Robert Hockett*

Social-Contractarian Money

<https://doi.org/10.1515/icl-2021-0011>

Published online July 29, 2021

Abstract: State capacity, stable currencies, and well functioning financial systems seem to be ‘package deals’ – one cannot have one without having all. I show that the intimate functional links among states, monies, and financial systems, ubiquitous across history and geography as they are, are not accidental. I do so by analytically ‘deriving’ first law and the polity, then money and finance, from a temporally extended implicit covenant that is both grounded in and facilitative of ongoing joint agency among persons. This lends to state and money alike their shared normative and, once formally systematized, legal character. I indicate throughout how this shared genesis, function, and normative character keep state, money, and ultimately finance practically ‘joined at the hip’, and manifest how polity and economy, indeed our very political and productive selves, are thus joined as well. To recognize and to ‘own’ this, I conclude, is not only to see that ‘the public’ must take a far more explicit role in finance, but also in a sense finally to own our own selves.

Keywords: agency, banks, collective agency, contractarianism, finance, investment, joint agency, money, Rousseau, social contractarianism

1 Introduction: One Conflation, Two Separations

Classical liberalism as received, elaborated, and bequeathed by the thinkers of the 19th century seems to have left some Europeans, and many Americans, afflicted with two forms of self-estrangement. Both forms are mutually supportive, and both forms proceed from a shared primal error. Both forms additionally are ‘tragic’, in that both are entirely needless.

The first self-estrangement is alienation from our own most inclusive modality of collectively deliberating, planning, and acting together in pursuit of shared

***Corresponding author: Robert Hockett**, Edward Cornell Professor of Law, Cornell University, Ithaca, USA; Adjunct Professor of Finance, Georgetown McDonough School of Business, Washington, USA; Senior Counsel, Westwood Capital, LLC, New York, USA; Advisory Board, Public Banking Institute, Los Angeles, USA; Advisory Board, Stanford Digital Currency Lab, Stanford, USA; Founding Board, Digital Fiat Currency Institute, Stanford, USA; Formerly, Federal Reserve Bank of New York, New York, USA; and Formerly, International Monetary Fund, Washington, USA, E-mail: rch37@cornell.edu

ends – that is, from our political selves, and from the polity that those selves constitute. Each ‘I’ is, as it were, separated from our common political ‘we’ – our *‘res publica’*, or ‘public thing’. Our republic.

The second self-estrangement is that from our own most inclusive modality of coordinating our materially productive and distributive activities – that is, from our producing and exchanging selves, and from the money to which our productive and distributive relations give rise.¹ Each ‘I’ is, as it were, separated from our monetary and therefore our productive and distributive ‘we’ – our ‘common currency’ and our ‘common weal’.² Our commonwealth.

A familiar idiomatic manifestation of the first separation is the ubiquitous, as it were negatively fetishizing reference to ‘the state’ or, more often in modern American parlance, ‘the government’ that one hears with dispiriting frequency.³ In such locutions we hear strange intimations that our own mode of acting together is something set over and irretrievably apart from, or exogenously imposed upon, or even actively hostile to, ourselves and our fellow citizens – that is, again, from, upon, and to the very people who constitute this polity and authorize its instrumentalities to act in their name.

A familiar idiomatic manifestation of the second separation is the ubiquitous reference to our money and our economy as things that, like ‘the state’ or ‘the government’, ‘come from without’ and are exogenously given. Money figures as something that ‘doesn’t grow on trees’, must be ‘backed up’ by gold or some other scarce alien substance, and is ‘debased’ by ‘the government’ itself when the latter resorts to the ‘mere printing’ of ‘mere fiat money’. ‘The economy’ for its part is taken for extra-civilizational, not unlike weather, hence something to which persons – including ‘the government’ – must simply conform themselves stoically rather than trying to shape or design.

1 The suggestion that money is something to which our productive and distributive relations give rise, or that they might even in some sense constitute, might ring obscure at the moment. Its truth, I believe, will be obvious once we are through. So will the reason for speaking here always of ‘productive and distributive’ relations rather than ‘productive’ relations and ‘distributive’ relations. Here is a hint: It takes material resources to make (more) material resources, and in a ‘decentralized exchange economy’ such as our own this means we must distribute resources (over persons or other productive agents) in particular ways in order to produce resources. Money is that means.

2 As with the suggestion, just now, that money is constituted by productive and distributive relations, so with the suggestion that our monetary ‘we’ is our productive and distributive ‘we’ – what now rings obscure will appear more perspicuously once we are through.

3 ‘Negatively fetishizing’ – that is, treating as somehow ‘external’ and ‘radically other’, while at the same time dreading and fearing. Dreading and fearing as menacing ‘other’, in other words, our own creation – indeed our own shared identity as ‘we’ made of ‘I’s.

In the latter instance, of course, alienation from ‘the government’, from money, and from ‘the economy’ – hence from our political and productive/distributive selves altogether – combine into one all-encompassing self-separation. It’s a bit like ‘a complex’, in the old Freudian sense of that word: a single great tangle of far-reaching, unquestioned, and ultimately unstable premises that together leave all in a world – a social world, no less – far beyond our own powers of construction and control.

Notwithstanding that it is we who’ve constructed it.

And we in ‘the West’, and in America in particular, have been thinking like this, and living accordingly, for decades if not longer.⁴

Under such circumstances it is tempting to ask, why the definite article? Why ‘the’ government, money, and economy? Why not ‘our’ government, money, and economy?

I referred to these ‘definite article’ forms of estrangement as ‘needless’ hence ‘tragic’, as well as ‘mutually reinforcing’ and rooted in one common error. And I’ve just now suggested they travel together. I want in this meditation to show how these estrangements bind up with each other, then to show why they are tragically needless, by tracing them both to their shared primal error.

In a sense, they are two sides of one coin, pun hereby ratified if not quite intended.

If I succeed in carrying out this intention, it will be easy to see once I’m done that our polity, our economy, our money, and our finance, far from needing ‘democratization’, are at bottom already quite deeply democratic. What remains is for the *demos* itself both to see and to ‘own’ this, that it might then put both its state and its money to much better – indeed to more democratic – use.

I’ll begin with ‘the state’ and ‘the government’ and our political selves, if for no other reason than that what needs drawing out here is already reasonably close to the surface of intuition.

I’ll then turn to ‘money’, ‘finance’, ‘economy’ and our materially productive/distributive selves, the structures of which are much easier to get clear about once we’re clear about the structure of our political selves – that is, about what we collectively are and what living, acting, and producing together entail.

⁴ One or another form of liberal thought seems to have been part of the complex of American political and economic thinking since the get-go, inasmuch as ‘the founders’ made significant use of both Locke and Smith, among others (the latter’s most oft-cited treatise even having been published in 1776). But the early modern ‘republican revival’ seems to have been even more influential in the early days of the polity, having waned in its sway nearly to the vanishing point only some time in the early to mid 20th century. See Robert Hockett, *A Republic of Owners* (forthcoming Yale University Press 2021); Robert Hockett, ‘A Jeffersonian Republic by Hamiltonian Means’ (2006) 79 University of Southern California Law Review 45; Robert Hockett, ‘Whose Ownership? Which Society?’ (2005) 26 Cardozo Law Review 1.

I will then elaborate what I take to be a number of noteworthy implications that these reflections yield where the conduct of finance in a republic is concerned.

2 Our Polity

Here is an invitation. Let us construct a small proto-republic. If you accept this invitation, so that it is ‘we’ who now do the constructing, this polity we build will bear certain quite interesting properties.

2.1 I, You, We

We will start with what we are doing right now. You who now read these words, and I who have written them, are at present a unity. Ours is a unity that tends, because quite familiar, to be taken for granted. And so it is a unity whose entailments are easy to miss. Yet it is a truly remarkable thing that is pregnant with many remarkable entailments – a wonderful thing that is ours for as long as you’re reading.

We are embarked on a common project – the project of successfully communicating a thought or idea, a ‘vision’ or ‘argument’.⁵ By the time we are done, you might remain unconvinced by my argument; you might disagree with my claims or my view on some or all points. But for you to determine what you might make of my argument, and hence whether you agree on some points or disagree entirely, you must first take it in. And I for my part must get it across.

On this we are agreed – implicitly if not explicitly. This agreement is pre-supposed by your reading, and by my writing. We’re in this together, for now.

There is, then, a ‘we’ here. And this ‘we’ is more than a mere partitive or aggregative ‘we’. It is an integrative ‘we’. It is an incipient form of what Rousseau might have called an ‘association’ as distinct from an ‘aggregation’.⁶ It is a kind of momentary ‘common mind’, distinct from your mind and my mind even while constituted in indispensable measure by our minds.⁷ It’s what is referenced when one uses oft-heard locutions like ‘on the same page’.

⁵ I note that the ‘com’ of ‘communicate’ is the ‘com’ of ‘common’, as in ‘common bond’, ‘common law’, ‘common currency’, and ‘common weal’. It is also the ‘com’ of ‘company’, ‘commerce’, ‘commune’, and ‘communism’.

⁶ Jean-Jacques Rousseau, *Du Contrat Social*, Book I, Chapter 5 (Book I, Amsterdam, 1762).

⁷ See Philip Pettit, *The Common Mind: An Essay on Psychology, Society, and Politics* (OUP 1993).

To see this more fully, suppose you are reading, not this essay, but some other essay by some other person. And suppose I am writing *this* essay, in the expectation that someone – perhaps you, perhaps not you – will read it. Suppose further that you see me writing this essay as you are reading the other essay, and I see you reading that other essay as I work on this one. It will in this circumstance be correct, in a sense, for either of us to say, of the two of us, that ‘we are communicating’.

But there is an ambiguity.

The ambiguity is that in saying that ‘we are communicating’ under the circumstance just specified, we might mean we are both ‘communicating with one another’, or that we are each simply ‘engaged in communicative activity’. If we mean the latter, again in the circumstance specified, then we speak truly. If we mean the former, by contrast, then we speak falsely. For in the circumstance I have described, we communicate severally but not jointly.

We do not communicate ‘*with* one another’. We simply communicate (with others – the others we’re reading) in the same room as one another.

2.2 Joint ‘We’s and Several ‘We’s

Let’s call the ‘*do it together* we’ the ‘*joint* we’, and let’s call the ‘*doing it separately* we’ the ‘*several* we’. We could use other terminology if we preferred – the ‘integrative’ or ‘collective’ versus the ‘aggregative’ ‘we’, for example, or the ‘unitive’ versus the ‘partitive’ ‘we’ – and occasionally I *will* use alternative locutions of this sort. But since a fair bit of legal terminology will figure into the discussion below, I might as well start with the legally tried and true ‘joint’ and ‘several’.

Here is the thing about the joint or integrative as distinguished from the several or aggregative ‘we’: the two ‘I’s and two ‘you’s in the joint ‘we’ are both jointly constituting something – a sort of shared subjectivity that is internally complex even as it is outwardly simple. They are accordingly what might be called ‘internally’ related, just like any two or more things that are mutually integrated rather than separately aggregated.⁸ They are what they are in virtue of the relation itself, not unlike how ‘left’ and ‘right’ are what they are in virtue of one another and their relation, or how every number is what it is in virtue of its relations with all other numbers that constitute with it ‘the system of integers’, ‘of whole numbers’, ‘of rational numbers’, or whatever system is salient at a given moment of thought.

⁸ The ‘in’ of ‘internal’ is the ‘in’ of both ‘integral’ and ‘integrated’.

As you read this essay, you become ‘my’, not just ‘a’, reader, and I become ‘your’ interlocutor, for purposes of the communicative consummation. While you are reading, there is a ‘we’ here that joins us – the ‘joining’ of ‘jointness’. For the duration of your reading, there is a unitive and integrative ‘we’ here that joins us and ‘internally’ binds us. Each of us then is what s/he is, for the purposes and duration of the relation – that is, we are ‘the *relevant*’ writer and ‘*relevant*’ reader – in virtue of this relation itself.

This is the sense in which our ‘we’ in this relation is something – a shared subjectivity – that is distinct from, even while indispensably and integrally constituted by, each of us. This is the sense in which the several – in this case, the two – ‘I’s merge into the joint – the one – ‘we’. This is the sense in which the word ‘we’ here accordingly designates or implicates a sort of temporarily ‘joint mind’ or ‘joint self’ or ‘joint subject’ or ‘joint will’ over and apart from, even while indispensably and integrally constituted by, our distinct, several minds. Where a ‘we’ is not joint but several, there is no such communion. There is only co-presence or co-existence.

If you and I ‘just *happen*’ to be writing and reading, respectively, with neither of us reading what the other is writing, then it can be said that we each are engaged in communicative activity. ‘We’, in a certain sense, are indeed doing so. But there is no collective or associative or integrative as distinguished from merely aggregative ‘we’ here. We can be said, in a thin sense, to have ‘something in common’ – the fact that we both are engaged in communicative activity right now. But this commonality is, so to speak, accidental. We simply happen to be engaged in the same sort of activity at the same time.

Where we are communicating ‘with’ one another, by contrast, living to the fullest the ‘com’ (‘withness’) of that word, the commonality is not accidental, but essential. And the ‘something in common’ now thickens – it is ‘deeper’. Our relation in this case is ‘internal’, not ‘external’, to our identities within the relation.⁹ We are what we are here, for the purposes of and over the duration of the joint activity, precisely *in virtue* of that activity. That activity is our common bond. it is what ‘joins’ us together into a *joint* – an internally joined, integrative – ‘we’.

