary financial, or tertiary derivatives markets.[16]

Of course, most instances of purposefully productive investment, not being 'sure things,' involve an element of risk hence at least of *de facto* speculation alongside the investment. Many instances of speculation, in turn, can help stabilize patterns of physical production, hence flows of productive investment, precisely by hedging against risks of the aforementioned kind. Finance-capital flows that one actually encounters in the proverbial 'real world' are accordingly not apt to lend themselves to neat categorization as either unalloyedly productive or speculative. They nearly always involve elements of both.

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15 See again observations made supra, note 10.

16 Roughly speaking, the 'primary' markets to which I refer are markets for new issuances, the 'secondary' are markets for previously held such issuances subsequently sold on to others, and the 'tertiary' are markets for hedging and other contingent claim contracts including forwards, futures, swaps, collars, and the like. See generally R. Hockett, *The Wealth of Our Commonwealth*, 7 BUS. ENTREPRENEURSHIP & TAX L. REV. 1 (2024), particularly Part 4 on 'Market Stratification.' Also HOCKETT, STATE, CREDIT, AND CAPITAL, supra note 14 Hockett, *Real Arrow Securities for All: Just and Efficient Insurance Through Macrohedging*, 34 REVIEW OF BANKING & FINANCIAL LAW 609 (2015).

In the pursuit of *purposes* or the formation of *intentions* that *prompt and guide* capital flows, however, productive and speculative purposes can and do typically alternately dominate. And purposive, intentional actions for their part generally bring material consequences – be these productive or counterproductive, stabilizing or destabilizing. It will accordingly prove helpful to keep the distinctions between productive and speculative capital clearly in view, in the manner of Weberian 'ideal types,' notwithstanding their co-presence in varying proportions from case to case among actual capital flows.

The divergence between investment and speculative capital flows made possible by monetization as just described, we'll find below, is not the sole source of certain recent and indeed highly counterproductive financial and macroeconomic dysfunctions that have found their ways into newspaper headlines over the past 15-plus years. But it is easily one of the worst accelerants. For it enables the self-augmenting – that is, the recursive – widening without limit of a gulf between profiting and producing implicit in any simultaneous decentralization of both production and finance in the form of disaggregated market exchange.[17]

Indeed, we shall soon find that sustainably decentralized production might actually *require* a *non*-decentralized and socially guided – that is, socialized – mode of finance. And this is what I suspect underwrites the aforementioned Keynesian asides that have occasioned this paper, all three of them ultimately rooted in what Marx and Keynes, uniquely in the modern era, recognized to be endogenous credit-money's *legal*, hence *material*, *productive non-neutrality*.[18] But we are not yet equipped to see fully why one might say such things. There is more ground to cover.

2. Capital – Public and Private

Capital can be *further* specified, along *another*, orthogonal dimension of comparison, not only into physical and financial, then productive and speculative species as I have suggested in the previous Section, but now also into public and private species – in this case, according not to the *purposes* but to the *source(s)* of its

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[17] Much more on these dynamics in Hockett, *Wealth of Our Commonwealth*, *idem*. Also in Hockett, *Income Inequality and Market Fragility: A Model and Some Empirics in the Political Economy of Finance, Part II*, 62 CHALLENGE 31 (2019); and Hockett, *Income Inequality and Market Fragility: Some Empirics in the Political Economy of Finance, Part I*, 62 CHALLENGE 32 (2019).

[18] We shall be developing this crucial point below. Hints of what we shall find can be found in J.M. Keynes, *A Monetary Theory of Production*, in DER STAND UND DIE NÄCHSTE ZUKUNFT DER KONJUNKTURFORSCHUNG: FESTSCHRIFT FÜR ARTHUR SPIETHOFF (Munich: Duncker & Humboldt 1933), pp.123-25; and of course Marx's CONTIBUTION of 1859 and KAPITAL Vol. I (1867), Vol. II (1885), and Vol. III (1894). In brief, money 'matters' for production because it is the primary mode that investment capital now takes, and is 'non-neutral' more generally because, most of it taking the form of credit-money, its issuance is identical to the proliferation of legally enforceable debt liabilities. The same facts of course entail that the *law* 'matters' where contemporary productive modalities and relations are concerned.

‘flow.’ And in contemporary ‘developed’ economies, as it happens, the ‘public’ component of the non-physical investment capital stock in fact dwarfs the private.

This claim might ring initially unfamiliar and even counterintuitive, so I’ll repeat it: *In contemporary ‘developed’ economies, the ultimately* publicly *sourced component of the non-physical capital stock* dwarfs *the genuinely* privately *sourced component.*

Here too I shall now have to do some unpacking. For both the fact and the magnitude of the difference between the public and private capital stocks, as well as that difference’s profound implications for production, appear – even after over a century’s helpful writing by the ‘Swedish,’ the ‘Austrian,’ and the ‘Keynes of the *Treatise*’ schools – still not to have been fully grasped and appreciated by most citizens or even many scholars.

So what is this ‘*public*’ capital to which I refer? *In what sense* is it ‘public’ and in what sense is *the greater part* of non-physical, finance-capital now public?

The answer resides in that ‘monetization’ to which I alluded before. And to see what that means we must start with the principal institutional *source* of all monetary, hence all financial, aggregates in ‘developed’ jurisdictions featuring Wicksellian endogenous bank-money arrangements with Fichtean-Knappian ‘state fiat’ currencies.[19]

Here’s what I mean …

Under all such arrangements, crucially, the primary financial institutions – publicly chartered commercial banks – are not ‘*intermediaries*’ of exogenously originating, pre-accumulated stocks of finance-capital. Rather, they are state-licensed, state-backstopped, state-guided *issuers* of endogenously extended, publicly monetized credit. In effect, as I’ll illustrate, they are private sector *franchisees* of the public sector *franchisor* that *legally charters* them, the franchised good in this case being the credit-based monetary medium bearing the state’s imprimatur – the ‘legal tender,’ or ‘money’ supply.[20]

Like any franchise, the state money franchise is a quality control arrangement meant to assure a uniform standard incumbent upon a large number of legally licensed disseminators.[21] While every McDonalds restaurant is owned and operated by a different proprietor, its offerings will be uniform across North America, on pain of any deviant’s loss of his legal franchise license.

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[19] See again supra, note 5, for a refresher on these names and terms.

[20] See Hockett, sources cited supra, notes 7 and 11. Also Hockett, *Finance without Financiers*, 48 POLITICS & SOCIETY 3 (2019); Hockett, *Remodeling Finance: The Franchise View and Beyond*, 45 CORNELL LAW FORUM 34 (2019); Hockett *What do Banks Intermediate?*, 7 February 2020 JUST MONEY (2020); and HOCKETT, DEMOCRATIZING FINANCE (Verso 2022) (w/ Fred Block).

[21] *Idem*.

Just so with any private sector commercial banking institution, any of whose extensions of publicly sanctioned and monetized credit in violation of the anti-inflationary and anti-deflationary 'quality control' standards promulgated and policed by the Federal Reserve System, the Federal Deposit Insurance Corporation (FDIC), and the Office of the Comptroller of the Currency (OCC) or its state law counterpart for any state-charted bank will invite loss of the bank charter.[22]

Note what this means for the national finance-capital stock: it means that our publicly licensed banking institutions do not '*intermediate*' our capital stock, but *generate* and *disseminate* it.[23]

Were banking and finance merely 'intermediation,' as all too many private sector bankers and their *rentier* clients earning rents on the basis of induced scarcity find it convenient for us to think, *all* capital would be in a certain sense *private* – and, therefore, unproblematic from a productive or public policy point of view. For there would in such case be both inherent and, at least as importantly, ascertainable *limits* to its *supply*. All that was lent would have to have been pre-accumulated, and hence all loans would be 'made' from a finite and determinate set of antecedent deposits.

But this is *not* how *banks* (or 'shadow banks') work.[24] It is how *mutual funds* work. Where *banks* are concerned, it is truer to say 'loans make deposits' than to say that 'deposits make loans.' And this fact is far more consequential, where investment stability and productive sustainability are concerned, than seems yet to be widely appreciated – notwithstanding its familiarity to Walras in the late 19th century, Marx in the mid 19th century, Thornton in the early 19th century, and others – including John Law, James Steuart, and Alexander Hamilton in yet earlier centuries.[25]

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[22] *Idem*. Surprisingly, virtually no lawyers or economists inquire why the US's first federal bank regulator, established with the National Bank Act of 1864, was and still is called the 'Comptroller' – archaic English for 'Controller' – of the national *Currency*. The reader will know after reading the next several pages – or any of the works I've just cited. See also *Money's Past is Fintech's Future: Wildcat Crypto, the Digital Dollar, and Citizen Central Banking*, 2 STANFORD JOURNAL OF BLOCKCHAIN LAW AND POLICY 1 (2019).

[23] *Idem*.

[24] Shadow banks are institutions and markets, notably the money fund, securitization, repo, and derivatives markets, that replicate banks' 'borrow short, lend long' maturity-transforming business model in manners designed to escape banking regulations aimed at mitigating the liquidity risks inherent in that model. See generally Hockett, sources cited *idem*.

[25] See, e.g., especially Volumes II and III, but also Volume I, of MARX'S KAPITAL, *passim*. Also L. WALRAS, DE LA FIXITÉ DEVVALEUR DE L'ETALON MONÉTAIRE (1882); and HENRY THORNTON, AN ENQUIRY INTO THE NATURE AND EFFECTS OF THE PAPER CREDIT OF GREAT BRITAIN (Hatchard & Rivington 1802). The works of John Law and Sir James Steuart earlier on in the 18th century feature a similar, if less systematically explored, understanding of credit-money endogeneity.

The key point that stems from the institutional fact just elaborated, which the Wicksellian Keynes of the *Treatise* well understood and which we too must 'get' if we are to understand our own productive and associated financial arrangements along with their 'upside' and 'downside' potentials, is that we, the public, supply most of the nation's *investment* capital by legally *monetizing* our own public '*full faith and credit*.'

This takes a brief bit of detailed tracing to substantiate, both because it is counterintuitive at first – we've been trained, through such words as 'intermediation,' by the *rentiers* and some of their academic apologists to think differently – and because the process of monetization occurs in those 'black boxes' that we all call the 'banks' – including both the private sector and the public sector Federal Reserve District Banks – and seldom look inside.

Let us, then, look more deeply. Let's look inside of these boxes …

3. Banks – Publicly Franchised Finance-Capital Generators

Suppose that you go to a bank for a loan to finance a remunerative project – a project you're sure will prove profitable. You need purchasing power to gain command over your project's material inputs, but all that you have is your own private promissory note – your capacity to contract for a loan.