2.3 Joint ‘We’s Birth Obligations & Authorizations

Here’s one more thing about the joint ‘we’: it generates something jointly authoritative and hence severally binding. It is, as it were, pregnant with

⁹ See Andrew Levine, *The General Will: Rousseau, Marx, Communism* (Cambridge University Press 1993).

obligation. There is a form of normativity latent or imminent in it, something which brings new forms of interpersonal propriety and impropriety – obligation and possible breach of obligation – into play.¹⁰

When a ‘we’ is merely several or aggregative, there is no new question of possible ‘violation’ or ‘wrong’ or ‘illegitimacy’ or ‘acting without authorization’ lurking about. There is only the set of antecedently incumbent obligations – obligations not to deprive others, whom you might or might not ever encounter, of their antecedently given entitlements. When a ‘we’ is joint or integrative, by contrast, new obligations are born – obligations not to violate the covenant that is implicit in the sharing of purpose that constitutes the joint ‘we’ in the first place.

You are reading Proust somewhere, I am writing ‘Hockett’ somewhere, and That is all there is to it. No new bond, no new obligation, nothing newly binding. No new ‘strings’ attach us. If on the other hand you were reading *me*, the prospect of wronging each other in new ways, in a manner bound up with our shared purpose, enters the scene in the very joint act.

For consider: If on the next page you suddenly find the words ‘JUST JOKING’ in all caps, with no further writing to follow, I’ve in a certain sense wronged you. I’ve misled and duped you. I have violated an implied covenant between us.

Likewise, if you publish this essay in your journal, and your journal is called *The Journal of Jokes*, you have in a certain sense wronged me (I hope). I in the one case, and you in the other, have as it were ‘frustrated the purpose’ of our joint engagement in an attempt at communication. We have violated our implicit agreement, and in that sense have violated ‘us’ and have violated each other. We have severally made a mere joke of what was evidently meant – by both of us, jointly to be serious.

The notions of ‘bindingness’, ‘obligation’, and ‘violation’ at work here carry with them the notion of ‘something higher’ than either of us – something beyond or incumbent *upon* us even as it is *of* us.¹¹ It is something authoritative to which we are both in a certain sense subject. It carries something ‘prescriptive’ or ‘normative’ that presses upon us, and in that sense is, metaphorically speaking, ‘above’ or ‘beyond’ or ‘outside’ us.

10 See Michael Thompson, ‘What is It to Wrong Someone? A Puzzle about Justice’, in RJ Wallace et al (eds), *Reason and Value: Themes from the Moral Philosophy of Joseph Raz* (OUP 2004).

11 See Robert Hockett, ‘Pareto against Welfare’ (2008) working paper; Robert Hockett, ‘Reflective Intentions: Two Foundational Decision Points in Mathematics, Law, and Economics’ (2008) 29 *Cardozo Law Review* 1967; Robert Hockett, ‘Why Paretians Can’t Prescribe: Preferences, Principles and Imperatives in Law and Economics’ (2009) 16 *JLPP* 391.

This ‘higher thing’ in this case either is or is closely bound up with our ‘we’ – our *joint* ‘we’.¹² Were we each acting alone – were our ‘we’ merely several – there’d be no question of this kind of wrongdoing. There’d be no shared purpose for either of us to frustrate, no commitment, implicit or otherwise, to break. We would just do what we (severally) do and that would be that.

2.4 Vertical and Horizontal

In this sense, we can say that a joint ‘we’ introduces a sort of ‘vertical’ dimension into what we are doing – to what would otherwise be no more than an ‘external’, ‘accidental’, and ‘horizontal’ relation. When you do what you do and I do what I do and there is no commerce between us, we are ‘on the same level’, so to speak. Everything’s flat. But when we do something *together*, there is now a sort of ‘normative third’ present that is ‘above’ or ‘beyond’ us, a ‘third’ that comes with – or in fact in a certain sense just is – the ‘internality’ and no-longer-accidental character of our relation.¹³

That third is our ‘we’, something that *as* ‘us’ jointly is *neither* of us severally.

In that sense it’s sort of both us and not-us. Its being not-us is the source of its authority ‘over’ (each of) us, of its being incumbent ‘upon’ (each of) us. Its being us, in turn, is the reason that we are the principal parties who’re able both to violate it and to *speak in its name* – that is, to speak ‘authoritatively’ – when we remonstrate with each other, in the event one of us frustrates our jointly shared purpose via the violation. For it is we who have ‘authored’ it, we who now constitute it.

We might say, then, that in mutually interacting with a common purpose we

- (1) constitute a joint ‘we’, and thereby
- (2) individually come under obligations that
- (3) we collectively authorize one another to demand be fulfilled.¹⁴

This proves to be a pregnant thought later. For we shall find that it binds the political ‘we’ and the productive/distributive ‘we’ – it binds state and economy. And it does so, we will see, through a conduit that we call *money*.

Productive and distributive activity in decentralized exchange economies pervasively involves joint exchanges of promises, hence joint issuance of countless reciprocal obligations (where an economy is not a decentralized economy, polity

¹² Ibid.

¹³ Ibid.

¹⁴ The law of partnership, incidentally, largely tracks this arrangement. It is as if our society had recognized both the ubiquity and the importance of the arrangement, and supplied ‘default rules’ to vindicate and bolster the values that suffuse it.

and economy are one, and so there is no need to speak of them separately or as things that retain some single ‘connecting link’ such as money). Citizens through their states in turn authorize one another to demand that such promises be honored and obligations be met. Just as obligation and authority travel together as two sides of one coin, then, so do state and economy.

And money, we’ll find, is the coin. Simultaneously the token of obligation and the authorized means of discharge of obligation. But more of this in due course...

2.5 The Political ‘We’ – the Polity – Just is the Most General Joint ‘We’

All of the above is probably a bit hippy-dippy-sounding. Heavy, heady, pseudo-psychobabble mystic-seeming stuff that you might say or hear while you are ‘smoking something’ or are ‘dropping acid’ among intimates. But in fact it’s something we all are familiar with – as evidenced, among other things, by the presence of the words ‘joint’ and ‘several’ themselves in our language. And it is very important for present purposes.

For confusion on this point – the ubiquitous, unthinking conflation of the collective ‘we’ and the aggregative ‘we’ – is responsible for the first form of estrangement with which I above opened this essay (It is also, we’ll see, responsible for the second form of self-estrangement, but we are not there yet.)

We treat ‘the state’ or ‘the government’ – our own polity – as ‘radically other’ because we forget it is our common project, rather than just our common fate or our separate fates. It is our joint emanation, not an alien determinant of our several destinies (It is our ‘internal’ means of selecting our shared destinations, not an ‘outward’ imposition of radically separate destinies.) What ‘it’ does, ‘we’ do – collectively, not aggregatively. This is so even when the state or the government embodies our joint ‘we’ and in that sense is distinct from and authoritative over our several ‘I’s.

As *citizens* rather than mere *guests* of ‘our’ state, we are constituents of something that we ourselves willfully constitute – a politically constituted ‘we’. We are essentially, not accidentally – internally, not externally – related to one another and to our state – *our* state – for purposes of the relation: that is, for political purposes, for ‘purposes of state’. We *share* ‘our citizenship’. And that is because we share our state.

The state is simply the most agent-inclusive, project-inclusive, temporally extensive joint ‘we’ of them all. The ‘meta-we’, as it were, that institutionalizes our

joint pursuit through time of that grand project which is the enabling of all of our 'I's and our smaller 'we's' projects, be they individual, familial, or other sub-state groupings' – including business firms' – projects.

As citizens, we are internally and essentially related in respect of our sharing of this state – in respect of our citizenship. Our relation – our state – is accordingly both *of* us and yet *distinct* from us, much as 'a couple', in the romantic or marital sense, is something distinct from its members even while critically constituted by those members – those members *in their capacities as* ('*qua*') participants in the romantic or marital relation.

Indeed, a state can be viewed as a thin form of perpetual covenant not altogether unlike the marital or romantic or familial covenant. Its members – its citizens – are embarked on a broadly inclusive, trans-temporal 'project' together: again, the effectively perpetual project of securing and maintaining an environment in which all can flourish both jointly and severally, on whatever account or accounts of such flourishing the citizens individually or in sub-state groupings regard as compelling and legitimate. Scarce wonder a Rawls would have written of the state as a 'social union of social unions'.

Something like this seems to be what Rousseau had in mind when he wrote of a 'general will'. There is a tendency, at least in the Anglo-American – that is, in effect, the liberal and neo-liberal – world to think that Rousseau must have meant something ghastly and indeterminately bounded, even something of dubious existence in using this term. Voltaire famously quipped that if God didn't exist, it would be necessary to invent Him; many Anglophone thinkers seem to think the same of Rousseau's 'general will'. They treat it as a sort of convenient *deus ex machina* that Rousseau simply pulled out of a hat so's to rationalize certain surprising prescriptions to which his pre-reflective sensibilities drove him. And the fact he was Francophone probably did little to allay Anglophone suspicions on this score.

But in fact, Rousseau is more clear-eyed and less mush-mouthed than are his early Anglophone critics. For he sees, even if he understandably gropes a bit to articulate, that there's a distinction between the collective or integrative and the merely aggregative 'we' that I have sought to explicate. As noted above, after all, he distinguished explicitly between aggregations and associations. And he says that this *joint, associative* we is the 'general will' of any true *republic*.

Rousseau was of course under no illusions about the difficulty of actually constituting and realizing a republic – hence a true general will – out of multiple selves whose impulses could drive them apart from one another as readily as they could drive them together (Rousseau *himself* seems to have been all the time

intimately on the ins, then the outs, with his closest acquaintances¹⁵). Indeed, he claimed that no true republic had yet come to be on this Earth.

That probably struck Anglophone readers as gratuitously – and characteristically Gallicly – paradoxical. But the point of his reflections is that the idea of a republic, and hence of a general will, is the best way of understanding what we are *trying to do* when we form and then act as a state. The idea of the republic functions as a sort of ‘regulative ideal’ that is effectively the *telos* of all legitimate government-constituting and, then, state action (*Scarce* wonder those master elaborators of the idea of a regulative ideal, *Kant* and then *Hegel*, admired *Rousseau* as they did).

The ideal of the republic is in this sense the best way to understand what we are trying to do, hence of what we are doing – it is the best way to understand *ourselves* – when we jointly engage in public deliberation, public decision, and public action. It is in this sense that ‘the’ state is *our* state, ‘the’ government *our* government. Our government, we might say, is ourselves. Our *political* selves. Our most encompassing of all of our many *joint* selves.

This is not that hard to grasp, is it? But then why do we routinely overlook it?

2.6 Why We Miss This

It is tempting to think that our language might have something to do with our oftentimes missing this, even while it could not possibly account in full for the problem. English draws no distinction between a familiar ‘you’ and a formal ‘you’. Intimates and strangers are all ‘you’s. Perhaps this encourages conflation of intimate ‘we’s of the sort oft-associated with joint action, on the one hand, with the more casual ‘we’s we associate with separate actions, on the other hand. After all, there is an intimacy in joint action that is lacking in mere several co-existence. An intimacy that Americans seem often to expect to find only in ‘*romantic partnerships*’.

This might be a stretch, I admit; and I certainly do not wish to overstate it. But it is striking, isn’t it, that both classical and ‘neo’ liberalism, with their unrelenting ‘methodological individualism’ and ontological atomism where the scientific study and metaphysics of persons are concerned, are primarily Anglo-American diseases. The rest of ‘the West’, whose languages for the most part continue to distinguish between what English once separated into ‘thou’ and ‘you’, has remained largely free of the worst liberal and neoliberal perplexities – at least

¹⁵ The *amour propre* that occupied so much of his thinking and writing outside of the *Contrat Social* apparently bedeviled his personal life too.

when not strong-armed by Washington or ‘Washington Consensus’ institutions. Theirs is a liberalism more smoothened by republican intuitions than is the Anglo-American flavor these days.

Perhaps this is why Americans and their English linguistic cousins read Locke while the Germans, the French, the Italians ... all read *Rousseau* – as of course did those other great seminal 18th and 19th century thinkers, *Kant*, *Hegel*, and *Marx*.¹⁶ Of course *Locke* shows republican traces as well, and of course Rousseauvian contractarianism manifests liberal characteristics. But the point here is that it’s easier to warp *Locke* than *Rousseau* into libertarian fantasy, just as it’s easier to misconstrue *Rousseau* than it is *Locke* into an incipient ‘totalitarian’. It is because *Rousseau* is more taken with the ‘we’ that ‘I’s constitute, while *Locke*’s more consumed with the ‘I’s who all constitute them.

It is also striking, in this connection, that the supra-individual ‘legal persons’ encountered in Anglo-American law – the trust, the partnership, the company, even the corporation (as the Latin origin of the latter term might suggest) ... – all entered our law via its conduit to the Roman and subsequent Continental European tradition: equity jurisprudence. That Roman tradition, for its part, bequeathed us the very idea on which *Rousseau* riffed: the idea of a ‘republic’ – a *res publica*, or ‘public thing’. What is this but a collectively constituted ‘we’ – a polity, or state, as something both *of* us and yet *distinct* from us, on a ‘different level’ from us in the say every joint ‘we’ is on ‘a different level’ than its ‘I’s?

One could go on and on about this – the more you look and the deeper you dig, the more fascinating and even exciting it grows...

2.7 Why We Make ‘We’s

But we must leave off these speculations for now. For present purposes the key point, I am hoping, is made. It is that what we in America call ‘the state’ or ‘the government’ is a modality of collective deliberation and action that amounts to our most comprehensive joint ‘we’. What ‘it’ does, ‘we’ do. And we do it *together*, jointly. That is different from doing it separately, severally – even when to appearances the same ‘outward’ or ‘external’ things might be done.

Why do we do it? Why form republics? There seem to be many reasons. The most obvious reason – the low hanging fruit here – has to do with what even

¹⁶ There are, of course, exceptions in the Anglo-American world – Philip Pettit, Alan Ryan, and Alan Thomas perhaps among the more prominent among them. Ryan would even tell us that we are wrong to read *Locke* himself as simply a liberal, at least insofar as the latter characterization is taken to be contrary to a republican one. And Thomas compellingly rescues Rawls from the same fate. See Alan Thomas, *A Republic of Equals* (PUP 2017).

orthodox economists, econo-political ‘scientists’, and choice theorists will call collective action problems. These are of course problems that strike us when individually rational decisions aggregate into collectively irrational outcomes. Think of the bank-run, the price inflation, the asset price bubble, the rush for the door upon hearing the word ‘fire’...

These problems can be very formidable – especially in financial markets, which are prone to a plethora of what I diagnose elsewhere as what I call *recursive* collective action problems.¹⁷ They are ‘tragic’, in that you are damned if you do, damned if you don’t, since acting individually rationally is the source of the problem, while acting irrationally accomplishes nothing.

Addressing a collective action problem requires an exercise of collective agency, a form that allows for collectively changing each individual’s calculus.¹⁸ And this is in part what a joint political ‘we’ – a state or a government instrumentality – is. It is ultimately what much law and ‘regulation’ are. It is certainly what a central bank is, as we shall find in due course...

But there are more reasons than this for political ‘we’s. Oftentimes things that in theory can be done by one person, or by multiple persons acting severally, can be done even better by persons acting jointly – as one. And there also seems simply to be something like proto-collective-agency ‘built into’ us. We are inherently cooperative creatures, as a bit of reading about ‘mirror neurons’, or why the whites of our eyes show while those of most other creatures do not – or even just your own life story to date – should make plain.¹⁹ Do you do everything alone or do some things together?

Well, you are reading this essay. That’s not alone.

I don’t think we need meditate much further on why we have polities now. We seem always to have had them, and seem likely forever to have them. Just as we have and have always had one another...

What matters for now is our polities are, again, our most comprehensive and universal modes of collective agency and collective action. They are the ultimate joint ‘we’. Through them we act together *both* because, among other things, this comes naturally to us, *and* because, not unrelatedly, it enables us better to ensure our own flourishing as persons and as groups of persons.

¹⁷ Robert Hockett, ‘Recursive Collective Action Problems’ (2015) 3 Journal of Financial Perspectives 1.

¹⁸ Ibid.

¹⁹ It is sometimes suggested that the high sclera-to-iris size ratio of our eyes facilitates our discerning where our fellows are gazing. This is quite helpful for purposes of coordinating actions of many kinds that remain characteristic of human life. Thanks to John Roemer for this observation.

Essentially bound up with that flourishing, of course, is productive and distributive activity. And so the state is our ‘highest’ authority where organizing productive/distributive activity is concerned much as it is where organizing many other forms of activity is concerned. And because we organize productive activity, in a decentralized exchange economy such as our own, largely by swapping obligations – that is, by contracting – the principal *medium* through which such organizing is done is our *money*. This will become clearer as we proceed.

3 Our Money

On, then, from state to economy. On, then, to money.

3.1 From Our State to Our Money

I hope now to demonstrate that, just as our state is our common emanation, so is our money. I hope also to show that our money *just is the general form of our shared mode of organizing distributive and hence productive activity* in any ‘decentralized exchange economy’ such as our own.²⁰ In this sense, our money is what most critically joins our political to our productive lives, our civic to our economic selves, where any economy of this kind – any ‘decentralized exchange economy’ – is encountered.

It is the *corpus callosum*, as it were, that unites state and economy when productive activity is ‘decentralized’ – that is, not fully planned in each salient detail by the polity as a whole at its most inclusive level of organization, its ‘central’ government.

Moreover, just as state and economy emerge, respectively, out of the (contract-like) authority and (contract-like) obligation birthed by the joint ‘we’, so is money simply the authoritative means of signifying and discharging the multiple (contract-like) obligations under a decentralized mode of production and distribution such as that encountered in a decentralized exchange economy. Where there is mutual ‘horizontal’ obligation and there are means of discharging such obligations, there is money.

Money is accordingly as intimately bound up with our political selves as is our state, and is as intimately bound up with our productive and distributive selves as

²⁰ ‘Distributive and hence productive’, again, because productive inputs must be distributed over productive units prior to production’s getting underway. In a ‘decentralized exchange economy’, that distribution takes the form of distributed claims upon productive inputs – that is, of money.

is our economy. Like our state and our (decentralized exchange) economy themselves, it proceeds from our joint ‘we’.

Indeed, it can helpfully be thought of as an arm of or instrumentality of our polity – and in that sense an arm of our joint ‘we’, our political selves – used to optimize the productivity of our productive, that is, our economic selves, again in any decentralized exchange economy. It is, in effect, that bare minimal form of ‘centrality’ that even a ‘decentralized’ economy must be built upon.

The only alternatives are central planning or productive entropy.

Just as a ‘common language’ is prerequisite to the ‘com’ (the ‘withness’) of ‘communication’ between otherwise distinct persons, we might say, so is a ‘common currency’ prerequisite to the ‘com’ (the ‘withness’) of ‘commerce’ between otherwise distinct persons.

Unlike the case of the polity, however, the case of money presents a significant challenge to exposition. The reason is that common myth-adulterated intuitions concerning the nature and functions of money run systematically counter to the truth about money. The reality of money is, in other words, ‘counterintuitive’. It is, in fact, the inversion of presently received orthodoxy – which, like current orthodoxy about the state, is a liberal orthodoxy. But this in itself will prove helpful, for much as one finds clues as to what a photograph looks like in the photograph’s ‘negative’, so will we find hints of real money in myth money.

Deriving the state from familiar intuitions of collective agency – intuitions about the joint ‘we’ – is, I hope in light of the foregoing Sections, a more or less straightforward exercise. For the language we typically use of ourselves in our political capacity – the language of the joint ‘we’ – tracks that we use of ourselves in our sub-state collective capacities even if it’s at odds with rhetoric about ‘the [putatively alien] government’.

We are *accustomed* to speaking in this manner, to using the word ‘we’ in this manner. With money, by contrast, things stand differently. A great tangle of misleading talk and misguided intuition, much of it rooted in the *wrong way* of analogizing or assimilating states to sub-state groupings, must either be disentangled and reversed or be quarantined and sidestepped altogether.

I’ve a feeling the second strategy will be the more effective one. I’ll accordingly ‘construct’ money from the proverbial ‘square one’ out of the same associative ‘we’ that I used in constructing the state. Then I will show how what even laypeople know or can easily learn about actual monies in current and past use maps on, isomorphically, to what I’ll have elaborated analytically. Only after that will I ‘seal the deal’ by indicating how popular misconception actually inverts the truth about money.

This procedure will also yield an additional benefit. It will enable us to see just how simple the error made by orthodoxy is. Correct simply one false conflation

made by the orthodoxy, in other words – as it happens, a version of that conflating of joint ‘we’s and several ‘we’s which I cautioned about earlier – and even orthodox understandings of money converge to (what at present will appear as) the (heterodox) truth of the matter.

3.2 From Joint ‘We’ Accountability to Several ‘We’ Accounting

Let us begin, then, again with a simple two-person story. I’ll make it about you and me again, as in the reading-this-essay story from which I worked ‘up’ to the state a few pages back. I want to draw out how money’s status and ‘authoritativeness’ in exchange proceed very naturally from the same normativity latent in the joint ‘we’ as do the status and authoritativeness of the state itself in collective political action. And I want to show how money emerges *as a means of discharge* of the obligations that proceed from that same, ‘joint we’ species of normativity.

Here we are, then, you and I. Let’s say we’re teenaged siblings, and that the two of us sometimes do favors or ‘good turns’ for each other. Maybe it was my turn to take the garbage out last night and you, seeing that I was busy doing homework, did it for me. Afterwards I said, ‘thank you, dear sibling, I owe you one’. This kind of happens all the time. It is familiar enough. It might even happen often enough that we end up, either deliberately or inadvertently, informally ‘keeping accounts’ of the favors we do one another.

If I have been busy with schoolwork of late and you have been doing me favor upon favor where the family chores are concerned, you might build up quite a ‘surplus’ with me. If you do, and if both of us understand one another to be more or less equally obligated to do family chores over time and equally bound to be fair with one another, you will at some point be able to ‘spend’ from that surplus. You might be busy one night and say, ‘hey, Robert, it’s my turn to wash the dishes tonight but I’ve got a paper due in the morning – may I redeem some of my “chore credits” with you and ask you to handle the dishes this time?’

And if we have mutually respectful relations with each other and I am not similarly constrained, I will say yes. And I will not say ‘you owe me one’ here because in this story I’m paying back (some of) what *I* owe to *you*. I am discharging one of my *own* obligations, in other words, in discharging one of yours in this setting.

If I do *not* at some point ‘pay you back’ in this manner, moreover, you will experience it as a kind of violation, an injustice. It will amount to a kind of cheat, of similar form to my ‘just joking’ example earlier on in this essay. And that is because we both have an arrangement, an implicit agreement – a ‘covenant’, ‘contract’ etc – which binds us together as one, a joint ‘we’ for the purposes of the arrangement.

To act contrary to this arrangement and its purpose is to ‘break faith with’, to ‘violate’ the implicit agreement and, with it, both our shared-purposive ‘we’ and the other ‘I’ who is party to it. This is a wrong that calls out for remonstration, redress, or contract-cognizable justification.

And so we say that the two of us are ‘accountable’ to one another – to our joint ‘we’ – where this arrangement is concerned. One either pays one’s account or she ‘gives an account of herself’.

There is, then, an obligatedness that is incumbent on both of us in this arrangement. It is as morally saturated, we might say, as is any other shared project that gives rise to a joint ‘we’. And this obligatedness is joined up with ‘payment’ of some sort. One ‘pays’ what is ‘due’ per the obligation, what one ‘owes’, in ‘discharging’ her obligation.

The next thing to note is how readily our obligations here – what is due, what is owed – will be ‘cashed out’ at discharge into something like money. In so doing, we’ll see not only money’s rootedness in normativity, obligation, accountability and associated accounting, but also its elaboration into the notions of credit, asset, and liability that populate the familiar legal and financial ‘universe’ – or, if you prefer, ‘environment’ or ‘game reserve’.

In effect, the mutual *accountability* imported by our relation – our joint ‘we’ relation – unfolds into specific forms of *accounting* that already are pregnant with ‘credit’, ‘debit’, and ‘authorized’/‘recognized’ forms of discharge or payment.

3.3 Accounts & Accounting, Credits & Debits, Authorized Means of Discharge

Let us first note, then, how easy it is to think in terms of owing and being owed, of liability and asset, in this ‘tale of us’ as I’ve told it thus far. Let’s note also how easy it is to think of yourself as ‘spending’ out of your ‘credits’ or your ‘surplus’ when you ‘redeem’ those credits after having ‘earned’ them and thereby ‘indebted’ or ‘obligated’ me – Robert, your sibling counterpart and counterparty.

We clearly are talking about something very like a ‘horizontal’ monetary relation here even as we speak in effect of a jointly shared ‘vertical’, authoritative relation latent in our obligatedness to each other pursuant to the purposes of our joint ‘we’. And yet no ‘currency’, or even any explicit agreement, has thus far been needed. The essence of the story is the ‘accountability’ and the ‘accounting’, not whatever physical things – neurons in this case? – are used as *aides de memoir* in our ‘keeping accounts’.

Further, as just noted, no *literal* written or spoken promises figured into the story just told, at least not in the formal sense of that word. But it’s easy to see

it – again, a kind of compact or covenant – implicit here. If we both fall into an arrangement of the kind just imagined, there is an unspoken understanding that you will be ‘paid back’ when you do your good turns for me – and *vice versa*. That promise is latent in the ongoing reciprocal arrangement, whereby one of us does good turns for the other on some occasions, and the other does good turns for the first on other occasions.

This is the sense in which the two of us have a kind of ongoing contract here – something akin to what lawyers sometimes call a ‘relational’ contract. That is, of course, one way of saying what a *political* ‘compact’, or *constitution*, is. This is, or is latent in, the *res* of the *res publica* – the ‘public thing’ – noted earlier. It ‘constitutes’, or records and memorializes the earlier constituting of, the particular joint ‘we’ in question itself. It is also, again as noted earlier, the residual binding cement of any ‘decentralized exchange economy’. It is that one element of joining, and in that sense of ‘centralizing’, even otherwise several, dispersed ‘I’s that is prerequisite to their acting productively together at all.

Exchange economies are in this sense just horizontal covenant economies. They are contract economies. And money is simply the shared means of keeping contracts.²¹ There must be at least this much ‘we’ even in an economy that operates mainly as horizontally transacting or interacting ‘I’s.

Like remarks now can be made about ‘authorization’. You and I have implicitly agreed that some actions shall ‘count’ in our ‘accounting’, as ‘discharging the debt’ when you ‘owe me one’ or I ‘owe you one’. The actions that ‘count’ for these ‘accounting’ purposes are what we both *recognize* – and in that sense both *authorize* – as ‘recognized or authorized means of payment’ of our obligations to one another.