Your promissory note is not legal tender – it's not a publicly recognized money that sellers and renters are legally required to accept in payment of obligations in the way that Federal Reserve Notes (a.k.a. 'dollar bills') are – hence can't serve directly as monetized investment capital. So you go to the bank to exchange it – to 'swap' it, in fact – temporarily for *public* promissory notes: Federal Reserve Notes or their electronic equivalent.

These *do* count as, indeed they are *legally deemed*, 'legal tender' – i.e., money, publicly guaranteed purchasing power usable in financing all manner of private production.[26]

Now, the bank is of course going to *evaluate* your proposed project and its likelihood of 'success' – that is, of profitability – before approving your proposed swap, in effect serving as a publicly licensed private sector gatekeeper in the dissemination of what we shall momentarily find to be public investment capital. I want to talk about *how* it does that in a moment, for much hinges on it. But first let us see how the swap works and how it turns privately approved loans into publicly issued finance-capital…

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[26] See again Hockett, sources cited supra, note 20.

If the bank approves your temporary-swap application, it is going to trade for your promissory note, not quite literal public promissory notes, but what lawyers, and with them Walras and his best-informed contemporaries, used to call their 'fiduciary' equivalent.[27] It is going (a) to open an account in your name, (b) to credit an account already there in your name, or (c) to provide you a cashier's check – another variant on our old friend the promissory note – that instructs someone else to credit you.

Now for the kicker: you can immediately *spend* this credit – it is monetary from the get-go, requiring no antecedent accumulation of gold coins in a sack, metal bars on a pallet, paper bills in a vault, or whatever. You simply insert a chip, swipe a strip, or key a blip into a 'reader' and you've paid for the inputs to your bank-financed project, be they machine tools or a plane ticket to Las Vegas (we'll come back to that).

What makes this possible – what makes it a time-limited, term-structured private note / public note swap – is that the bank is, as noted above, a publicly licensed institution networked into our national payments system. And at the center of that payments system sits … wait for it … our *central* bank. In the U.S., again, that is the Fed. And owing to the unsunderable internal tie between monies and payment systems, not to mention the legal tender status of its own promissory notes, this means the Fed is the montizer of your promise – or what is the same thing, of the Federal Reserve System Member Bank's '*crediting*' of your promise.

Let's think this through a bit more, though I trust you are already catching a glimpse of what's happening here in our bank and the Fed-administered national payments system into which it is legally networked …

Socially considered, a functioning money is, among other things, just 'that which pays' in a social practice of paying or a 'payments system.' Relatedly, it is 'that which counts' in a system of debit and credit or value accounting. And it is we, the public, who democratically *legislate* what shall pay, who owes whom, what shall count in payment or discharge, and who shall *disseminate* that which counts it when we endogenously generate it, *ex nihilo*, through public-private note swapping at publicly chartered, privately run banking institutions as we have done now for ages.

And here in the U.S., again, we have legislated that the public sector Fed shall generate and hence modulate the supply of that monetized credit – i.e., govern its aggregate supply – while private sector banks shall allocate it – i.e., 'gatekeep' by evaluating proposed projects and then deciding who will enjoy access to that capital.

[27] See again Walras, supra note 25. As the word's Latin radical (*fide*) suggests, 'fiduciary' status attaches to anyone upon whom, in virtue of some legally salient role or relation – such as that of a banker to her client – legal obligations of trust are expressly or impliedly imposed

I am not a licensed bank, so I can only *purport* to lend to you by 'opening an account' in your name and handing you a chip card or strip card to 'swipe the swap.' Hence if you swipe my counterfeit bank card to purchase your inputs – machine tools or plane tickets or otherwise – nothing will happen. It 'doesn't count.' It will not pay. It is not money or legal tender, it's not a public capital instrument swapped for your private capital instrument. Nor is it that instrument's instantly generable and indefinitely extensible fiduciary equivalent – a 'bank account.'

For again, I'm not a bank.

Were I a bank, all of this would be possible. For we would have legally rendered it possible, we would have made this an institutional fact of our social practice of crediting, money-issuing, and paying. And thus it happens each day now – at *actual* publicly licensed banks networked-in to our Fed administered public payments system.

This form of monetized public finance-capital changes everything where finance-capital is concerned, and has done for decades if not centuries. Its analysis lay at the core of the work not only of the early Keynes and his teacher Wicksell, who called this stuff 'bank money,'[28] but also, as noted before, of Walras's earlier work on money and, well before even his, Thornton's and indeed Marx's in all three volumes of *Kapital*, especially Volumes II and III.

Fragments – and alas, *only* fragments – of these earlier observers' insights found their way into contemporary thinking through Keynes in the Anglosphere and, before him, both 'the Swedes' and 'the Austrians' beyond. But these thinkers' followers drew only modulatory, not allocative, lessons from the work. And that, we shall see, is why they, unlike Keynes, didn't propose as Keynes did a 'socialization of investment.'[29]

Keynes's predecessors saw, in other words, that endogenous credit-money supplies must be modulated in the interest of price stability – that is, in the interest of there being neither 'too much' money 'chasing' too few goods and services nor 'too little' money finding too many potentially productive yet unfinanced physical investment projects. But they overlooked, as we'll see, the dependence of that public project of money *modulation's* success upon at least one form of public *allocation* as well.[30]

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[28] See again WICKSELL, supra note 5.

[29] *Keynes* drew such lessons, I suspect, at least in part because, notwithstanding his efforts to conceal the fact, he read Marx with at least some degree of care and admiration. His remarks as to what he called the 'pregnancy' of Marx's M-C-M' model of circulating capital, along with his friendships with the Marx-admiring Kalecki, Sraffa, and Joan Robinson, seem to me to afford external evidence complementing the internal evidence that are Keynes's interest in 'hoarding,' money non-neutrality in production, and even labor costs as a rough index of value macroeconomy-wide in the *General Theory*.

[30] See again Hockett, sources cited supra, note 11.

4. Capital & Production – Their Money-Mediated Divorce, Our Broken Home

To elaborate further what I am now driving at – viz., monetization's and Wicksellian bank-money's capacity jointly to sever profiting from producing, hence to drive financial asset price hyperinflations that impede physical capital accumulation – I shall have to return to our bank for a moment…

Recall first that in evaluating your aforementioned swap application, a bank's loan officer will ask herself whether you're apt to succeed with your project. That is a micro-, not macro question. And the publicly licensed, but privately (that is, shareholder-) owned commercial bank's personnel will unpack and address this question by reference not to *production*, to which the bank's shareholders in their private capacities as shareholders are indifferent, but to *profit*.

That is the rational thing for the bank to do in a system where not only production, but also production finance and indeed most forms of finance-capital, are left to privately ordered market exchange. The bank survives and keeps its shareholders happy in our fragmented system only as it profits.

Our system of bank regulation – in the terms used above, our bank-licensing regime – for its part at present publicly *endorses* this. It polices primarily bank 'safety and soundness' – that's a regulatory term of art – and aims above all else to … another term of art … 'prevent bank *failure*.' And these are all functions, not of production, but of profits.[31]

None of this would be problematic were profits and producing identical or even proximately linked, such that production would 'take care of itself' just so long as we ensured profitability. But alas, the monetization of finance-capital as noted above *enables* a divergence, while the outsourcing of public capital management to exclusively profit-driven private sector banking institutions and other financiers virtually *guarantees* that divergence.

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[31] For more on this, see Robert Hockett, *The National Reconstruction and Continuous Development Act of 2021*, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3775616. This bill has now been formally proposed in Congress by Rep. Ro Khanna (D, CA) and Sen. Marco Rubio (R, FL). See Robert Hockett, 'Reorganizing to Make America Make Again: The National Development Strategy and Coordination Act of 2022,' *Forbes*, Dec. 13, 2022, available at https://www.forbes.com/sites/rhockett/2022/12/13/reorganizing-to-make-america-make-again-the-national-development-strategy-and-coordination-act-of-2022/?sh=58e3428d76dd; and Robert Hockett, 'Building Back Better Forever: The National Reconstruction and Continuous Development Act of 2021,' *Forbes*, Jan. 29, 2021, available at https://www.forbes.com/sites/rhockett/2021/01/29/building-back-better-forever-the-national-reconstruction-and-continuous-development-act-of-2021/?sh=3f85c4723cfd.

In fact, it guarantees not only that this divergence can and will happen, but also that it will steadily widen through time, recursively 'feed on itself' without limit until terminal credit-collapse.

That sounds apocalyptic – it should, for it is – and this might have led you to think I'll now posit some 'radical,' exotic, or 'heterodox' idea in explaining myself. Something about 'dialectic,' 'hysteresis,' 'Minsky Moment' or some such …

But I'm not.

The crowning irony of our present finance-capital arrangements, I think, is that the dysfunction endemic to decentralized private bank management of centrally supplied public central bank capital is entirely accessible to orthodox intuition. And yet it goes almost entirely unremarked – or at the very least unmodeled and hence unexplained.

The problem is, in other words, attributable to variants on orthodox 'market failure' more familiar in both 'freshwater' and 'saltwater' precincts even than in hotbeds of putative heresy like late 19th century London, or late 20th century Annandale-on-Hudson or Tennessee.

I am referring to collective action predicaments that loom around any setting in which people decide things individually that can aggregate into upshots affecting all of them collectively. The garden-variety renditions of these challenges are familiar, while what I have long called their iterative, recursive renditions for some reason are not.

5. Collective Action Predicaments – Recursive and Otherwise

A collective action predicament – call it a 'CAP' – is a choice situation in which individually rational decisions aggregate into collectively irrational outcomes.[32] Think of the rush to the theatre door after 'fire!' is shouted, or of everyone's standing at once at a cultural or sporting event to 'get a better view.'

A CAP is in this sense a 'tragic situation,' tragic in the classical Greek – 'damned if you do, damned if you don't' – rather than in the trivial, 'bad news' sense. (I harp on this because the *structure* of the situation is what is critical, and only 'predicament' and the Greek sense of 'tragedy,' not the imprecise 'problem' or 'disaster,' convey that.)

CAPs are familiar enough generically – again, 'fire!' – but their pervasive affliction of decentralized capital market exchange seems to be strangely

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32 See again Hockett, sources cited supra note 12.

underappreciated. And what I have dubbed their far worse *recursive* renditions – lets call them 'ReCAPS' – seem to attract no notice at all.

This, I believe, is why we don't solve them. It's why we keep getting finance and, accordingly, production all wrong. And it is why Keynes was right about 'functionless investors,' the necessary 'euthanasia of *rentiers*,' and 'the socialization of investment,' whether he would have put things in the manner in which I put them here or not.

A few examples will sharpen understanding …

The most salient *non*-recursive CAPs where production is concerned stem from what I call 'controllability' and 'capturability' problems, respectively, in economies in which production is delegated to decentralized private ordering. *Controllability* problems induce collectively irrational underinvestment in productive *industry* – why individually invest in a firm, for example, if underemployment, deflation or inflation in the macro-environment make future sales uncertain? *Capturability* problems induce collectively irrational underinvestment in *infrastructures* necessary to production – why individually invest if the 'positives' yielded by the investment are mainly 'external'?

Recursive CAPs – again, ReCAPs – are collective action problems with 'feedback effects.' They are self-worsening in consequence of their structure, which drives an iterative process pursuant to which individual reactions at time $t+1$ to events that occur at time t do not mute, nullify, or counteract those events, but simply repeat them *ad infinitum* in more acute and collectively devastating form.

Examples abound in decentralized markets, especially though not solely in banking and capital markets. A few more familiar examples will make the point …

Inflation: You and I see prices rising, hence rationally buy more now rather than waiting till later; but this just makes prices rise faster. *Deflation*: You and I see prices falling, hence rationally defer buying or hiring till later; but this just makes prices fall further and unemployment rise faster. *Bank Run*: You and I hear that our bank is faced with liquidity trouble, hence rationally 'run' there to withdraw our funds before they run dry; but this simply hastens the eventuality we fear. *Asset Price Bubble*: Simply a hyperinflation in capital markets. *Market Crash, Credit Crunch,* or *Asset 'Fire Sale'*: Simply a debt-deflation or 'bank run' on capital assets. And so on…

See?

The story of 'financialization,' productive atrophy, and crash-to-crash lurching on the part of most of the 'developed' world's *macro*economies over the past 50 years, not to mention the specific decades that led up to 2008 and to 1929 earlier, just is the story of unnoticed collective action predicaments endemic to the

*micro*structure by and large shared by those economies.[33] And that microstructure is a structure of scattered nodes of individual agency actuated by individual 'interests.'

That *needn't* be a problem for production. But it *will* be a problem for production if we let it act as a problem for production *finance*.

It is one thing to decentralize production, it is another to decentralize the *financing* of production – at least when we do so with public as well as private capital as these terms are defined above. The first simply isn't compatible with the second.

That's apt to strike many as counterintuitive at first – again, we've been taught otherwise, and have been taught not to think of production and production finance separately. But disaggregate and then think of them separately, and you will see this is right…

Simply remind yourself that if finance is for profit, and profit is possible without production, then production can tend to be under-financed, while unproductive and even counterproductive profiting can be over-financed – indeed *vastly* over-financed once indefinitely extensible public finance-capital (Wicksellian 'bank money' counted as Fichtean-Knappian state-issued legal tender) gets into the act.

Hence my earlier mention of Vegas, where people go not to produce, but to win from others what they already have – i.e., not to make, but to take…

But what can we do about it?

What we must do is to 'socialize investment' a la Keynes. As we'll now see, however, this mightn't require full-on micro-allocation of all public finance-capital. It might be enough simply to macro-allocate that capital – viz., between broadly more *productive* and broadly more *speculative* uses, as these terms are defined above. And as I shall show, the U.S.'s Federal Reserve System, in conjunction with sundry more Treasury-associated organs of our government, was originally designed to do just that.

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33 Germany, in which 'financialization' has been deliberately held at bay by both customary bank-manufacturer linkages and wise public policy, has been a partial exception that in effect 'proves the rule.'

6. Collective Capital Agency, a.k.a. 'Management' – What the Fed, Treasury, and 'Public Finance' are Actually **For**

To solve a collective action problem, you have to exercise collective agency.[34] We used to have a word for this form of agency – we called it 'governance,' and called its agents – *our* agents – our 'governments.'[35]

The chief secret of contemporary Wicksellian finance-capital, I think – the secret Keynes groped for – is that ungoverned production is in the long-run incompatible with ungoverned finance. And by 'governing' I don't mean just reactive regulation. I mean proactive *allocation* – allocation on which production and, in the end, therefore *money supply modulation hence financial and productive stability themselves* depend.

This takes us straight to our solution…

Here's something you might not have known. The U.S.'s Federal Reserve System is a national development bank – *our* national development bank.[36] Some sophisticates probably understand, at least obliquely, that the Fed is a kind of public capital manager – that's sort of what credit modulation and monetary policy are all about once public capital has been monetized – but they won't get the development bit.

That is in turn because we have severed finance-capital from its original productive purpose, as noted above, while relatedly severing modulation from allocation and macro from micro. The three divorces are all of a piece. They are faces of one schizophrenia, a state of mind in which finance and development are unrelated or even at war.

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[34] See again Hockett, sources cited supra note 12.

[35] The 'Austrians' - Böhm-Bawerk, von Mises, Hayek, Schumpeter … - kind of 'got' this. But unlike the Swedes – principally Wicksell and Myrdal (at least the Myrdal of MONETARY EQUILIBRIUM (19390) – who tipped them off, all of them save Schumpeter seem to have had Freudian 'issues' with authority. Hence they overlooked this solution, which is the only solution. In fine Habsburg fashion, they re-fetishized metal finery instead. Fisher, more on whom presently, 'got' it as well, but he seems to have thought we could get on *without* public capital. We can, provided we're cool with subsistence-level production.

[36] See, e.g., ROBERT HOCKETT, SPREAD THE FED, supra note 11; Robert Hockett, *Spread the Fed: Distributed Central Banking in Pandemic and Beyond*,14 VIRGINIA LAW & BUSINESS REVIEW 1 (2021), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3597724; Robert Hockett, 'The Fed is a Development Bank,' *Forbes*, Sept. 30, 2020, available at https://www.forbes.com/sites/rhockett/2020/09/30/the-fed-is-a-development-bank--make-it-our-development-bank-again/ ; Robert Hockett, 'Spreading the Fed: From Federal Disintegration through Community QE to Central Bank Decentralization, Part 1,' *Law & Political Economy*, August 11, 2020, available at https://lpeproject.org/blog/spread-the-fed-part-i/; Robert Hockett, 'Spreading the Fed: From Federal Disintegration through Community QE to Central Bank Decentralization, Part 2,' *Law & Political Economy*, August 12, 2020, available at https://lpeproject.org/blog/spread-the-fed-part-ii/

Now if you want to find words like 'finance' and 'development' joined in one title or phrase, you have to read journals like *Finance and Development* – the joint publication of the IMF and the World Bank, legally known as the International Bank for Reconstruction and Development. You won't find these things tied together in any self-styled 'developed' society.

We didn't *used* to think 'development' something only for 'underdeveloped countries.'[37] Nor, accordingly, did we think of 'development finance' as a special kind of finance only for underdeveloped client states. *All* finance used to be 'development finance,' just as all capital was productive capital.[38]

That was back when we understood public capital had to be not only publicly modulated, at the 'macro' level, but also publicly allocated, at the 'micro' level. You know how you can tell that? By looking at the Fed's 'federation' – its federated structure – which dates back to its establishment through the Federal Reserve Act (FRA) of 1913.

People often seem confused by the Fed. They speak of 'the Federal Reserve Bank' (not 'a thing'), then 'the Federal Reserve Board ('a thing,' but only as part of a bigger thing). When you then tell them that we have a 'Federal Reserve System' (*that's* the thing), they wonder how a 'System' can regulate or conduct monetary policy as if it had agency. Was Alan Greenspan 'a system'? Was Janet Yellen? Is Jay Powell?

Maybe best not to answer those last ones...

The Fed is a 'system' because it comprises multiple distinct nodes of agency at two distinct 'levels' – one corresponding to what I've called 'macro' and 'modulatory,' the other corresponding to what I've called 'micro' and 'allocative.' The Fed Board is the first of those, while the Regional Federal Reserve Banks – I'll call them Regional Fed Banks or Regional Feds – constitute the second.

The Regional Feds were meant originally to help finance 'development' in our nation's many still 'underdeveloped' and 'still-developing' regions circa 1913, which

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[37] I suspect that the shift is a product of the Cold War, where the point of 'development' came to be understood as facilitating 'developing' country 'takeoff' such as might lessen the appeal of Soviet and Chinese communism. It strikes me as no accident that Walt Rostow, coiner of the 'takeoff' understanding of 'development,' was an economist not in Treasury, the Fed, or the President's Council of Economic Advisors or National Economic Council, but the *National Security Council*. The title of his book – The Capitalist Manifesto, would also seem to be, let us say, a 'clue' as to his purposes. For more on this, see Robert Hockett, *Dylanomics: Why Economies 'Not Busy Being Born' are 'Busy Dying,'* 2 OXFORD OPEN ECONOMICS (2023), available at https://academic.oup.com/ooec/article/doi/10.1093/ooec/odad009/7273121.

[38] Id. See also Robert Hockett, 'Building Back Better Forever: The National Reconstruction and Continuous Development Act of 2021,' *Forbes*, Jan. 29, 2021, available at https://www.forbes.com/sites/rhockett/2021/01/29/building-back-better-forever-the-national-reconstruction-and-continuous-development-act-of-2021/?sh=3f85c4723cfd.

they did by monetizing – 'discounting' – productive commercial paper, a function that removed all liquidity risk from bank loans extended to productive startup firms.[39] That is a credit-allocative function – it's about productively directing the flow of public investment capital as I defined it above.

The Board was in turn meant to coordinate all of this regional development financing, to ensure that its partial decentralization across separate regions didn't fall prey to CAPs and ReCAPS as defined above, and in consequence generate nationwide modulatory dysfunction – inflation, deflation, hyper-inflation or debt-deflation.

This is a credit-*modulatory* function – it's about centrally orchestrating, via control of the national credit pipeline, the coherent functioning of regional public capital disseminators to avoid mis-allocation and, with it, mis-modulation.

This was a brilliant arrangement – maybe more brilliant even than its founders fully realized. In a single organizational stroke, it offered institutional means of solving the ages-old allocation/modulation conundrum, while relatedly defusing our ages-old national ambivalence over the dangers of capital concentration on the one hand, capital over- or under-generation on the other hand.

That conundrum and associated ambivalence had been the twin drivers of a strange national oscillation between central banking and *de facto* monetary anarchy from the era of Hamilton on down through the gilded age, and at last they were institutionally solved – in potential, at least.[40]

The institutional solution, moreover, took a form that bridged not only macro and micro, not only modulation and allocation, but also *public and private*. For productive initiative was left to private sector producers and entrepreneurs, while decisions whether publicly to monetize project-associated private paper were assigned to institutions that were themselves hybrid entities – the Regional Fed Banks being, as they were, overseen by Boards of Directors with membership two-thirds determined by private sector entities subject to Fed Board approval.