What ‘settles accounts’ in your and my little ‘economy’ in my story is doing chores that the other party was required to do. Doing chores on behalf of each other is our ‘money’ in this tiny polity-cum-economy.²² It’s what we both jointly ‘recognize’ in fulfillment of our obligations, hence is what we both jointly ‘authorize’ to function as money – ie, as that with which we ‘pay’ and ‘repay’ one another. We jointly constitute a chore money economy.

Now it is not difficult, once you give these matters a little thought, to generalize outward from the limited you-and-I economy here to larger

²¹ This is slightly to oversimplify things. But you’ll see momentarily why it’s a worthwhile simplification.

²² See remark in the footnote immediately preceding, and its associated text.

‘political-economies’²³ – that is, to maximally inclusive economies within the jurisdictional boundaries of joint ‘we’ polities – with both larger populations and greater varieties of transaction type in which the ‘credits’ built up by chore-doing can be ‘spent’ in the discharge of ‘debts’. Just watch...

3.4 From ‘Several’ Accounts to ‘Joint’ Account Books – Ledgers

Building outward, then, how about we continue to keep this all in the family for now. We’ll start by simply adding more siblings and more ways in which siblings can become obligated to, hence to owe or be indebted to, one another.

So now we have you, me, and Jean-Jacques, three siblings. It’s been a busy week for me at school, and so you have done many of my chores for me. I owe you. I might eventually ‘pay’ you in the manner described above – by doing chores for you at some later date. But there is now also another possibility: Maybe I did many chores for *Jean-Jacques* last week. So *Jean-Jacques* ‘owes me’ much as I ‘owe you’. It might even be that Jean-Jacques owes me precisely *as* much as I owe to you. If so, we might imagine my authorizing Jean-Jacques to ‘pay’ you instead of me, since I owe you anyway.

If this way of handling chores becomes ‘a thing’ in the you, me, and Jean-Jacques economy, the three of us might very well begin ‘keeping multiple accounts’ with each other; and we might do so more or less formally now, regularly transferring ‘credits’ and ‘debts’ with one another according as each does the chores of another. We might then take to calling the *full set* of these accounts what people call other sets of accounts in other contexts: we’ll call it ‘a *ledger*’.

The word ‘chore’, once we do this, now will begin to take on at least one new characteristic additional to that of designating the particular assignments we siblings are responsible for handling within our family: it will begin to name an incipient ‘*unit of account*’ now as well. You, I, and Jean-Jacques will then incur obligations to one another, and ‘pay’ one another, ‘in chores’.

In the case just imagined, for example, on a given day it might be that ‘I owe you two chores’, while ‘Jean-Jacques owes me three chores’. In such case I have

²³ In employing this scare-quoted phrase I allude, incidentally, to what was originally meant by ‘political economy’ in the 18th and 19th century sense, before the discipline lost sight of the critical role of the polity in constituting an economy and took to calling itself ‘economics’ (The word ‘economy’ stems from the ancient Greek *oekonomia*, which referred originally to household resource management – something a bit like what now is called ‘home economics’. Thinkers who coined and then used the term ‘political economy’ meant in so doing to take the original Greek concept and extend it from households to those larger organizational units that are full polities – that is, from less inclusive joint ‘we’s to maximally inclusive joint ‘we’s).

liabilities in the amount of two chores (both owed to you) and assets in the amount of three chores (owed me by Jean-Jacques). I am accordingly one chore in surplus – my ‘account balance’ is a positive one chore. You for your part at this point have no liabilities and have assets in the amount of two chores (my liabilities to you); so your ‘account balance’ is a positive two chores. Finally, Jean-Jacques here has no assets and has liabilities in the amount of three chores (owed to me, hence my assets); his ‘account balance’ is accordingly a negative three chores.

And that is our ledger. Note here, by the way, how the ‘owings’ and ‘owed’s’ here – the chore assets and chore liabilities – all cancel out in aggregate. That is no accident. It is simply the upshot of what one calls ‘double-entry bookkeeping’ – to each asset a corresponding liability, and *vice versa*.

This venerable tautology holds within it certain truths that will prove interesting later – including the fact that the so-called ‘credit theory of money’ and ‘debt theory of money’ are really one theory.²⁴ Ditto the ‘state theory of money’, as we shall see.²⁵ It also, accordingly, holds clues to how economic orthodoxy, which routinely ignores what accountants call ‘stock-flow consistency’, goes so far off the rails in modeling, explaining, and predicting ‘macroeconomic’ – that is, polity-wide economic²⁶ – phenomena. But we’re not there quite yet.

Back now to you, me, and Jean-Jacques. Over time, of course, our accounts will change on a weekly or even daily basis. They will change in manners corresponding directly to the changing patterns of our ‘contractual’ or ‘economic’ relations with one another – what I’ll call our ‘owning and owing’ relations (Think of what you own as what you are owed here. You own the asset, your counterparty owes you its corresponding liability.) The patterns of obligations we owe or are owed one another will shift all the time, and in this sense our chore economy’s ‘money’ will ‘flow’ back and forth among us continually as our ‘economic relations’ – that is, our ‘account balances’ – continually shift.

‘Money’, in this case, will in a certain sense ‘spring into’ and ‘drop out of’ existence on a regular basis. It will come into existence in the form of a ‘surplus’ held by the beneficiary of an obligation, and a corresponding ‘deficit’ owed by the obliged party, any time that an obligation is incurred – for example, by your doing a chore for me that now obligates me to do a chore for you, this latter constituting your asset (your right to be repaid) and my liability (my duty to repay). It will drop

²⁴ See H D McLeod, *The Theory of Credit* (1889); Alfred Mitchell-Innes, ‘The Credit Theory of Money’ (1914) 31 *Banking Law Journal* 151; NT Skaggs, ‘Debt as the Basis of Currency’ (1998) 57 *American Journal of Economics and Sociology* 453.

²⁵ See Georg Friedrich Knapp, *Staatliche Theorie des Geldes* (1905).

²⁶ See (n 23) above and (n 28) below, on ‘political economy’.

out of existence each time an obligation is discharged, a debt paid, and the ‘slate’ is ‘wiped clean’.

And this should not be surprising to those who have read Section 2, earlier. For there we observed, in Subsection 2.3, that joint ‘we’s birth new forms of obligation. Money is simply the traceable record of one species of this ‘we’ – generated genus.

There will be more money, then, precisely when there are more obligations – more ‘chore assets’ and coordinate ‘chore liabilities’. There will be less money when there are fewer of these things.²⁷

This is intriguing, is it not? If we think of assets as wealth, then there is more wealth precisely when there are more assets. Which means, tautologously, that there is more wealth precisely when there are more liabilities. Which means there is more wealth when there is more debt – when there is more obligation.

Our wealth – what we own – is what we are owed. Hence it is also what we owe. We own what we owe, and we owe what we own.

Our wealth is precisely our obligatedness to one another. Our wealth resides in our being bound (‘joined’ – hence ‘joint’) to one another together as one for all manner of purpose. In our being a ‘we’ of a particular sort – the ‘joint’ sort – that continually generates new obligations.²⁸ More jointness, more obligation, more wealth.

That *has* to have rung ‘counterintuitive’ at first. You *must* be thinking that I am now dealing with *another kind* of ‘joint’ here. Or that I am ‘dropping’ that earlier-mentioned ‘acid’ after all.

I’m sorry.

But before you decide I’m ‘JUST JOKING’, please consider...

Consider what the ‘chore’ and ‘chore money’ – not just a ‘chore economy’, but also a ‘chore *money* economy’ – we have developed in my story enables us to do. You can now finish your homework – or perhaps write a research paper for ‘extra credit’ at school – on some nights when you’d otherwise be overburdened with chores. You can do that by either ‘spending’ some of the ‘chore money’ surpluses you have built up or by ‘borrowing’ chore money from – hence incurring ‘chore debt’ to – one or more of your siblings.

Jean-Jacques will be able to do likewise on some nights, as will I. Your *chore* wealth, be it already earned or be it borrowed now and then earned and paid later,

²⁷ This doesn’t bode well for the proposition that money’s essence lies in some precious substance like gold or some other exogenously given item that is inherently even if artificially scarce – like ‘bitcoin’. But again, we’ll get to this ‘all in good time’.

²⁸ Again, a slight overstatement in the sense of that noted above in (n 21). But a useful one, you will see, in the sense noted in (n 21) and (n 22).

will in this sense enable you to produce greater *material* wealth – in this case, ‘school-credit’ wealth. Ditto for Jean-Jacques and for me.

Might this capture part of the sense in which ‘it *takes* money to *make* money?’ At any rate, a sense in which *having* wealth (here, chore assets – and the practice pursuant to which these can be generated and accumulated) amounts to a means of *garnering or producing* more wealth (here, school-work wealth)?

Of course it might. Indeed it does.

Our chore-trading practice is quite advantageous for all three of us, and is so in a sense even liberal ‘orthodox’ economists will be able to appreciate. For if you, I, and Jean-Jacques arrange this thing right, we will not only get all of the chores done just as we would have done had we not begun ‘trading’ in chores, we will also get *other* things done that we *couldn’t* get done before – here, the homework or ‘extra credit’ research papers that we wouldn’t have been able to produce as oft or as well could we not sometimes ‘buy time’ with ‘chore money’.

Note then that money does not only enable us to ‘buy’ what is already produced. It also enables us to *produce* more *tout court*. This is the ‘secret’ – a secret only to liberal orthodoxy, and to the intuitions and institutions adulterated by it – behind what a few – alas, only a few – savvy economists call ‘the monetary production economy’. It is also why I distinguished between a mere ‘chore economy’ and a ‘chore *money* economy’ one moment ago.

We’ll come back to the fuller significance of these observations below.

We now have just two further steps to take in generalizing outward from the original two-person ‘chore money economy’ tale with which we began. Suppose now that rather than having ‘chore credits and debits’ simply ‘circulating’ among more siblings than two, as we have done by bringing Jean-Jacques into our story, we also want you, me, and Jean-Jacques to be able to exchange more than just undifferentiated ‘chores’. This will require our ‘money’ to undergo one more transformation – to attain to a greater degree of what we might call ‘abstraction’, ‘full fungibility’, or ‘moneyness’...

3.5 Accounts, Ledgers, Numéraires

If we want to grow our three-person exchange economy into something more closely resembling an actual decentralized exchange economy of the size and complexity one encounters outside the home in the wider world, then there are two more dimensions along which we will have to add a bit more complexity. The first is the dimension of chore comparability.

Not all chores, really, are ‘created equal’.

It might be, for example, that washing the dishes is a much less pleasant task than is taking out the garbage or vacuuming the floors. Having to clean the bathroom might be worse even than that. If that is the case, then neither you, I, nor Jean-Jacques will likely be willing to ‘recognize’ or ‘authorize’ vacuuming the floors on one occasion as adequate ‘payback’ for cleaning the bathroom on one occasion.

We might all come to agree that if you, for example, clean the bathroom one night when it is my turn, then I owe you either one bathroom cleaning, two dish-washings, three garbage-takings, or four vacuumings. And we’ll require the same of Jean-Jacques should I direct him to pay you rather than me when he owes me and I owe you.

In effect, what we’ll be doing in this case is commensurating qualitatively different chores and establishing ‘relative prices’ or ‘exchange rates’ among them.²⁹ Once we start doing this, it will be convenient to devise some unit of measurement in terms of which all chores can be simply compared. We might call these units, simply, ‘chore-units’. Then we’ll say vacuuming the floor ‘earns one chore-unit’, taking out the garbage ‘earns two chore-units’, washing the dishes ‘earns three chore-units’, and cleaning the bathroom ‘earns four chore-units’.

Our unit of account here will have evolved also into a unit of measurement. And what will have made that possible is our abstracting and separating the unit from the original concrete exemplar of that unit. When all chores were equal, the unit of account was the unit of measurement was the chore. When chores are no longer equal, we need a unit that is no longer of the form one-chore/one-unit, but is instead of the form one-chore/ n -units, n varying with chore value (or disvalue).³⁰

Our ‘chore money’ now will be transparently functioning not only as a ‘medium of exchange’ usable in ‘settling [chore] accounts’, and not only as a ‘unit of account’ used in *keeping* such accounts, but also as a unit of (value-) *measurement*. A unit that is no longer essentially tied to any *particular* chore, but is instead sufficiently abstract as to be usable in comparing and measuring the differing values/disvalues of *many different* chores.

One more dimension of complexity to go...

Suppose now that you, I, and Jean-Jacques have fallen into the familiar habit of doing things for one another not only where chores are concerned, but in other

²⁹ See Robert Hockett, ‘The Deep Grammar of Distribution: A Meta-Theory of Justice’ (2005) 25 Cardozo Law Review 3; Robert Hockett, ‘Putting Distribution First’ (2017) 18 Theoretical Inquiries in Law 1.

³⁰ ‘Value’ and ‘disvalue’: Here doing a chore is disvalued (Few kids seem to enjoy chores). Someone’s doing the chore for you is correspondingly valued.

spheres of activity too. Jean-Jacques might, for example, tend to struggle with trigonometry while you are very good at it. You might have trouble finding someone who shares your sense of humor while I ‘get’ you and am always ready to banter in ways that keep you laughing. I might have little ‘fashion sense’ while both you and Jean-Jacques have ‘good eyes’ where such things are concerned. And perhaps all three of us can feel discouraged at times, while at the same time each of us is good at cheering up the others.