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[39] Another tragically forgotten bit of Fed – and hence our Republic's financial – history. And an ironic one at that, given the near-obsession with discounting commercial paper as the right way to central-bank on the part of Paul Warburg, the most influential Fed founder. See the brilliant PAUL M. WARBURG, THE DISCOUNT SYSTEM IN EUROPE (1910), and try not to weep. See generally Robert Hockett, *The Once and Future Fed – and Treasury*, 65 CHALLENGE 1 (2021), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3808792. Also Hockett, sources cited supra, note 36.

[40] The full history is recounted in HOCKETT, THE CITIZENS' LEDGER, supra note 7. Also Hockett, *Money's Past is Fintech's Future*, supra note 22; and Hockett, *Central Bank Independence with (Principled) Central Bank Allocation*, in POPULISM AND THE FUTURE OF THE FED (James Dorn ed., Cato 2022), supra note 11.

And so there it was, a network of public-private regional development banks overseen by a nationwide public capital overseer. And hence an optimal half-centralization of public development finance in the cause of decentralized private productive activity.

So what happened?

It grows a bit complicated here, as I've written at greater length elsewhere.[41] Suffice it for present purposes to say that a national mobilization for world war only four years after the FRA's passage (*From Warburg to War*, one might say), followed by a global pandemic … hmm … and then a 'roaring' decade in which 'America's business was business' and politicians' business was to 'get out of the way,' led to our largely forgetting the Fed's modulatory and allocative purposes and consequent potential as public capital manager for private production.

We also appear to have taken the Real Bills Doctrine, in effect the operating theory of the original Fed, to imply not only productive allocation's necessity to good modulation, but also its sufficiency to that task. Were all money endogenously generated here at home, that might have been harmless error. But where exogenously sourced war credit repayment flowed as abundantly into US markets as it did in the 1920s, the mistaken belief and consequently inadequate 'sterilization' of European gold inflows brought the great bubble and bust of the decade.[42]

Sure, we rediscovered the modulatory task and even dimly discerned its relation to the allocative task at the beginning of the New Deal after the Roaring 20s clammed up with a bang. That is what founding the mixed Board/Regional Federal Open Market Committee (FOMC) as permanent link between modulatory Board and allocative Regional Fed Banks amounted to. Ditto the Glass-Steagall Act of 1933 and the establishment of the Reconstruction Finance Corporation (RFC) in 1932 and its rapid expansion after 1933.[43]

But we've never grown fully and enduring clear, as a polity, about what this stuff all was for or was all about. And so we now live with the upshot of inattention – inattention to what we actually have, right now, right here before us, thanks to our insightful and foresightful ancestors, who left both the original regional Fed District Banks and a host of RFC subsidiaries – notably the Small Business Administration, the Export-Import Bank, and Fannie Mae – still in place and awaiting revitalization.[44]

The upshot? Continual misallocation of public capital by privately profit-, not production-, driven 'financial' institutions; consequent capital mis-modulation by

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41 *Idem.*
42 See again Hockett, sources cited supra, note 40.
43 *Idem*.
44 *Idem*.

timid or ill-informed stewards of our capital commons; and thus perpetual under-production, over-speculation, and 'secular stagnation.'[45]

Let's fix this.

7. Publicly Managed Public Capital, Privately Managed Private Capital

As I've suggested, we already have most, if not all, of the institutions we need now to do what needs doing. Their late 19th and early 20th century enabling acts need not even be amended, but must simply be read in accord with their origins. These are the legacies, indeed the bequests, of our forebears – Paul Warburg and Carter Glass foremost among them. What's needed is re-appreciation of these institutions' institutional purposes – and associated re-appropriation of their originally mandated mandates.

What that means practically is that we must reconfigure a few things to take public capital management back under public management, while fittingly leaving private capital to private management. We've already begun doing this, as it happens – first with QE mortgage paper during the last crisis, and now with pretty much every kind of paper under the sun (including decidedly non-solar fossil fuels!) during the recent pandemic.[46] Isn't it time that we grew more deliberate – and transparent – about all of this allocation?

Note, even if only in passing, how politically attractive this will be if we're finally clear in pronouncements about what we are doing…

Want to 'End the Fed,' Representative Paul, where the management of private capital is concerned? You're right – leave that entirely to 'unfettered' private capital managers, so long as they're not money-laundering, financing drug-lords or terrorists, etc. Want to 'kill crony capitalism,' fellow Wall Street Occupier? You too are right – stop channeling public capital through profit-, not production-moved private 'financiers.'

But how?

It's easier than you might think. We can organize thought and planning here in the way all intelligent investors and entrepreneurs do – by recourse to a balance

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[45] See, e.g., Robert Hockett & Richard Vague, *Debt, Deflation, and Debacle: Of Private Debt Write-Down and Public Recovery*, White Paper, Global Interdependence Center, Federal Reserve Bank of Philadelphia (2013), available at https://www.interdependence.org/wp-content/uploads/2013/04/Debt-Deflation-and-Debacle-RV-and-RH1.pdf.

[46] See, e.g., the excellent summary compiled by my former colleagues at FRBNY: Gara Afonso et. al, 'A New Reserves Regime? Covid 19 and the Federal Reserve Balance Sheet,' *Liberty Street Economics*, July 7, 2020, available at https://libertystreeteconomics.newyorkfed.org/2020/07/a-new-reserves-regime-covid-19-and-the-federal-reserve-balance-sheet.html.

sheet. 'Assets on the left, liabilities on the right.' Here is what proper accounting and accountability – that is, proper management – of our public capital stock can look like given the institutional hand we've already been dealt ...

8. Public Assets – 'Spread the Fed'

Let's start with assets, since everyone wants those.[47] An asset is generated each time a loan is extended. Bank loans are assets on bank portfolios. As noted above, private sector bank loans effectively tie asset value to project profitability, which as also noted above is a very good idea if profitability perforce means productivity. But monetized capital and practically unrestricted betting opportunity on *secondary*, what I call *n*-ary, and *derivative* 'capital *markets*' divorces the two, underwriting our constant misallocations and consequent mis-modulations.[48]

To solve the problem, just pull a 'Parent Trap' – remarry production and profit. Do that by fine-tuning what we do now: Require private sector lenders and other financiers to finance projects in either of two ways, each keyed to the source of the capital to be invested…

For privately originated, pre-accumulated capital, let private sector lenders and financiers invest unrestrictedly – at least as consistent with the criminal law. For publicly generated, Fed-monetized credit-capital, require pre-approval of projects by regional Fed District Banks as we did for the Fed's first 20 years as described above. Instruct these institutions, in turn, to evaluate projects by reference not simply to profits, but to production.

You might at first wonder whether Regional Fed Banks are up to this task. The answer is that they are, and the question is not even a close one. To see why, ask yourself first what they do *now*…

Have you ever noticed that what Regional Feds do now is essentially, in the words of one of my brilliant past Research Assistants, simply to 'write papers and stuff'?

She's right. Ms. Yuan is correct. That's part of what I did when I worked there. But it's the 'and stuff' part that's most interesting where fine-tuning's concerned. Fed Banks have Research Departments, and what they research are economic trends and developments within their regions – just as assigned to them way back in 1913. All they do *not* do now that was assigned them back then is to *monetize* project *paper* – that is, purposefully lend public capital in the form of discounting productive project-associated commercial paper.

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47 See again Hockett, sources cited supra, note 36.
48 See again Hockett, *Wealth of Our Commonwealth*, supra note 16.

This is what I am saying that they should once again do. They should *monetize private paper again*, be it directly, or via private sector banks, or via Bank of North Dakota style public banks, or all of the above. They know how to do it. Their Research Departments are practically telling them how to do it. (Banks do use Fed District Banks' *research* now, but banks can't solve CAPs or ReCAPS.) We're just not *letting* them do it. Let's let them do it – no, let's *make* them do it.

The present is an especially opportune time to make this transition – to 'cross (back) over' to our original way of doing things. There is even a beautiful sort of symmetry in what I shall propose – a symmetry beyond that of mutually offsetting assets and liabilities on our consolidated public 'balance sheet.' For a war and pandemic one century ago first took our Regional Feds off their mission, and the wars and pandemic of the past several years and the present now offer the chance to *restore* them to that mission.

I allude to my 'Spread the Fed' proposal…

You've perhaps heard of the Fed's Municipal Liquidity and Main Street Lending Facilities offered during the pandemic of 2020.[49] These were about aiding our states, municipalities, and small businesses nationwide in riding out and reversing the devastation of the present pandemic – a pandemic our principal collective agent, the nation's Chief Executive at the time – didn't seem able to handle. (One who lacks *any* agency – 'self-control' – lacks the makings of *collective* agency.) These programs were brilliant in conception and almost immeasurably promising in potential, working as they did to take assets associated with public goods and in need of public support onto the public balance sheet. But they were absurd in their actual administration.

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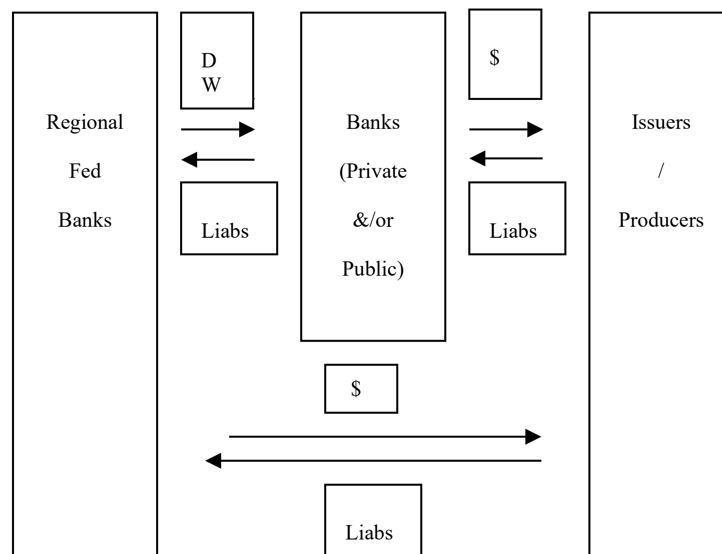
[49] The author assisted state and municipal officials to tap into the new Fed facilities opened temporarily during the Covid pandemic. See, e.g., Robert Hockett, *The Fed's Municipal Liquidity Facility: Present and Future Possibilities and Necessities*, Memorandum, May 2020, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3597732; Robert Hockett, *Community QE2: New Key Provisions and an Updated 'Game Plan' for State and Municipal Action*, Memorandum, May 2020, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3589851; Robert Hockett, *Community QE: Key Provisions and a 'Game Plan' for Immediate State Action*, Memorandum, April 2020, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3574157. Also Robert Hockett, 'Community QE: An April Game Plan for States and Cities,' *Forbes*, April 12, 2020, available at https://www.forbes.com/sites/rhockett/2020/04/12/community-qean-april-game-plan-for-states-and-cities/#138495c03624; Robert Hockett, 'Optimize Community QE: An Open Letter to Fed Chairman Powell,' *Forbes*, June 14, 2020, available at https://www.forbes.com/sites/rhockett/2020/06/14/optimize-community-qean-open-letter-to-fed-chairman-powell/; Robert Hockett, 'Community QE – Illinois Signs On, and Eligibility Further Expands, But "Penalty Rates" Still Have to Go,' *Forbes*, June 5, 2020, available at https://www.forbes.com/sites/rhockett/2020/06/05/community-qe--illinois-signs-on-and-eligibility-further-expands-but-penalty-rates-still-gotta-go/#5b593cfb18f2; and Robert Hockett, 'Welcome to Community QE: Now Let Us Put it to Use,' *Forbes*, April 9, 2020, available at https://www.forbes.com/sites/rhockett/2020/04/09/welcome-to-community-qe/#1e84d9fcc415.

The reason is straightforward. The MLF was administered entirely out of the Federal Reserve Bank of New York in Lower Manhattan. The MSLF for their part were administered out of the Federal Reserve Bank of Boston in … yes, Boston. I have worked at the first and with the second. Their staffs are brilliant and earnest, creative yet sober. But they are tiny in number, and to ask them to sort out the needs Oahu and Billings, or of Tony's Tractor Repair in Dorado or Nancy's Nails in Watts was to do them and their beneficiaries – to do *us* – an intolerable injustice.

What should we have done and indeed still be doing? Easy: Spread the Fed. Let Dallas handle Tulsa and Cleveland handle Ashtabula. Let Kansas City look after the financing needs of Packer Plastics in Lawrence and Atlanta those of Mimi's in the Marigny. Better yet, *incorporate additional* Regional Feds now that the western half of the country is filled-in as it wasn't in 1913.

It is ridiculous that Missouri has two Fed while California – no, while the entire West plus Hawaii – has one. But that doesn't mean 'redistribute' the Fed Banks, it means to make more. 'Re-Distribute' – restore to national distributed status – to make it the locally responsive national development bank it was always intended to be. Do that, and the Fed's role in publicly managing and investing our capital would look as depicted *Figure 1*, in which Regional Fed Banks lend, solely for projects reasonably likely to prove productive, to issuers.

Figure 1: **Reformed Bank/ 'Spread Fed' / Producer Relations**



Some of this lending would be direct, in the form of direct Fed discounting of privately issued paper issued for production, and some of it would be indirect, flowing through private sector banks and public banks accessing the Fed's Discount Window just as Paul Warburg envisaged well over a century ago. All that would

change relative to current practice is that the Regional Fed District Banks would now (1) take the lead role in lending, (2) resume early 20th century direct lending to producers, and (3) condition all lending on *ex ante* showings of reasonably likely production not speculation.

Lending of genuinely *private* capital, for its part, wouldn't need change at all. (Self-styled 'conservatives' should love this.) Banks could make loans for productive *or* merely speculative projects, provided they funded the loans fully with deposits, in effect *making* themselves what they routinely now falsely *label* themselves – 'intermediaries.'

The reason is straightforward in light of the discussion above: unproductive lending is only a problem when publicly generated and indefinitely extensible public finance-capital, not privately accumulated scarce private capital, is what is lent. This is the kernel of wisdom in Irving Fisher's '100% Money' proposals of the early-mid 1930s, which came a cropper only because they were all about 'shalt not's, not 'shalt's, where public capital is concerned. Ditto the 'narrow banking' updates of Fisher at present on offer.[50] What these all lack is a 'shalt' in respect of public capital – the 'shalt' of productive investment. And that is precisely what I am prescribing.

'Production,' of course – indeed by design – is doing a good bit of work here. I'll accordingly return to both it and 'development' momentarily. But let us complete our first pass at the consolidated national balance sheet first. Let's look at liabilities…

9. Public Liabilities – Digitize the Dollar, Widen the Wallets

Corresponding to the asset portfolio on the left hand side of any balance sheet are the asset-holder's liabilities on the right hand side of the same.[51] As discussed at some length above, our Fed already issues the principal tradable public liability that all of us now use in purchasing, paying, speculating, and investing. That is the Federal Reserve Note noted above – the Dollar Bill – along with its electronic equivalent.

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[50] See IRVING FISHER, 100% MONEY (1935). Keynes of course politely declined to endorse the plan upon receiving Fisher's invitation to do so, as the plan included no public-issuance to offset the private contraction that Fisher's narrow banking proposal would bring – in the midst of a debt-deflation no less. Regrettably, the many revivals of Fisher's proposal proffered since 2009 suffer the same defect.

[51] This Section draws upon Hockett, sources cited supra note 7; also Robert Hockett, *The Democratic Digital Dollar: A Peer-to-Peer-Savings & Payments Platform for Fully Inclusive State, Local, and National Money & Banking Systems,* 10 HARVARD BUSINESS LAW REVIEW 1 (2020), available at https://www.hblr.org/wp-content/uploads/sites/18/2020/02/The-Democratic-Digital-Dollar_HBLR_FINAL.pdf; and ROBERT HOCKETT, FINANCING THE GREEN NEW DEAL: A PLAN OF ACTION AND RENEWAL (Palgrave 2020). See also Robert Hockett, *Money's Past is Fintech's Future: Wildcat Crypto, the Digital Dollar, and Citizen Central Banking*, 2 STANFORD JOURNAL OF BLOCKCHAIN LAW AND POLICY 1 (2019), available at https://stanford-jblp.pubpub.org/pub/wildcat-crypto-fintech-future/release/1.

The Fed also maintains a system of Reserve Accounts for our banks, thereby operating as a 'bank to the banks' – hence our term '*central* bank' – and using these accounts both as a tool of monetary policy (partly through Interest on Reserves, or IOR) and as a liquidity management device (partly through Reserve Requirements). This is the Walrasian fiduciary rendition of the Fed's Notes – in Wicksell's terms, the Fed 'bank money' alongside its '*paper* money.'[52]

In effect, then, the Fed already stands between banks and the non-bank entities whose issuances it presently holds in its asset portfolio – principally Treasury Securities, Agency Securities, and IMF Special Drawing Rights (SDRs) during 'normal' times, supplemented by mortgage-related and, more recently, additional private sector issuances during recession and, in 2020, pandemic. What I have done above is simply to add *productive private sector loans* to the portfolio, which invites us to ask what the *liability* side *counterpart* addition should be …

The counterpart to adding productive private sector loans to the asset side of the public balance sheet just is to add interest-bearing private sector peer-to-peer (P2P) digital wallets to the liability side of the public balance sheet.

This is how the Fed can and must round out and complete its recent pandemic-prompted balance sheet expansion as it (1) transitions, as it already now *aims* to do, to issuance of a *digital* dollar, and (2) upgrades, as it is already now *doing*, the national payments platform to permit real time clearing and settling of transactions (I refer to 'FedNow'). All it need do is add digital *citizen* banking and *business* banking to its current '*bank* banking.'

Here's how it will work. First, every citizen, business, and legal resident receives an interest-bearing digital wallet – call it a Democratic Digital Dollar (3D) Wallet – accessible by desktop, laptop, smartphone or other device. Second, each such wallet is endowed with (1) what I call 'vertical' connectivity to a 'master account' on the liability side of the Fed balance sheet, and (2) what I call 'horizontal' (again, P2P) connectivity to all other wallets.

I call the resultant digital payments platform the 'Democratic Digital Dollar,' or '3D,' platform at the national level, for which I've proposed both Fed and Treasury ('Digital Greenback' and 'Treasury Dollar') renditions.[53] I call it the

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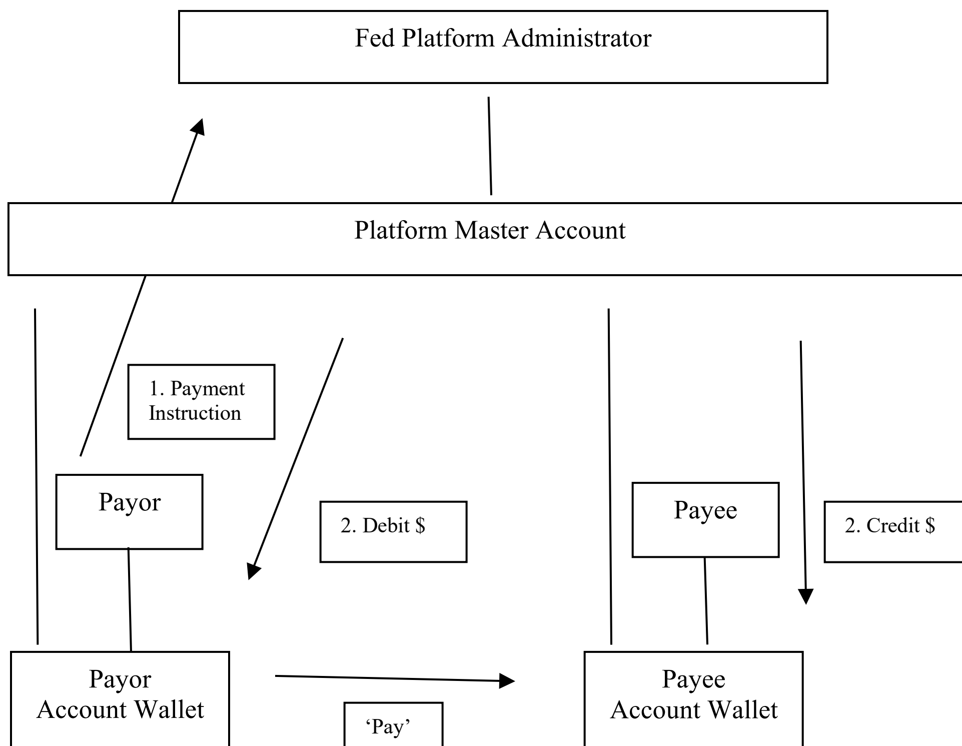
52 WICKSELL, *supra* note 5. There is a unfortunate tendency among some contemporary economists, not to mention legal and finance scholars, to interpret 'loanable funds' as a preaccumulated quantum exogenously supplied by bank depositors. Wicksellian loanable funds without endogenous bank money generation is a bit like decaffeinated coffee – the very point of the thing's been discarded. One contemporary economist who does not fall fully into this error is Woodford. See, e.g., MICHAEL WOODFORD, INTEREST AND PRICES (Princeton U. Press 2003), the title of which fittingly channels Wicksell.