In such case you, I, and Jean-Jacques will likely come over time to do all manner of ‘good turn’ for one another, only some of these being cases where one of us does the chores of another. Each of us might also sometimes do things that irk one or both other siblings. You borrow my copy of *Emile* without asking, then inadvertently ruin it by becoming so engrossed that you take it into the shower with you. Jean-Jacques self-projectingly calls you ‘*une imbécile*’ in frustration some evening when he’s slow in the uptake of the trigonometry you’re trying to help him with. I step on both of your feet while I’m trying to learn how to waltz. And so on...

We can well imagine, in this case, our all beginning informally to ‘keep accounts’ with each other with a view to these varied benefits and burdens, much as we did with our chores. You ‘owe me one’ for the book, Jean-Jacques ‘owes you one’ for the insult, and so forth. You might then ‘pay me back’ by doing one of my chores for me – perhaps one, perhaps two chore-units’ worth, depending on the value of the sound book as compared to the soaked book. Jean-Jacques might offer to do three chore-units’ worth for you owing to the hurtfulness or injustice of the insult. I might forgo my claim against you, or cheer you up when you’re sad, and offer either chore-doing or free lessons in civility to Jean-Jacques, to atone for my foot-stepping. And so on.

If we three siblings come to ‘account’ in this way for sufficiently many benefit and burden types additional to chores, we might at some point start counting our ‘money’ not in ‘chores’ or even ‘chore-units’, but instead just in ‘units’, or maybe ‘merits’ and ‘demerits’. Our shared ledger will now record simply units of asset (perhaps with ‘+’ signs) and liabilities (perhaps with ‘–’ signs), leaving such terms as ‘dishwashing’, ‘vacuuming’, ‘book-damaging’, ‘toe-stepping’ and so forth as no more than parenthetical accounting memoranda indicating *how* particular merit/demerit units have been accrued or forfeited. At that point we will have developed a ‘money’ that is, in econospeak, as ‘fungible’ as can be within our small intra-familial ‘economy’. It’s pretty much ‘pure money’ – as pure as money can get – in our little economy.

And note that this still hasn’t required a materially exchangeable ‘currency’ of any sort. No gold, no paper. Just an informal account ledger kept only in human memory.

And so we can glimpse now, however fleetingly, what even ‘pure’ money has to do with ‘production’ (the doing of chores and of schoolwork), ‘productive relations’ (the relations among our three chore-doing and schoolwork-doing siblings), ‘obligation’ (our obligations to one another pursuant to our relations), ‘assets and liabilities’ (same), and ‘accountability’ and ‘accounting’. We can even see how this all grows from a joint ‘we’. The ‘we’ that is we three, who have effectively joined together in implicit covenant, partly with a view to bettering our lot and partly because that’s how we roll as humans – as Aristotelian ‘political animals’.

3.6 Size, Complexity, Obligation-Tracking and -Verifying

But where are the gold coins, dollar bills, central bank keystrokes in all of this? In what sense is what’s happening here an incipient form of state-making and money-using of the kind that we think of when we think about nations and national economies?

We’re almost there, actually. It is in fact very easy to see states and moneys as straightforward outgrowths of proto-political formations, proto-productive and – distributive relations, and associated proto-moneys of the sort just elaborated in our sibling tales. The key is to note that with growth comes a need of formality. Formality both in respect of agreeing or covenanting, and in respect of the tracking of covenantal obligation and discharge.

All we’ve envisaged above has taken the form of ‘informal arrangement’, which is quite good enough when we’ve only got three kids and a few benefits and burdens that are produced and exchanged. The ‘verticality’ of the joint ‘we’ – and the normativity, authoritativeness, and obligation that are latent in it – can be left implicit in the informal understanding among the three of us that ‘one good turn deserves another’. And the shifting ‘accounts’ of the siblings – the oft-changing chore assets, chore liabilities, and then other good turns and ill turns – can be tracked well enough simply by memory, with no need even of paper ledgers, let alone paper money or tokens of any sort.

When populations grow larger and asset/liability relations grow more far-flung and complex, however, things must be ‘formalized’ and ‘regularized’. That is so if for no other reason than to enable us all to ‘keep track’ and ‘verify’.

Let us then build up a polity – not just a family polity, but a ‘state-like’ polity, a maximally inclusive joint ‘we’ – with the materials we have now to hand. And let us develop this polity’s money and ‘monetary system’. All we need do is to formalize what we have.

3.7 Formality and (Explicit) Verticality

In our sibling stories, mutual obligation, accountability, accounting, asset/liability, recognized/authorized means of payment, even promise came into the picture only implicitly. All of this was latent in the ‘we’ relation among siblings. Our joint ‘we’ gave birth to all of these things, but we didn’t have to talk about them all that much; all was simply ‘understood’.

And that works when we are dealing with but smallish, closely bound-up groups whose members can come spontaneously to trust and to rely upon one another, to view and treat one another as equals, to practice reciprocity with one another, to incur and discharge obligations to each other. In such cases what I have been calling the ‘vertical’ dimension of the joint ‘we’ remains latent even while operative. On the surface, our relations all seem to be horizontal, even though ‘deep down inside’ they are vertical too.

When societies and their corresponding economies – their joint decision-making, producing, giving, and receiving practices – grow more extensive and less intimate, however, it becomes helpful, if not necessary, to render explicit what has previously been left implicit. The verticality latent in the joint ‘we’ must be rendered as patent and visible as the horizontality that is patent among all the transacting ‘I’s.

And so at length we jointly ‘formalize’ and ‘regularize’ what sorts of obligations can be incurred or enforced by whom, thus which obligations shall ‘count’ for purposes of ‘accounting’ and public ‘accountability’, what sorts of ‘payment’ are ‘authorized’ as satisfying such obligations, how and where to track and enforce such obligations and their discharge, even how ‘we’ shall jointly *decide* and *act upon* our joint *decisions* on such matters. When we formalize our norms this way, we call then ‘laws’. And when we act to ‘regularize’ activities pursuant to our laws, we ‘regulate’.

Where you find what’s called ‘law’ and ‘regulation’, you find a joint ‘we’ that’s grown large enough to necessitate rendering its ‘vertical’ normative character explicit.³¹

Most modern societies seem to have developed three broad means of formalizing and regularizing along these lines. First, they formally promulgate

³¹ The *Decemviri* are said to have erected the ‘twelve tablets’ of bronze in the center of Rome to obviate uncertainty and corresponding disagreement over ‘what the rules were’ among transacting citizens. Many of these rules concerned property, tort, commercial transactions, weights and measures, and the like. This is as suitable a moment as any to designate as that at which Rome moved from being a community, *a la* our sibling stories, to being a polity – in this case, the world’s first great republic.

institutions and prescribe procedures for deciding and acting collectively in the form of deliberately constituted polities – republics – that are nowadays schematized in written ‘constitutions’. These simply ‘reduce to writing’ that ‘forming’, ‘founding’, or ‘constituting’ which is the deliberate self-constituting of a polity – a joint political ‘we’ – by its citizen ‘I’s. You, I, and Jean-Jacques had an incipient, informal proto-version of such a polity in our stories above. Because it was informal, its vertical dimension was latent. Republics just render that patent.

Second, modern societies deem certain ‘privately’ – that is, ‘horizontally’ – incurred obligations ‘publicly recognized’ and hence ‘vertically’ enforceable in special adjudicative institutions we call ‘courts’. All of these obligations arise from horizontal ‘transactions’ of one sort or another between ‘I’s, though some are involuntary while others are voluntary.

Involuntary transactions are, in the Anglophone world, generally called ‘torts’, the word ironically descending from a French, and hence ultimately Latin, original.³² These are cases where one party inflicts harm on another of a kind for which the other may seek publicly enforced redress. The tort victim in such case becomes an ‘involuntary creditor’ of the ‘tortfeasor’, the latter being ‘liable’ and accordingly accruing a liability.

You, I, and Jean-Jacques had an incipient, informal proto-version of this arrangement once we began ‘aton[ing]’ for insults, property damage, and unauthorized borrowings among one another by doing chores for each other in our stories above. The ‘vertical’ incumbency of such ‘atonement’ on any of us who wronged another of us was left implicit in our surface-wise ‘horizontal’ arrangement, which is simply to say our arrangement was informal.

Voluntary transactions, by contrast, are reciprocal exchanges of *promissory* obligations that count as what we call ‘contractual’. These contracts are simply promises, explicit or implicit, that are enforceable in courts when certain formal requirements are met. These are the kinds of exchange to which people refer when they speak of ‘exchange economies’. They’re the cement that productively *binds* together even those who do not *produce* together in any literal, shoulder-to-shoulder sense.

You, I, and Jean-Jacques had an incipient form of the institution of formal contract in our sibling stories above too, as we noted there often enough. The ‘vertical’ accountability of any of us who broke faith with another of us was left implicit in our surface-wise ‘horizontal’ arrangement, which is simply to say our arrangement was informal.

³² Old French *tort* (wrong, injury), from the Medieval Latin *tortum* (wrong, injustice), from the Classical Latin *torquere* (to twist, or ‘contort’). Injustice is ‘twisted’, ‘contorted’, much like some pastries called ‘torts’ to this day.

Finally third, modern societies typically specify, again formally, some mode of payment that shall be ‘good for all obligations public and private’. These specifications, called ‘legal tender laws’, effectively define what shall count as the polity’s money. This money is simply that which is recognized as discharging one’s obligations. You, I, and Jean-Jacques had an informal rendition of this too, which is precisely what all our sibling stories were meant to make plain. *Our* ‘legal tender’ was ‘chores’, then ‘good turns’. The ‘vertical’ ‘authorization’ of these chores and good turns was left implicit among us in our surface-wise ‘horizontal’ arrangement, which is simply to say our arrangement was informal.

Apart from this difference in degree of ‘formality’, money in a republic or other species of nation-state is essentially what it was in our sibling stories. To get to the former from the latter we first add more people and, with them, a greater variety of kinds of obligation that they might incur to one another. We then add an element of solemn formality about which obligations ‘count’ as ‘enforceable’ and what counts in ‘payment’ of them. We do this, in turn, so as to avoid misunderstandings of the kind that arise when we have (1) hundreds or thousands or millions of people who might not know one another or the terms of their arrangement that well, rather than merely a few people who know each other and the terms of their arrangement *very* well, (2) hundreds or thousands or millions or billions of transactions, and hence obligations, to keep track of, or (3) both of those.

There is only one more thing to note – or rather, to make explicit, since it too was only implicit in our sibling story ... That would be currency.

3.8 Monetary Verticality Made Explicit: Coin & Currency

I have this shtick. What I do is I ask people in rooms I’m addressing about money to take out a dollar bill or some other bill. Then I ask them to read across the top. What they find there is ‘Federal Reserve Note’. Then I ask them what ‘note’ means. Does it mean ‘note to your girlfriend’? No, it is short-form for ‘promissory note’. That is a legal term of art. It means ‘IOU’. It is something a lot like a contract.

A promissory note is what you sign when you go to a bank to take out a loan. It’s effectively a contract, binding you to pay back the bank over some interval pursuant to some schedule. The bank gives you other promissory notes – Fed notes, or their depository equivalent – in exchange for your promissory note. You’re essentially just swapping one kind of note for another. Your promises for Fed promises. Your obligation for a Fed obligation – that is, a US obligation.

What's going on here?

Hyman Minsky once quipped that anyone can issue a currency, the trick being to get it accepted. What he meant was that not just anyone will take your IOUs in payment of your obligations.

You, I, and Jean-Jacques in our sibling stories did that – at any rate a form of that. You said 'I owe you one', and I accepted that. We didn't need paper, because the volume of our transactions was small enough to permit 'mental tracking'. Had we needed paper, however, we could have relied simply on IOUs that we wrote to one another, and all three of us would have accepted these from one another. That is because we have this mutual exchange relation with one another as laid out above, and because we are able to recognize each other's handwriting and to trust one another to live up to our handwriting-verifiable obligations.

Where we don't have that small population size and small transaction volume, as noted a few paragraphs ago, we need some kind of formalization and regularization. That is just another way of saying what Minsky said – the trick is to get it accepted. What we do is develop means of converting, under well-specified conditions, small-group-recognizable 'horizontal', or 'private', IOUs into full-polity-recognizable 'vertical', or 'public', IOUs. Then we have truly *common* 'common currency' (Money is in a certain sense 'communist').

How does this work? How do we do it? Can we 'build out' to this, too, from our sibling story?

You bet your bottom dollar we can.

All we need do is go back to our story and pose a few questions that I refrained from posing before, lest things grow too complex too fast.

So here is the first question: Where did those 'chores' come from in the story of you, me, and Jean-Jacques? Why did anybody have to do chores in the first place, hence become able to indebt someone else by doing what they were required to do?

The answer is pretty clear, once you think about it. And once you do it explains why you might have detected a faint air of 'Charlie Brown' in our story. *Where are the parents?*

The parents in our sibling story presumably imposed the chore obligations in the first place. And that accounts for 'chores' and then 'chore-units' having developed as both the medium of exchange and the first unit of account – the 'money' – in our sibling story. It is also why 'chores' will remain a money in this story even if you, I, and Jean-Jacques start paying one another in generic 'units' once we start 'keeping accounts' with one another on the basis of *favours* we do one another in addition to doing each other's chores. For the *parents* will still have to be paid in those *chores*. There will *always* be 'demand' for *those*.

Bringing the parents into our story now enables us to go back to those ‘Federal Reserve Notes’, and in so doing make clear the relation between what is called ‘public’ money on the one hand and what can be called ‘private’ money on the other hand. Here’s how to do it...