53 See Robert Hockett, *Digital Greenbacks: A Sequenced 'TreasuryDirect' and 'FedWallet' Plan for the Democratic Digital Dollar,* 16 JOURNAL OF TECHNOLOGY LAW & POLICY 1 (2021), available at

'Inclusive Value Ledger' (IVL) platform at the state and local levels, with one version now before the New York State Legislature and another before the city of Kansas City.[54]

On any rendition, wallet holders are enabled to pay taxes, licensing fees, and other remittances, as well as to receive tax refunds, program moneys, and other disbursements, along the platform's vertical dimension. Then they can also make real time payments to *one another* along the its *horizontal* dimension.

***Figure 2*: Democratic Digital Dollar ('3D') & Wallet Architecture**



Private sector payments over the platform will occur on the liability side of the Fed balance sheet, just as accounts and payments now respectively subsist and occur on the liability sides of combined private sector bank balance sheets which themselves are in effect on the Fed balance sheet at one remove, via the banks' own Reserve Accounts at the Fed. In effect, this will give perfect account-book reflection to the fact that, in trading with one another 'severally' in our private capacities, we

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https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3599419. Also Robert Hockett, The Treasury Dollar Act of 2020 (Draft Bill), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3563007.

[54] See Robert Hockett, The Empire State Inclusive Value Ledger Establishment and Administration Act of 2019, available at https://assembly.state.ny.us/leg/?default_fld=&bn=A08686&term=2019&Summary=Y&Actions=Y&Text=Y&Committee%26nbspVotes=Y&Floor%26nbspVotes=Y.

are all trading liabilities that we ‘jointly’ issue – Fed promissory notes – in our public capacity

It is really that simple. And this should not be surprising. For, think about it: presently private sector banks hold privately extended loans on the asset sides of their balance sheets, and corresponding privately owned demand deposits on the liability sides of their balance sheets. All we are doing is removing those portions of both of these that involve public capital to the public balance sheet, leaving all that involves only private capital as is.

Before ‘tying all together’ by merging this liability side tweak with the asset side supplementation described above, it is worth quickly enumerating a few of the many advantages that the liability side supplementation just described will entail…

Inclusion: In a commercial society or exchange economy like ours, a payment system amounts to an essential public utility – a functionality that justice requires we make freely available to all. We will now have that. No more ‘unbanked’ or ‘under-banked.’ Call this the justice, inclusion, or public utility rationale for adding a universal 3D platform to the liability side of the public balance sheet.

Growth: Meanwhile, we measure the size and growth of our economy by reference to transaction volume, such that more efficient payments mean greater growth, *ceteris paribus*, and a larger economy over time. So, of course, does greater inclusion itself. Call this the growth or efficiency reason for adding a universal 3D platform to the liability side of the public balance sheet. Justice and efficiency thus converge to commend it.

Monetary Policy Efficacy: A 3D platform on the Fed’s balance sheet will also enable much faster fiscal stimulus and other forms of monetary policy transmission than does our present system of private sector banking institutions, which we can only hope will transmit federal stimulus money to consumers in the form of cheap credit. *In extremis*, we will be able to drop digital ‘helicopter money’ directly into our digital 3D Wallets. In less volatile times – times that the reconstruction I’m prescribing will make far more common, indeed ‘the new normal’ – we can countercyclically modulate spending activity by raising 3D Wallet rates when we must slow down and lowering them when we must speed up spending activity.

Value: A digitized public payments platform on the liability side of the public balance sheet also will enable public agencies from federal on down to local, should we wish, to dispense monetary rewards to ‘care work’ providers and other contributors to the public good that our present payment arrangements render too difficult for most governments to deem feasible. A teen who helps grade-schoolers with homework after school, or a friend or family member who cares for a ‘shut-in,’ can transmit digital ‘proof of work’ (POW) to a city, state, or federal social services authority and receive spendable 3D credits in return. There will be no need for ‘complementary currencies’ – the newly digitized 3D will *itself* be that currency.

Privacy: Going digital will offer commercial and financial data privacy benefits too. Public administrators of Fed liabilities don't act for profit – there are no 'carrots' to entice 'data harvest.' They also are subject to both 4th Amendment constraints and criminal sanctions, unlike Wells Fargo or Facebook – there is a 'stick.'

No matter how one looks at the matter, then, it seems clear we should institute a universal 3D Platform on the liability side of the Fed balance sheet as the Fed digitizes the dollar and upgrades the national payments platform. Merge this with the public productive lending to be represented on the asset side of the Fed balance sheet, and you have in effect all the rudiments of a full Public Capital Manager to manage our public capital – *all while leaving* bona fide private *capital to* private *capital management*.

I promised before to return to 'productive,' which is what must distinguish public capital management from private capital management. Let us now complete our portrayal of renewed and regenerative public capital management by looking a bit more 'deeply' at what production both does and must mean. And let's link it up with the now clearly necessary project of national reconstruction – what I have called, in honor of a well-motivated but as yet incomplete national redevelopment platform, 'Building Back Better & Beyond.' That will complete our conversion to a full Capital Commons – the proper 'end game' for any worthwhile project of BBB.

10. National Reconstruction and Development – An FSOC for 'R&D'

Have you noticed how the names of certain periods in our history, and of the institutions that we have established to manage significant challenges in those periods, tend to feature words like 'reconstruction' and 'development'?[55] And have you noticed how they also tend to run these together as if they were one-off, post-crisis affairs?

Such was the post- Civil War Reconstruction. Such was the aforementioned Reconstruction Finance Corporation (RFC) that financed first our New Deal and then our Second World War mobilization. And such is the International Bank for Reconstruction and Development (IBRD, aka 'World Bank') that we established to rebuild the world after the Second World War.

Associating reconstruction and development is a good idea. Thinking of them as brief, one-off post-crisis affairs is not.

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[55] This Section draws upon HOCKETT, FINANCING THE GREEN NEW DEAL, *op. cit.*; and Robert Hockett, *An FSOC for Continuous Public Investment: The National Reconstruction and Development Council*, 10 MICHIGAN BUSINESS AND ENTREPRENEURIAL LAW REVIEW 5 (2021), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3697282.

It is a tragic mistake.

Thinking development a 'done deal' is, in effect, of a piece with, if not identical to, the mistake that has been our (1) long-term forgetting that capital is for production, not speculation, and thus (2) consigning our public capital to private management while (3) severing macro from micro and (4) modulation from allocation.

We should accordingly on the one hand 'lever' present appreciation of ongoing crisis necessitating a national 'reconstruction.' But we should on the other hand also make *permanent* those things that we *do* now reconstruct…

For *scientific and technological* development are *perpetual*, and so then must *national* development be. We speak of 'research and development' in the one case, and often abbreviate it as 'R&D.' Let's use the same conjunction henceforth for 'reconstruction and development' too, since the latter is always the fruit of the former.

Henceforth, then, 'R&D' will mean reconstruction and development too. And 'development' thus defined will in turn define … here comes the kicker … '*productive*' as well. Here is the key to 'productive' as we move to make public investment – indeed, make America – both 'inventive-' and '*productive* again.'

How?

In other work, I have proposed establishment of new twinned national development institutions patterned in some ways after the War Industries Board / War Finance Corporation pairing and War Production Board / Reconstruction Finance Corporation pairing of the First and Second World War and New Deal eras, and in other ways after the Financial Stability Oversight Council (FSOC) of the post-2008/post-GFC era.[56]

[56] I am delighted to report again, as briefly noted above, that Rep. Ro Khanna (D, CA) and Sen. Marco Rubio (R, FL) have now jointly sponsored legislation that would institute most of my plan here. In addition to the sources last cited, see again Robert Hockett, 'Reorganizing to Make America Make Again: The National Development Strategy and Coordination Act of 2022,' *Forbes*, Dec. 13, 2022, available at https://www.forbes.com/sites/rhockett/2022/12/13/reorganizing-to-make-america-make-again-the-national-development-strategy-and-coordination-act-of-2022/?sh=58e3428d76dd; and Robert Hockett, 'Building Back Better Forever: The National Reconstruction and Continuous Development Act of 2021,' *Forbes*, Jan. 29, 2021, available at https://www.forbes.com/sites/rhockett/2021/01/29/building-back-better-forever-the-national-reconstruction-and-continuous-development-act-of-2021/?sh=3f85c4723cfd. See also Robert Hockett, 'U.S. Must Take Equity Stakes in the Companies It Rescues,' *Financial Times*, March 28, 2020, available at https://www.ft.com/content/86a333d0-6dc3-11ea-89df-41bea055720b; Robert Hockett, 'The US Must Ramp Up Production by the World Wars I & II Playbook, Not the 2008 Playbook,' *Business Insider*, March 29, 2020, available at https://www.businessinsider.com/coronavirus-pandemic-us-should-ramp-up-ventilator-mask-

Those pairings and conciliar arrangements, I've shown, simply reinstated in updated form Treasury Secretary Hamilton's Bank of the United States, which functioned both as a money-modulating central bank like our Fed and as a national development bank.

So how does my contemporary – and now permanent – rendition work?

The basic idea is this: Our Republic has but recently emerged from the ravages of pandemic and renewed worsenings of racial and ethnic divisions rooted in developmental inequity. These came atop the newly 'existentialized' threat of climate change that has emerged over the last couple of decades. Whether we call it a Building Back Better or a Green New Deal, then, something like a national reconstruction and development is going to be necessary.

The sheer scale of the needs, along with the sheer number of distinct industries that will be touched, will in turn require an FSOC-like *coordinating council* to prevent mutually conflicting and needlessly overlapping national reconstruction and redevelopment efforts. It will also be necessary to facilitate adequate collaboration not only across executive departments, but also public and private sector agents, and among all 'levels' of government in our federated polity.

What we must do, then, is establish what I call a National Reconstruction and Development Council (NRDC) charged with the task of developing and executing (1) a comprehensive yet coherent national pandemic-aftermath response, then (2) a likewise comprehensive yet coherent infrastructural reconstruction, and then (3) an ongoing and continually updated national development policy – let's formalize it as an 'NDP' – recognized to be every bit as essential as national defense policy, national economic policy, national environmental policy, and so on. (Indeed the first is prerequisite to all others.)

In light of this mission, the Council must comprise the heads of the Fed, the Treasury, and all cabinet-level and other relevant Executive Agencies with jurisdiction over national industry and infrastructure – e.g., the Department of Energy, the Department of Transportation, the Federal Trade Commission, the Small Business Administration, the Department of Education, the Department of Labor, the Environmental Protection Agency, and so on. These persons will be charged with formulating long-term national development strategies within each of their

manufacturing-2020-3; and Robert Hockett, 'We Are at War and Need Wartime Institutions to Keep Our Economy Afloat,' *The Hill*, April 4, 2020, available at https://thehill.com/opinion/white-house/491166-were-at-war-and-need-wartime-institutions-to-keep-our-economy-producing. Also Robert Hockett, *White Paper: How to Use the Military to Produce the Supplies America Needs to Fight the Coronavirus*, New Consensus (March 2020); Robert Hockett, *Immediate Coronavirus Economic Mitigation Measures*, New Consensus White Paper (March 2020). See also HOCKETT, FINANCING THE GREEN NEW DEAL: A PLAN OF ACTION AND RENEWAL (Palgrave Economics 2020).

respective jurisdictional mandates, then 'synching up' and synthesizing them into a single coherent and non-duplicative whole.

The *financial* operations of NRDC can be managed by an Investment Committee that I have proposed as an arm of the NRDC. These will be reminiscent of those of Hamilton's Bank, the WFC, and the RFC in developing means by which private sector agents can participate in public investment, thereby both conferring 'stakes' in successful development to citizens and businesses, and soaking up private capital that might otherwise fuel inflation by flowing to less productive, more speculative deployments.

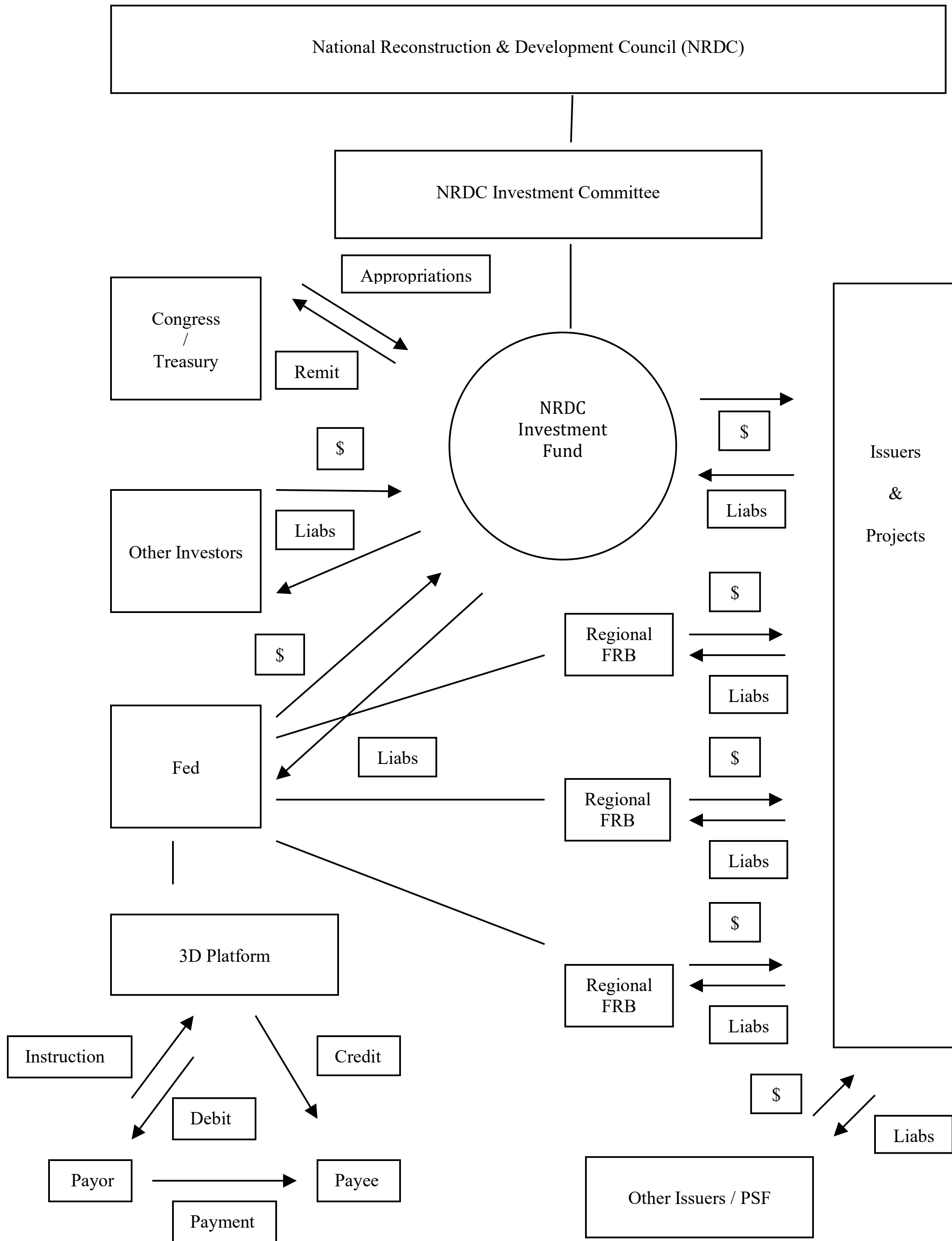
Bring these together with the 'Upgraded Fed' schematized above, and you have all that you need for efficient and effective public capital management both in reconstructing right now and in developing – or rather, perpetually *re*developing – ever after.

The NRDC, which in combining executive agencies is democratically accountable, democratically determine what we as a polity deem 'productive,' and acts to coordinate – in an information aggregating and facilitative sense – ongoing productive development across our full continent-spanning Republic. Meanwhile our 'People's Fed,' which remember is *part* of our NRDC, assists local businesses and local banks nationwide at the more 'micro' level, acting as a system of local development banks per the original vision of the Federal Reserve Act of 1913.

Figure 3 depicts the upshot. It is meant not to replace or displace *Figures 1 & 2*, but simply to combine and flesh out a bit more detail left implicit in both of them. Here we see (1) the role that the NRDC will play in democratically determining what counts as 'development' and hence what is 'productive,' (2) the role that the regional Federal Reserve Banks will play in choosing and funding investments thus counted as 'productive,' and (3) the combined role that the FRB and the NRDC Investment Committee and any fund or funds that it manages will play in assuring inter-regional allocative balance and, therefore, aggregate modulatory effectiveness in the financing of productive development projects nationwide.

The Price Stabilization Fund (PSF) or 'People's Portfolio,' more on which in a moment, for its part can be either an NRDC fund or a Fed fund. Either way, the Fed and the NRDC will have to be 'on the same page' where its investments are concerned, the NRDC with a view to cross-sectoral allocative needs entailed by development needs, and the Fed with a view to cross-regional allocative needs in relation to modulatory needs.

***Figure 3:* ‘People’s Fed’/NRDC Administrative & Financial Flow Structure**



11. *Sustainably Equitable* 'R&D' – Price Stabilization & Growth Sharing

A final word on price stability and equitable growth sharing.[57] Yet another class of new public investment instruments that either our new People's Fed or our NDRC's IC might hold could be shares in a new Price Stabilization Fund, or 'People's Portfolio,' that I also propose in other work.

Here the idea is to recognize that some market prices and indices of such prices are what I call 'systemically important,' by analogy to the Systemically Important Financial Institutions (SIFIs) that FSOC designates. These are prices that pervasively enter either directly into other prices as inputs, or indirectly into other prices by serving as benchmarks or reference points for other pricing decisions or derivative contracts.

The Fed has in effect long recognized at least one species of SIPI, and acted in the capital markets to 'collar' its movements within one narrow band – I refer to prevailing money rental, or 'interest' rates. Recent years have seen the Fed widen the sphere to include mortgage instruments and, now, even broad portfolios of corporate instruments – first in response to the dramas of 2006-09, and then in response to the Covid pandemic of 2020-22.

It is all but inevitable that the Fed, along with a new NRDC, will wish to target more such prices in future in the name of systemic financial stability. That will be partly because of effective credit-modulation's practical dependence on good allocation as discussed above, and partly because '*fine-tuning*' will be needed as the nation embarks next year on post-Covid reconstruction and then either a Green New Deal or a 'Building Back Better' revitalization of the kind also discussed above.

In time the most efficient means of handling this growing number of instruments traded in broadened Fed open market operations (or an NRDC equivalent) will be to hold all in one fund or, in investment-company-speak, 'family of funds.' This fund will have to be managed in close coordination with the development and execution of NRDC-determined national development policy, not

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[57] This Section draws upon Robert Hockett, *The People's Portfolio: A Macroprudential Price Stabilization Fund*, 66 CHALLENGE __ (2024) (forthcoming); Robert Hockett, *From the Federal Reserve to Strategic Reserves - And Back: A Marriage Proposal*, 12 MICH. BUS. & ENTREPRENEURSHIP L. REV. 1 (2023), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4128483; Robert Hockett, 'Fine-Tuning Monetary Easing, Part 2: The Fed's New Chicago Commodity Trading Facility,' *Forbes*, Jan. 31, 2022, available at https://www.forbes.com/sites/rhockett/2022/01/31/fine-tuning-monetary-easing-part-2-the-feds-new-chicago-trading-capacity/?sh=61f5e334318d; Robert Hockett, *Open Labor Market Operations*, 62 CHALLENGE 113 (2019), available at https://www.tandfonline.com/doi/abs/10.1080/05775132.2019.1583418; Robert Hockett, *How to Make QE More Helpful—By Fed Shorting of Commodities,* BENZINGA (Oct. 14, 2011, 8:41 PM), https://www.benzinga.com/news/11/10/1988109/how-to-make-qe-more-helpful-by-fed-shorting-of-commodities; HOCKETT, FINANCING THE GREEN NEW DEAL, *supra* note 32; and Hockett, *Treasury Growth Dividends*, 3 STANFORD JOURNAL OF BLOCKCHAIN LAW AND POLICY 1 (2020), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3604324.

to mention the Regional Feds' gatekeeping function in respect of private sector bank lending in keeping with evolving national development strategy as described above.

It will make sense, then, either for the NRDC's Investment Committee to manage this fund and sell the Fed interests in it, or for the Fed itself to assemble and manage the Fund. Hence my inclusion of this Fund in *Figure* 3 above. Either way, this will afford another set of assets for the newly enlarged public asset portfolio corresponding to the newly enlarged liability side of the Fed balance sheet brought by Citizen, Business, and Guest Wallets.