In our sibling story, relations of reciprocal obligation obtained not only among our siblings themselves insofar as they did things for one another, but also between the siblings on the one hand and their parents on the other. That is because, at least insofar as our parents are not simply arbitrary tyrants but reasonable family members, they not only oblige the children, but also oblige *themselves* in the matter of chores.

They oblige the *children* to *do* the chores. They oblige *themselves* to *recognize* a chore’s having been done *right* as *discharging* the child’s chore obligation. The children owe the parents the chores, and the parents owe the children the recognition that they no longer owe the chores once the chores are done. The parents obligate themselves to recognize a chore as payment of a chore obligation, in other words, when they *authorize* chores *as* payments of chore obligations.

This is part of why chores constituted the first ‘money’ in our sibling story. Chores had value for the siblings because doing them ‘credited’ their ‘accounts’ with their parents, taking them out of ‘chore deficit’ once chores were done. And since they had value for purposes of the child-parent relation, and since each child *had* such a child-parent relation, the chores came to have value in the child-child relation as well – for every child *needed* ‘chore money’. So the ‘vertical’ money that binds parent and child becomes ‘horizontal’ money that binds child to child.

As our story continued, the children developed other means of ‘earning money’ with one another additional to doing each other’s chores. But the enduring chore obligation continued to operate as a sort of touchstone – an original money – form *in terms* of which *later*-developed money-forms *continued to be valued and measured*.

Now let me add a quick caveat, lest I be misunderstood. There is nothing essential about there being literal *parents* in this story, particularly not if the ‘children’ are grown. I’ve used the example only as a convenient and intuitively familiar means of symbolizing the vertical dimension of the monetary relation. In an actual republic, of course, *we are ‘the parents’*, even *while* being ‘the children’. Think of our parent ‘we’ as what I’ve been calling our ‘public’ or ‘joint’ ‘we’, and of our children ‘we’ as what I’ve been calling our ‘private’ or ‘several’ ‘we’. I’ll make more of this shortly.

Were the three of us in my sibling stories all three adults, living perhaps in communion together in one home, we would very likely come up with a ‘chore list’ necessitated by the project of smoothly living together. In this case our collective – the joint ‘we’ of our household – would be the authoritative, chore-requiring

personage. It might even begin issuing tokens to verify when chores have been done, particularly were it to grow to include many more members. I'll make more of this, too, shortly. But back to us kids for a moment...

Now if you think of the chore obligation in our sibling story as a kind of tax imposed by the parents on the children or by the adult household upon its adult members, it is easy to understand what is being 'promised' via those 'promissory notes' known in the US as 'Federal Reserve Notes'. We all owe tax obligations to the 'common weal' (our commonwealth) that we manage through our federal government ('our' government, not 'the' government). We also determine through our government what shall count as payment of those obligations – that is, as money. As it happens, we also *issue* official, 'authorized' *representations* of that money – that is, a national currency.

You, I, and Jean-Jacques could have done the same – instead of marking credits and debits on a ledger, we might instead have printed up some paper bits that represented chore units and paid them to one another. As it happened, we found it easier just to keep a ledger. Before the coming of sophisticated technology, larger societies found it easier to go with the paper, and with coins, bullion, and so forth.

But we now are entering a world in which ledger technology can be used among large populations as easily as it was in our 'you, I, and Jean-Jacques' story.³³ In fact, in large measure we already do this, for 'cash' represents only a tiny portion now of the money supply in 'advanced' jurisdictions – bank accounts, which are electronically credited and debited just like your, my, and Jean-Jacques's ledger, constitute by far the greater part of the money supply in these economies.

In any event, Fed notes – US currency – represent our own explicit political commitment, hence obligation, to 'accept' such notes in fulfillment of tax obligations just as your, my, and Jean-Jacques's parents implicitly committed to accept our chore-doing as fulfilling our chore obligations. And American citizens then take to using the same currency – those Federal Reserve Notes or accounts measured in units of such notes (dollars) – just as you, I, and Jean-Jacques took to using chore-units as currency among ourselves.

And just as we saw our doing this as siblings enabling us to 'produce' more by freeing us up to fulfill the aggregate chore commitment *and* now do lots more in the

³³ See Robert Hockett, 'Money's Past Is Fintech's Future: Wildcat Crypto, The Digital Dollar, and Citizen Central Banking' (2019) 2 Stanford Journal of Blockchain Law & Policy 1; Robert Hockett, 'The Democratic Digital Dollar: A Digital Savings and Payments Platform for Fully Inclusive State, Local, and National Money and Banking Systems' (2020) 12 Harvard Business Law Review 1. Also Robert Hockett, 'The Capital Commons' (2020) 43 Review of Banking and Financial Law 1.

way of extra things like doing our homework well and writing research papers for ‘extra credit’ at school, so in a larger economy, we’ll find, does the institution of trusting, trading, and fulfilling promissory obligations – that is, the institution of money – enable a *society* to produce much more.

The only real difference between the sibling-and-parents story on the one hand and citizens-and-government story on the other, as we can appreciate in light of the earlier pages of this essay, is that in the latter story the same people who are the children are also the parents. At least that is so if, rather than a monarchy or some other form of autocracy, the polity we constitute is a democratic *republic* (Even Locke could appreciate this, if his polemic against Filmer’s remarkable *Patriarchica* is any indication).

In such case we jointly impose the ‘chore’ obligation, *and* issue the promissory notes whose tender can fulfill it. And we do so upon and on behalf of *ourselves*. Ourselves as one polity. Ourselves as one single politically constituted and universal joint ‘we’.

There will be more to say on this shortly. But first I must grow our little intrafamilial economy a bit more so as to show why the reflections just offered are important. I want, in short, to take us not only from ‘family money’ to republican money, but also from republican money to republican finance and from republican finance to republican production. In a sense, that is what this paper is ultimately about.

4 Our Finance

If you can see how our money is our emanation much as our state is our emanation – our joint, political emanation – then you have all that you need to see how finance and ‘the financial system’ are also our joint political emanation. The trick is to see that our money resides at the core of our financial system – *our* financial system – no matter how inaccessible to intuition some might have misled you, for (pecuniary) reasons quite of their own, into thinking that ‘system’ is.

4.1 Money and ‘Finance’

The best mode of entry to what I hope to show here, I think, might be via a sort of *via negativa*. I’ll start with a mistake – a mistake widely made by both liberal orthodox and libertarian economists, and by the people – including some misguided professors and public officials – who listen to them. Then in seeing what is mistaken and why it’s mistaken we’ll be enabled to see things aright.

And this will all flow from our earlier discussion. For, as we'll see, the mistake made about money, finance, and productive activity – that is, about 'the economy' – is isomorphic to the mistake made about governments and states – that is, the polity. It is once again all a matter of conflating what really two things – again, joint and several 'we's – into a would-be one thing.

When one loses sight of the fact that our state is our most project-inclusive and temporally extensive joint 'we', and that any such 'we' sweeps within it all 'I's, it seems that one leaves oneself prone to a very deep error. This is the error – in effect, the category error – of falsely assimilating ultimate units of political organization to mere citizens or households or firms, that is, to entities that buy and sell *under the authority* of such units. It is the error, in other words, of collapsing what I have been calling 'vertical' into mere 'horizontal', thereby conflating our joint 'we' with our several 'we's.

This 'original sin' generates multiple cognitive mash-ups that ramify throughout orthodox economic thinking and planning. Here is the legacy, it seems, of the classical liberal cast of mind when that mind's brought to bear upon matters not only political, but also productive or distributive – that is, upon matters economic.

To unpack what I mean here, let's begin with another parable – a parable I suspect you'll have encountered before, yet a parable we'll see is absurd, even incoherent. In this story, frequently propagated by partisans of classical liberal orthodoxy, 'there are two kinds of people in this world'. On the one hand are 'savers', or 'surplus units' – persons who've saved money or accumulated resources over time. On the other hand are 'dis-savers', or 'deficit units' – persons who have need of saved money or accumulated surplus but don't have it.

Financial institutions and markets now spring up as 'middle men' to enable these surplus and deficit units to find one another, overcoming 'search', 'monitoring', and 'maturity-matching' costs in so doing. They broker (or contractually substitute for) contracts between parties for the use of 'scarce capital' at a price – be that price 'interest', equity stakes, or some other form of compensation. Let's call this picture 'the intermediated scarce private capital myth'.³⁴

Now among the 'deficit units' in our story, liberal orthodoxy tells us, is something called 'the government', evidently now understood not as us in our collective political – our vertical joint 'we' – capacity, but as simply another 'agent' 'on the same – "horizontal" – level' as us in our individual capacities.

³⁴ See Robert Hockett, 'Finance without Financiers', anchor essay forthcoming in *Real Utopias Democratizing Finance* (Erik Olin Wright ed, 2020); Robert Hockett, 'Finance without Financiers' (2019) 47 *Politics & Society* 1; Robert Hockett & Saule Omarova, 'The Finance Franchise' (2017) 102 *Cornell Law Review* 1143.

Government as thus conceived ‘doesn’t produce anything’, we are told, nor can it sell equity stakes in itself (we hope). So it has nothing to sell or to offer to ‘earn’ money. It therefore has only two means of financing its operations. It must either borrow from the aforementioned ‘surplus units’, or ‘take’ – more pejoratively, ‘confiscate’ – from those units, in that form of taking we know as taxation. These borrowings and takings ‘fund’ government operations, we’re told.

But this means, on the liberal orthodox rendering, that there are limits on ‘public finance’ that take very specific forms. If the government borrows too much, we are told, it will grow less credit-worthy, will ‘crowd out’ private producers who also need access to accumulated scarce private capital, or both. And if the government taxes too much, then it will again crowd out private investment, and might even come to be ousted by angry citizens who launch ‘tax revolts’ too.

Either way then, you see, ‘the government’ is at the mercy of the polity’s privately acting ‘surplus units’. It’s at the mercy of people who’ve severally accumulated ‘scarce capital’ that ‘the government’ needs to operate, and that they can charge high interest rates for, refuse to pay in the form of taxes, or both if ‘the government’ gets uppity.

It’s not hard to see how this picture might prompt certain policy nostrums we hear all the time in America and in American-influenced precincts. References to ‘skittish capital’ and ‘bond vigilantes’, particularly in connection with alleged ‘government over-spending’, all channel the myth. So do complaints about taxes, and assurances by deep thinkers like George Bush and Grover Norquist that ‘it’s your money’ when they demand ‘tax relief’.

And so, of course, do cries that we’re ‘burdening our grandchildren with debt’, or that ‘the government will go broke’, or that the Fed, as that other deep thinker, Sarah Palin, once charged, is ‘debasement the currency’ when it accommodates fiscal expansion by purchasing Treasury securities in open market monetary operations.

But all of this is a howler. It’s not merely an error, it’s a *profoundly crude* error, indeed a *category* error. And it’s so because the foundational picture upon which it rests – the intermediated scarce private capital myth – is itself an absurdity.³⁵

By treating our money as something exogenously supplied us, and by treating our joint ‘we’ – ‘the government’ – as just another several ‘you’ or ‘me’, the orthodox story stands truth of things on its head. And many a backward or upside-down policy recommendation will in effect replicate that head-stand.

35 Ibid.

4.2 Obligations, Claims, Credit and ‘Capital’

We have the analytic resources we need now to see why the intermediated scarce private capital myth truly is mythic in the pejorative sense of that word. The foregoing lessons we’ve learned about money from our you, me, and Jean-Jacques stories provide what we require to accomplish this. All that is needed is to redeploy and then draw some entailments from those materials.

First let’s get clear about the relations among resources, claims upon resources, and credit. Once we do, we’ll see that orthodoxy’s conflation of sovereign political units with citizens, families, and firms corresponds both to a reinforcing conflation of resources with claims upon resources (that is, of ‘machine capital’ with ‘finance capital’) and to a false separation of credit and money.

The two false conflations and one false distinction are all, in a sense we’ll soon see, of a piece – a piece nicely captured by pervasive use of what turns out to be a quite polysemic word – ‘capital’ – as if it named one thing not two things. And these all are the spawn of that single ‘original sin’ that I opened with – the sin of conflating the joint and the several, the collective and the aggregative, the unitive and the partitive ‘we’.

Let’s begin with a family or firm that takes part in, you guessed it, another ‘decentralized exchange economy’. The family here even can be our you, me, and Jean-Jacques family from earlier, save with the parents now clearly in view.

Adult family members of our family purchase homes, vehicles, sustenance, education, and so on for themselves and their children in this economy. They typically sell services of various kinds – often all lumped together as ‘labor’ – to earn what is needed to purchase these things.

Firms act in similar fashion. They purchase ‘inputs’ to what they produce, and use the proceeds of sales of what they produce both to pay for those inputs and to yield the surplus above inputs – the profits – that their owners are seeking. Another familiar story, that – right?

Now in most of these cases, households and firms will engage in exchange via some ‘medium’ of exchange. This medium, as even classical liberals know, is often called ‘money’.

Insofar as money functions as a medium of exchange, it can be thought of as a claim upon what it’s exchanged for. It’s status as legal tender makes it a legal claim upon what it buys – a claim upon resources.

Think of this ‘claim’ feature of money as simply another face of its ‘asset’ status as noted earlier. Claims are the flipside of obligations just as assets are the flipside of liabilities and credits are the flipside of debits – indeed these are simply synonymous formulations of the selfsame tautology-generating relation.

So when households or firms swap claims for resources, they're essentially doing what you, I, and Jean-Jacques did in swapping 'chore credits' for chores in our earlier stories.

Now note that money is more than a present-moment claim, more than a medium of immediate exchange. It also works as an inter-temporal claim, a medium of exchange between present and future. This was true even of our 'chore credits' in the earlier you, me, and Jean-Jacques stories. Here is the source of even liberal economists' observation that money is not only a medium of exchange, but also a 'store of value'.

Money 'stores value' for as long as it retains its status as a claim, the flip-side of an obligation – in this case, the obligation of all in the polity, pursuant to their legal tender laws, to 'accept' the relevant money 'in fulfillment of all obligations public and private'.

The 'value' component of money as 'store of value' stems from money's status as a claim – again, the flipside of an obligation. The 'storage' component stems from money's status as a claim operative through time – a status, we should note as liberal orthodoxy does not, that it shares with the intertemporally durable polity (the joint political 'we') that issues it (*It* 'lives' while the polity 'lives').

What liberal economists also seem generally to overlook is that the inter-temporal aspect of money – money's very capacity to serve as a store of value – is rooted in its relation to *credit*, that all-important phenomenon named by an English word stemming from the Latin word '*credere*' ('to believe').

Money bridges time not only because its issuing authority bridges time, but also because *credit* – including the issuing authority's credit – bridges time (Indeed, without time there would be no need for credit at all). This too we saw in our you, me, and Jean-Jacques stories – our 'chore credits' weren't 'time-stamped' in those stories, they were 'good for all (relevant) time'.

4.3 Money and Time

Let's see how this works in a full national economy – a 'political economy'³⁶ – as distinguished from a you, me, and Jean-Jacques intra-familial economy...

Often a household or firm does not already hold enough money to purchase what it must for its purposes. And often it's not possible to *earn* such money without first *selling* something that one needs the money in order to make or supply in the first place (Hence once again the old adage, 'it *takes* money to *make* money'). I might have to purchase a car, for example, in order to be able to take a

³⁶ See again notes on 'political economy', (n 22, 23, 28).

new high-paying job far from home. But I also might lack the money to purchase the car until I have already worked at the job for a while and been paid.

That puts me in a bit of a bind. I already have, in a sense, the *capacity* to earn the money to pay for the car – I have the job offer – but I can't begin earning that money till I have the car. This is in a certain sense 'tragic' (That word again). I have capacity, yet something is blocking my exercise of that capacity. I am not what we might call 'capacity-constrained', yet I am nevertheless *something*-constrained. What is the something constraining me? What's holding me back?

My starting the job and my buying the car in this story are a bit like those two men at the doorway who keep saying 'after you' and thus never manage to get through. The two men – the old comic strip characters Alphonse and Gaston – never pass through the doorway *even though each has the capacity* to walk through the door. What constrains *them*?

What we might call *the structure of their social relation* – in this case, the fact that each insists upon waiting for the other to walk through before himself walking through – acts as an institutional obstacle to their moving at all.³⁷ It is their convention – their 'after you' convention – that blocks their way. And the same holds for firms here as holds for families. For firms typically *need* money to buy what they use to *produce* the things that they *sell* for money.

We're faced with a situation type, then, in which there is no basic capacity-constraint, no salient resource-constraint, but a significant *institutional* constraint.

4.4 Money and Time, Finance and 'Capital'

Now most societies with decentralized exchange economies develop institutions to deal with this Alphonse/Gaston problem. We call them 'financial' institutions, among which banks in particular figure prominently though far from exclusively (More on their variety below.) These institutions alter the structure of the 'social relation', as I called it, between Alphonse and Gaston. They make it possible for even strangers to 'spot one another credit' in the way that the non-strangers you, I, and Jean-Jacques were able to do '*entre nous*', within the family.

Financial institutions, be they publicly or privately afforded (I'll ask which mode of provision is better below), are meant to enable more exchange to take place across space by enabling exchange across time. In so doing, they are ultimately meant to make possible more *productive activity* across time – that is the

³⁷ There is an old story, one hopes apocryphal, about a 19th century law said to have been promulgated in Kansas with a view to coordinating the behavior of mutually approaching trains. Each conductor, it is said, was required to stop and await the other train's passing.

touchstone of their utility (Here is the source of what some heterodox economists, as noted earlier, aptly call ‘the monetary theory of production’). They do this by allowing us in a certain sense to spend now (part of) what we won’t actually have until later.

They allow, in other words, ‘advances’ now on what is expected to be ‘realized’ later, especially when such advances are prerequisite to that later ‘realization’ – that production – itself. All of this, you’ll recall, was present in our you, me, and Jean-Jacques stories above, with school work being that which came to be more abundantly produced once we supplemented our social relations with the institution of ‘chore money’, aka ‘chore credit’.

But now note, what are inter-temporally exchanged via these institutions are not material capacities or resources themselves, but *claims* upon such capacities and resources. That’s what the money you borrow amounts to – a claim upon current resources that you can then use to produce more future resources. And while material capacities or resources must of course be pre-accumulated to be used, *claims* upon such resources need *not*. That, too, we saw in the you, me, and Jean-Jacques stories.

One of the critical errors embedded in liberal orthodoxy’s ‘intermediated scarce private capital myth’, then, stems from equivocation upon and attendant unclarity about the word ‘capital’. Orthodoxy deals with capital as if it were physical resources alone (machines, say, after the 19th century picture), even while purporting to take account of claims upon resources – what we can call ‘finance capital’ – by taking account of financial ‘intermediation’.³⁸ In so doing, it conflates an indefinitely extensible resource – finance capital – with a (momentarily) scarce resource – physical capital.

This is one source of liberal orthodoxy’s many confusions (Or is it simply another element in its Freudian ‘complex’ of mutually reinforcing confusions?) There are more.

4.5 Credit, Money, Credit-Money

All right, I have said a bit about money in talking of credit, of resources, and of claims upon resources. Now let us focus again upon money specifically in relation to credit. Money, as we saw, in effect, in the you, me, and Jean-Jacques stories, is not simply *associated* with credit. Money just *is* credit (Hence the term aptly coined by some early post-Keynesian economists, ‘credit-money’.) And it therefore is

³⁸ Or what *Marx* called ‘fictitious capital’ in Karl Marx, *Das Kapital* (Volumes II and III, 1885, 1894).

debt – since, as we saw earlier, to every asset corresponds a liability, to every credit corresponds a debt.

Money's being a kind of circulating credit/debt is part of what enables it to *function* as an inter-temporal *claim* – a 'store of value' – in the first place.

To remind yourself of how, take out that dollar which I mentioned earlier from your pocket again. Recall the inscription across the top: 'Federal Reserve Note'. A dollar is a *promissory* note. A circulating representation of an obligation.

A promissory note represents a legally enforceable commitment – a contract-like obligation. The promisor undertakes to do something in future (You don't have to promise if you're doing it now.) The promisee undertakes to trust the promisor – to believe her when she says she will do what she's promised.

Insofar as the promisee does so, he 'credits' the promisor with what ever he puts at risk of the promisor's possibly breaching the promise (That Latin '*credere*' – 'to believe' – again). In so doing, he becomes a creditor, the promisor a debtor. The creditor holds an asset, the creditor is subject to a liability. The promissory note signifies both – it is the issuer's liability and the note-holder's asset, combining credit and debit, claim and obligation, once again.

Perhaps needless to say, promissory notes in scenarios like this one function as means of payment, just as your own IOU does if you use one to purchase something from another who trusts – who 'credits' – you. And just as your merely 'mentally tracked' promise did in our you, me, and Jean-Jacques story, where scale was sufficiently small, trust sufficiently high, and matters sufficiently simple as to allow for the keeping of mere 'mental accounts'.

I need something from you now, I offer you something in the future, I 'pay' you the (literal or figurative) promissory note now as a token – as proof – of my promise to perform in the future. My promissory note is thus functioning as a medium of exchange. That's one thing, recall, that liberal orthodoxy tells us that money is.

But now what is the *Fed* promising? And why do *its* promissory notes function as modes of payment – as currency, or 'paper money'?

Earlier I quoted Minsky's old quip that anyone can issue a currency, the trick being to get it accepted. Minsky was saying that private promissory notes can serve as methods of payment from one party to other parties who know her and trust her, and in that sense can function as 'private moneys', but are unlikely to be accepted in payment by parties who *don't* know or trust her, hence as *public* moneys. Your, my, and Jean-Jacques' chore credits were money *entre nous*, but would have been worth little among children in other families in other neighborhoods who neither knew us nor had to do chores in our family.

If something is to circulate widely as a mode of payment, then, it must be a sort of 'promissory note' *everyone* 'recognizes', trusts, and perhaps even needs – a note

that everyone will accordingly accept in payment as a form of money. What manner of note might that be?

Isn't the most widely reliable promise, and hence widely usable memorial of obligation, the one that we *all* make? The one that we make *in our joint capacity*? The one that we make *as a polity*? And isn't that simply the currency we all jointly 'authorize' through that polity, thereby obligating ourselves in our joint and several capacities to accept it in payment of 'all obligations public and private'?

The answer, it seems we've implicitly agreed, is yes. And this means the most widely accepted note in these parts is the Fed note.

The Fed note functions *across* households as our 'chore units' functioned *within* our household, back in our you, me, and Jean-Jacques stories. And that is simply because the Fed is the promise-issuing authority of our most inclusive politically constituted joint 'we' – the 'we' that includes all our smaller joint 'we's, including our families.

4.6 The Joint/Several Swap and 'The Financial System'

When you borrow money, then – which you often do in this country by handing a bank your own promissory note in exchange for Fed promissory notes (or their depository or cashier's check equivalents) – you just temporarily trade your own notes for Fed notes.

It's just a temporary *swap*.

You temporarily transform narrowly accepted notes into widely accepted notes, horizontal money into vertical money, private money into public money. But this just means you trade evidence of your own promise for evidence of Fed promises. You swap *your* (several) promissory obligations temporarily for *our* (joint) promissory obligations.

It's still all about promissory obligations – hence about credit and debt. All that varies is *whose* credit, *whose* debt – *whose* asset, *whose* liability – we are using.

One way of thinking of 'private' (yet always publicly licensed) banking and other financial institutions against this backdrop, as noted earlier, is as 'outsourced' credit-checking offices of the Fed and, in consequence, of Us (our joint political 'we', our 'We, the People') – all Americans in their capacities as citizens of one shared republic (one *res publica*, or public thing), whose central bank the Fed is.

This is effectively all that is happening out there in the big bad 'financial system' that some financial practitioners and academics want you to think too complex to understand – and, therefore, take control of. It's all about tapping into

our public promise-issuing machine – sometimes legitimately, other times illegitimately, in ways we'll encounter below.

How our system is meant to work, when functioning according to its implicit and, alas, seldom now articulated design, is essentially thus:

Publicly licensed 'private' lending banks, which in theory have better access to information about the credit-worthiness of those who live near them in their communities, in effect do credit-checking for our 'central' bank – our Fed. In that sense, they do the checking for us – our joint political we – to determine whom 'we' ought to credit with a view to their doing something productive with the proceedings and thereby bettering the material circumstance of us all.

In so doing, banks decide whose private promissory notes will be temporarily tradable for public promissory notes. They thereby assist our Fed, and hence 'us', in temporarily transforming private money into public money – purely horizontal claims into vertical or vertically-enhanced horizontal claims.

In so doing they also provide credit in a form that, by being 'cashed out' in widely accepted claims upon resources – that is, as public money – enables the wide use of current resources to produce future resources: that is, they finance productive activity, just as our 'chore credits' did earlier in our small family in which things were small-scale enough as to obviate the need of specialization where 'credit-checking' was concerned. In this sense, even our 'private' productive activity is 'publicly' financed.

Let that sink in for a moment...

We finance ourselves. We (jointly) finance our (several) selves.

That's what we do through our banking and broader financial system with our Fed – our '*central* bank' – at its center.

I have riffed at perhaps tedious length on the implications of this arrangement in other work. I call it a 'finance franchise'.³⁹ For in effect private banking institutions are simply distributing that public resource which is the monetized full faith and credit of the United States, earning privatized seignorage for doing the credit checks while being publicly licensed to play this role only so long as they maintain the 'quality standards' we demand through our franchisor Fed and its co-regulators.

Through a variety of channels, this arrangement has come to encompass much more than just banks. By now it embraces nearly all of the US financial system. The so-called 'capital markets' and 'money markets' all seek to glom on to banks and

³⁹ Hockett, 'Finance without Financiers' (n 34); Hockett & Omarova, 'The Finance Franchise' (n 34).

the Fed in the form of ‘financial holding companies’ and ‘shadow banking’ precisely in order to tap into the public full faith credit – that is, the franchise.⁴⁰

It is easy to trace and to diagram all of this – literally *all* ‘financial flows’ – in a manner that renders the whole system accessible both to analysis and to intuition. It is easy, in other words, to show pictorially that literally all financial flows of any consequence are effectively channelings of indefinitely extensible public full faith and credit. But if you want all that technical detail – along with the 20 plus mad scientist diagrams that make it all visualizable – you will have to move on to my technical writings...

I think it is time now to turn to a brief account of the actual history of money and finance, which is structurally and narratively reminiscent of, while being empirically far richer than, the stories of you, me, Jean-Jacques and our parents, of me and my car, and of Alphonse and Gaston. This will not only further substantiate the skeletal story I’ve been telling thus far, but also enable us to see how much better we can ‘do money’ than we are doing it now, once we see that it is indeed *our* money.