Finally, we can imagine one additional source of enlargement of both the asset and liability sides of the new People's Fed balance sheet: If national redevelopment succeeds as investment becomes productive rather than merely speculative again, national wealth will be growing. So, then, will the Fed's asset portfolio, as investment returns flow in.

Why not *share these with citizens*, in a manner of growth-indexed UBI – at least insofar as this can be kept consistent with consumer price stability. We can think of these as 'Returns on Public Investment' (ROPI) wrought by public capital management alongside the more familiar 'Returns on Investment' (ROI) associated with private capital management.

In other work cited above, I have proposed these as 'Treasury Growth Dividends,' so-named in virtue of their association with my proposed Digital Greenback and Treasury Dollar. If we go the full Fed/NRDC route prescribed here, however, those will be best handled as I've just described – by our revitalized People's Fed and NRDC – and be called 'Citizen-' or 'Commonwealth Growth Dividends.'

Once again either way, the mutual enlargement of both sides of the Fed balance sheet seems fitting – indeed fully vindicating of the very point of this brief *précis*. For this has been all about reclaiming public capital for publicly cognizably productive investment – investment that grows the Republic's wealth. And the Republic's wealth just is the Citizens' wealth – our 'Commonwealth.' This is, of course, what we owe and are owed by one another.[58]

It's literally what we owe to ourselves.

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[58] See ROBERT HOCKETT, A REPUBLIC OF PRODUCERS (Yale U. Press 2024) (forthcoming); and Robert Hockett, *Social Contractarian Money*, 15 VIENNA JOURNAL OF INTERNATIONAL CONSTITUTIONAL LAW 1 (2021).

Conclusion – Socializing Investment to Build Back Better & Beyond

And that's that. We have found the distinction between public and private investment capital, seen why the public and private sectors must manage their own shares of the aggregate, and designed a full architecture to enable that – an architecture that amounts to a natural extension of present arrangements, and changes them neither a whit more nor a whit less than what's requisite to achieving that task.

The next steps, of course, are to promulgate new rules under old laws and get moving. And here, I must say, prospects have not in our lifetimes looked as promising as they do now…

Virtually everyone seems to agree that something's gone terribly wrong with our present financial arrangements – arrangements that sever public *capital* from publically cognizably productive *investment*. All appear likewise to agree that a national reconstruction, followed by serious national redevelopment, is now imperative. And now both the ideas of and the means to enabling public options for banking and even central bank-issued digital currencies are gaining traction as well.

Add in enthusiasm for a Building Back Better or Green New Deal, and it grows difficult not to grow giddy at this 'perfect storm' of readiness to do all that needs doing on both the asset and liability sides of our public ledger.

These things are all sure to happen if darker – or hotter – forces don't tear down or burn up our Republic before we've arrived. For the logic that forces them on us is hard not to see once it's been pointed out, especially as the dysfunctions that this logic shows to inevitable *until* we do it continue to gather all round us.

But there is no sense in *waiting* for these things to happen. The thing to do now is to do it, and do it now. Ours is a Capital Commons whether we see it and use it or not. It is, as the financiers say, money on the table' – in this case *public* money on the table.

It's time now to take it and grow it as Keynes, I suspect, would have pushed had he lived longer. For, after all, it is ours.

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Summary Appendix: 12 Steps to a Keynesian Capital Commons

We can sum up the foregoing in twelve paragraphs. We might think of these as a sequenced '12-step program' for the reform first of understanding and then of action in the cause of both (a) ending our dysfunctional dependence on private management of our public capital, and

symmetrically (b) re-assuming responsibility for the productive management of that capital. The thing to do, then, is to understand that …

1) Most investment capital in 'developed' nations is public capital, which is not pre-accumulated and 'intermediated' like private capital, but publicly generated and indefinitely extensible as 'endogenous credit-money.' Publicly licensed banks and bank-equivalents ('shadow banks') play a key role in generating this form of monetized capital. Hence Wicksell's 'bank money' and 'loanable funds,' which some self-styled heterodox and orthodox economists routinely mischaracterize as exogenously given private, not endogenously generated public, capital.

2) *Private management* of public capital inevitably results in misallocation (under-investment), ineffective modulation (over-speculation), and secular stagnation (under-production). That is thanks to (a) the monetization of capital in all non-barter exchange economies, combined with (b) recursive collective action predicaments that pervade all 'privately ordered,' decentralized capital & money markets. The first separates profit and production; the second ensures that private sector capital and money managers opt for the former, not for the latter.

3) Both (2)(a) and (2)(b) above also drive 'financialization' in privately ordered markets for public capital – that is, the recursive stratification of capital markets into 'secondary,' 'tertiary, … '*n*-ary' and derivative markets. These are the subject of my 'Meta-Markets' and 'Dialectic of Finance' work. The process begins innocently as individually rational private sector attempts to re-socialize private investment-risk attendant on decentralized privately ordered production, but these quickly morph into collectively irrational sites at which capital managers find greater profit in *gambling* on *price movements* in 'capital *markets*' than in *investing* in productive capital *projects*. Financialization is in this sense 'the mother of' – or, better, the aggregation of – all recursive collective action predicaments in privately ordered markets in which public capital is privately traded.

4) Groups solve collective action predicaments through the exercise of collective agency – that is, through collective governance or public action. Publicly generated capital must accordingly, in light of both (2) and (3), be publicly managed, while privately intermediated capital may be privately managed. Privately ordered, decentralized 'capitalist' production is sustainable only if the public component of the nation's *capital* stock is *not* privately ordered or decentralized. Narrow banking proposals like Fisher's of the 1930s and some of its contemporary updates reflect understanding of one side of this two-sided 'coin' but not the other – they 'get' the 'shalt not' of privately managed public capital, but are silent on the 'thou shalt' of *publicly* managed public capital.

5) Public capital management can be and is best modeled as a central bank balance sheet. In the U.S., that is the Federal Reserve ('Fed') Balance Sheet. Public reclamation of responsibility for managing the public share of the nation's capital stock will accordingly register as an augmentation of the Fed balance sheet, growing its asset and liability 'sides' in tandem. We can call the resultant augmented or 'upgraded' Fed 'a Peoples' Fed,' or 'Citizens' Fed,' tasked with publicly *managing* our *Re*public's *investment* capital – the wealth of our Commonwealth.

6) On the Public Asset 'side' of the Fed Balance Sheet, the most straightforward and non-'disruptive' corrective measure will be to reinstate the Fed's original role as a two-tiered public capital manager comprising both (a) at the 'macro' level, a Federal Reserve Board tasked with modulating monetized credit aggregates economy-wide, and (b) at the 'micro' level, Regional Federal Reserve Banks tasked with allocating public investment capital only productively, not speculatively,

as befits that network of regional development banks which the Fed System's second tier was originally intended to be.

7) Productive Regional Fed lending will thus once again take both of the forms it originally took – (a) direct purchase of productive project-associated paper issued by local and regional 'operating companies' (that is, producers and service-providers), and (b) indirect lending to operating companies through public and private sector community banks that fund lending not with deposits, but through Fed Discount Window lending, which latter will be conditioned *ex ante* on projects' promising to be productive, not speculative. I call this 'Re-Distributing,' as in *again distributing* the project lending of the Fed over the full breadth of our continent-spanning Repubic. Our mantra should be to 'Spread the Fed.'

8) On the Public Liability side of the newly augmented or upgraded Fed Balance Sheet, the most straightforward and non-'disruptive' corrective measure will be to extend to all citizens, businesses, and legal residents of the nation interest-bearing P2P digital wallets, the balances in which will be new Fed liabilities corresponding to the new Fed assets described in (7). This is my 'Democratic Digital Dollar' and associated 'Fed Wallets' proposal, which should be considered (a) the 'end-game' of my more immediately implementable 'Treasury Dollar' and 'Digital Greenbacks' proposals now before Congress, and (b) the national rendition of my state and municipal 'Inclusive Value Ledger' (IVL) proposal now before the New York State Assembly and Senate.

9) Inasmuch as Federal Reserve Notes (paper dollars) and their fiduciary equivalent (Wicksellian bank money) are themselves Fed liabilities – indeed, our presently dominant form of monetized public capital instrument – the Democratic Digital Dollar will amount simply to (a) a digitization of already-existent Fed liabilities, and (b) a movement of the 'bank money' component thereof from private sector bank balance sheets to the Fed Balance Sheet. This will in turn make for far better banking than we presently enjoy.

10) It will make for better banking in multiple ways: (a) There will be no more commercial or financial exclusion ('unbanked' or 'underbanked' status) plaguing our citizenry or small businesses, nor will there be privately assessed rents known euphemistically as 'fees.' (b) There will be no more shortages of circulating payment media in isolated communities, and transaction speeds, hence growth, will accelerate. (c) Monetary policy will no longer be subject to leakage owing to reliance on private sector financial institutions that 'intermediate' – that is, interfere with relations – between the Citizenry and its Central Bank; the Fed will modulate the national credit-money supply by raising and lowering interest paid out on wallets, not merely private sector bank interest on reserves (IOR), and in extremis can even drop digital 'helicopter money' into citizens' wallets. (d) Public authorities will be able to compensate currently uncompensated 'care work' upon digital 'proof of work (POW). (e) Finally, the 3D being a public commercial utility (as FedWire and FedNow are now), profits are removed from the picture while 4th Amendment protections are added – there will be no more breaches of commercial privacy or 'harvesting' of consumer financial data.

11) We can complete the Productive Public Capital (PPC) picture with an organizational tweak to our existing system of cabinet-level executive agencies that exercise jurisdiction over the nation's infrastructure and industry: My proposed 'National Reconstruction & Development Council' (NRDC) - an 'FSOC for Development' comprising the heads of all of the aforementioned cabinet level executive agencies – will develop, regularly update, and execute a National Development Policy (NDP), which both (a) affords guidance as to what we democratically deem 'productive' for purposes of Fed

lending, and (b) coordinates with the Fed in assuring that productive lending and national development occur evenly and equitably throughout our continent-spanning Republic in manners neither inflationary nor deflationary.

12) Finally, we can round out the public capital management upgrade with equitable growth sharing and macroprudential price stabilization - my 'Growth Dividends' proposal for regular UBI deposits into the Fed Wallets as national wealth grows as mentioned above, and a Price Stabilization Fund (PSF), a.k.a. 'People's Portfolio' for open market operations to collar what I call Systemically Important Prices and Indices (SIPIs) – housing prices, fuel prices, Libor, some additional staple and commodity prices, and perhaps the SSP or prevailing wage rates at the bottom of the wage scale. These are of course add-ons to the core upgrade elaborated above, hence can be postponed or severed if not already broadly supported by the citizenry.