4.7 Metal, Paper, History

There was a very brief while when Federal Reserve notes promised the bearer a small bit of gold – or at any rate were redeemable by some entities for such. They were in this sense ‘claim checks’ upon gold. Some view this fact – which was true only for the first 20 years of the Fed’s 105 year history – as indicating that inscriptions like ‘Federal Reserve Note’ now are vestigial, a bit like the human tailbone. But that is a mistake.

What people who make this mistake fail to grasp is that gold itself was like paper when it first came to be used as a medium of exchange. Gold itself, in other words, is no more ‘inherently’ monetary or valuable than paper or ledger entries of the kind that you, I, and Jean-Jacques might have recorded. The true story, which should in light of our earlier discussion prove very instructive, runs essentially like this...

In the ancient Near East, civilizations were heavily dependent on agriculture. Because agricultural yields were subject to the whims of nature, it became common practice in ancient societies to store grain during ‘fat years’ so as to be well provisioned for ‘lean years’. Grain storage of this sort, vital as it was, was not

⁴⁰ They also, of course, make indispensable use of US Treasury securities, which serve effectively as ‘base money’ even in all of the stock and bond markets.

left to the wisdom of individuals alone. It quickly became a function of the polity – the joint ‘we’ – as a whole.⁴¹

It became, in other words, a ‘state function’, much as old age insurance in the form of Social Security is today. Growers were required to make ‘grain deposits’ into a community pool, which requirement operated as a kind of tax or mandatory social insurance premium, both of which come down to essentially the same thing – again, like Social Security taxes today.

Now when you ‘deposited’ your grain per this requirement – generally with a religious authority, since state, religion, and the means of sustenance were closely bound up in those days⁴² – the authority who received your deposit gave you a token which signaled that you had made your deposit. The tokens in this case were a bit like the stamp that is inked to the back of your hand when you go to a club – they showed you had ‘paid’.

In time, these tokens began circulating as currencies. It is not hard to see why. Suppose that your neighbor has very good land that produces very good crop yields. Suppose that your land is less good, but that you are a very good toolmaker. For your neighbor to produce grain, then, is very easy, whereas for you that is very hard. On the other hand, for you it is easy to make good tools, while this is hard for your neighbor.

In such a situation, there are gains to be had from letting your neighbor ‘deposit’ extra grain at the community grain-store, collect extra ‘receipts’ for having done so, and then give you those extra receipts in return for your making tools for her. That way you both get to do what you’re best at, and so both of you are able both to produce more in aggregate and to prove that your grain obligation has been satisfied. You are, in effect, in the same boat here as you were earlier when I spun out the tale of you, me, and Jean-Jacques.

Now implicit in the practice of giving a receipt for the grain deposit is a commitment by the grain-gathering authority to *recognize* the receipt as verification of one’s required deposit’s having been made. We can think of this as a term in a sort of *contrat social* pursuant to which members of a society (or their deity)

⁴¹ The fact that many ancient societies appear to have been organized as nondemocratic theocracies should not be taken to undercut the applicability of my notion of a joint ‘we’ here (Recall the earlier observation, apropos Rousseau, that the notion of a true republic is a regulative ideal rather than a category we find perfectly instantiated anywhere). The point here is that it is easy to see why a fully democratic republic would have done the same thing, social-insurance-wise, as ancient monarchies and theocracies did. The same mixed considerations of solidarity and collective action problems – in this case, ‘free-rider’ problems – that would be salient in the one case were salient in the other.

⁴² And remain so to this day, even, to a nontrivial extent, where religion is concerned – as witness the ‘culture wars’ that now seem ubiquitous even in ‘liberal’ polities.

undertake to recognize the authority of a ‘governmental’ agent (or priest) to requisition grain during fat years for provisioning during lean years, while that authority for her part undertakes to recognize her own ‘grain receipts’ as proof positive that a grain depository obligation has been met (Think back to the parents in our sibling stories).

In this sense the receipts function as assets of their recipients, and as liabilities of their issuers, just as chore obligations did in our sibling stories.

The moment this commitment is in place, be it explicitly or implicitly, the ‘receipt’ acquires the characteristics of a *claim*. The claim corresponding to the authority’s obligation to recognize the receipt-bearer as one who has already ‘paid her taxes’ (‘done her chores’) or as good as paid her taxes. And, once those lean years commence, it is a claim to some grain from the grain store.

Once ‘tax receipts’ become ‘vertical claim checks’ – again, simply ‘claims’ for short – as against the taxing authority in this sense, it is only a matter of time before they begin circulating as ‘horizontal claims’ too among those who need them – just as they did in the story of you and your grain-growing neighbor above, and just as they would have done in our sibling stories had we siblings or our parents issued ‘receipts’ rather than simply keeping informal ‘mental accounts’. All people need them, after all, and so all people accept them in payment of all manner of thing – not only grain, but also tools and much else.

These are public liabilities that circulate as private assets, so everyone uses and accepts them. And this is the nature of money in every group that grows to the size and degree of productive/distributive complexity that we find in all polities.

You can see here *in nucleo*, then, the sense in which our aforementioned Federal Reserve notes might function as claims on or liabilities of the US federal government even as they circulate as claims or assets among citizens. Think of the Treasury Department as the grain-gathering authority, and of the Fed as the claim check issuing authority. These are two mutually complementary organs of one government – *our* government, our joint politically constituted ‘we’. And the one organ recognizes – *we* recognize – only the receipts issued by the other organ in payment of taxes⁴³ (Taxes must be paid in dollars).

But now what about gold? How did *that* ever come into the picture? And why did the *Fed* (and other polities’ central banks) ever have anything to do with it?

⁴³ From 1863 to 1913, the treasury was the ‘claim check’ issuer too. More on these ‘greenbacks’, and why we added a central bank to our complement of monetary authorities, below.

The important thing about claim checks was never their material form, but the fact that they reliably *represented claims*.⁴⁴ Receipts of this kind actually took many different material forms over time. In the early Near East, clay tokens stamped with the grain authority's seal were the most convenient form (That seal was the progenitor of the later 'Federal Reserve Note' inscription). Later, as civilization advanced through the Mediterranean region and across the Eurasian continent through Anatolia, Persia, India, and China, among other places, new material representations of the same kind of 'claim' developed.

One material form that became widespread for a while was the so-called 'precious metal' token, or coin. It is of course commonplace nowadays to think of metals like gold, silver, platinum and others as somehow 'inherently' precious, and thus 'natural' stores of monetary value. But the truth seems to be the reverse – these metals *became* 'precious' largely because they came to be used widely as material representations of money claims.

Why would that have happened? The answer appears to be that the comparative 'softness', malleability, and resistance to corrosion of these metals (gold and silver do not rust) made them easy to stamp official images and 'code words' (like 'Federal Reserve Note') upon and then circulate over time. If, for example, it was now Tarquin or the Decemvirate or Caesar in Rome, rather than the Pharaoh or High Priest in Egypt, who was requisitioning taxes from the citizenry, and if the climate was not consistently dry enough to rely upon clay tokens not to disintegrate, it was natural to seek some more durable and non-corrosible substance into which Tarquin's, the Decemvirs', or Caesar's image could be stamped when it came to issuing 'receipts' to the taxpayers who'd paid their taxes.

Precious metals were just the ticket – the payment ticket or 'pay stub'. 'Precious' metal coins, then, became dominant money-forms throughout the ancient world. This continued into the medieval period, with only the taxers and issuers – monarchs, emperors, feudal lords, etc – and their images changing. As cities with increasingly differentiated economies began growing at the margins of feudal manors, however, coins and big blocks of metal called 'bullion' became increasingly inconvenient.

For one thing, they were heavy. For another, lugging them signaled to brigands that you were ripe prey. So a new practice developed. People began 'depositing' their metals with metalsmiths who happened to have safes, for 'safe-keeping'. The smiths for their part issued paper claim checks – or 'notes'

⁴⁴ Compare the number seven and the numeral '7'. The relation between the two is altogether accidental. Any symbol – even '3' or '@' – could have been decided by convention to denote the number seven. The sign is not the thing signified any more than a grammatical subject is a grammatical direct object; it is the thing that signifies.

representing claims upon the deposited metals (Note, then, how paper currency at this stage can be considered an early form of ‘derivative’ claim. The coin is the claim, the paper is a claim upon that claim).

It didn’t take long for people to discover that using the paper in payment, rather than going back to get gold and then carrying it to a place of transacting, could save time and effort. It also didn’t take long for the metalsmiths to discover something of considerable material interest to them: Once their claim checks began circulating as paper currency, they could issue such checks *to themselves* in order to buy things. They could also issue such checks for *lending at interest*. As long as the checks were not issued too far in excess of the metal in store, there was no danger in doing this, and there was much gain to be had.

In time this line of work unsurprisingly became much more lucrative than metalsmithing. The benches – or ‘*banca*’, as benches are still called in Italy where this practice first developed – on which metalsmiths did their smithing gave their name to what we now call ‘banking’, not smithing. And the practice of issuing more notes than one had metal became known as ‘fractional reserve banking’. The metal was a ‘reserve’, which represented a mere fraction of total note issuance. In effect, the metallic claims (the coins) were ‘levered-up’ (magnified) by the practice of issuing derivative paper claims as multiples of the metallic claims. The ‘money supply’, which we might just as well call the ‘circulating claim supply’, was accordingly magnified many-fold.

Now this practice of issuing more notes than they had metal made banker’s business not only profitable, but also both socially useful and financially risky. It was profitable because note-issuers got something for nothing – they received what came to be called ‘seignorage’, so-called because the first issuers who enjoyed this privilege were monarchs or manorial lords (Old French ‘*seignors*’) themselves. It was socially useful because it allowed for what later came to be called an ‘elastic currency’ – that is, a currency whose supply could be grown both to accommodate growing transaction activity and to finance growing productive activity (Recall our sibling story above, and consider our Alphonse and Gaston story below).

And the practice was risky – both for the banker and for society – because the elastic currency could be ‘over-stretched’, issued too far in excess of the metal that ‘backed’ it. One could, in other words, ‘over-promise’ by issuing too many promissory notes, which would undercut the value of promise and promissory note alike. We call such overpromising ‘inflation’ today, in a manner that brings to mind the illuminating metaphor of the over-expanded balloon that must burst.

Much of bank regulation, in consequence of these facts, took the form of bank-licensing requirements and reserve-regulation in olden days. But there was no inherent necessity that required reserves be metals. The only reason they were in

the early days was because such metals themselves were stamped by the sovereign as ‘legal tender’, good for the discharge of ‘all obligations public and private’. In other words, just as the paper memorialized promises, so did the metal – it’s just that the paper memorialized private bank promises (what we might call ‘vertically authorized – because licensed – horizontal money’), while the metal memorialized public authorities’ promises (what, again, we can call ‘vertical money’).

In time, public authorities began memorializing *their* promises with paper as well – with both sovereign bonds and sovereign currencies. Gold was used mainly for cross-border transactions – that is, transactions across jurisdictions and thus subject to no particular currency-issuing jurisdiction – for much of the 17th, 18th, and early 19th centuries.

In the mid-19th century, some jurisdictions reintroduced gold temporarily as ‘reserve money’ in order to signal to all members of the population and to one another that they would not over-issue currency, as some had done during rough patches like the revolutions, civil wars, and international wars that plagued the 17th, 18th, and 19th centuries. The US Fed was established during this period, and so for a brief while shared in ‘the gold standard’ with other polities’ central banks.

But within a decade of the Fed’s founding, the British public’s Bank of England abandoned metallic standards altogether, and America’s Fed followed suit another decade later. Since then, private bank ‘reserves’ at the Fed and other polities’ central banks or monetary authorities are ‘created’ much as individuals’ credit-money is ‘created’ by private banks themselves – namely, by the former’s simply crediting or opening an account for the latter. There is no metallic constraint at all.

The only ‘natural’ constraint on the bank is what loans can be made profitably. And the only ‘natural’ constraint on the central bank or monetary authority – in our case, our Fed – is essentially the same: it is how much credit-money can be generated in the form of newly extended loans before its growth rate is too rapid for ‘real’, productive growth to keep up and thus apt to bring on inflation.

4.8 Constraint, Balance, Health

This last point cannot be emphasized too forcefully or too often in a financial culture, such as our own, in which what I earlier called the intermediated scarce private capital myth is widely assumed to be true. There is no salient ‘natural’ limit on how much credit can be generated, hence on how much money or ‘finance capital’ can be issued. Even required reserve ratios calculated in relation to gold were not ‘natural’, since the ratio itself was politically decided and could always be

changed. The ‘gold standard’ itself, in other words, just like the first sovereign gold coins, was simply a public promise.

The only ‘natural’ limit on credit-money issuance, then, is in a certain sense ... nature itself.

Some very insightful but, alas, seldom-heeded economists over the decades have called this the ‘resource constraint’. That is a fine way to put it. But it is important in such case to bear in mind that what is meant by ‘resource’ here isn’t just ‘natural resources’ like land, water, air, etc. What is meant, rather, is a foreseeable transtemporal aggregate of material resources, produced and not-yet produced, including what can realistically *be* produced over a given time interval (Think again to the Alphonse & Gaston story above. And of finance capital used to gain access to machine capital so as to produce more material wealth).

The credit-money – the ‘finance capital’ – supply must be able to grow at a rate that allows for this resource stock to grow through the productive activity of those who need claims upon current such resources – that is, again, money – in order to produce future resources. There must be enough money, in other words, to accommodate people like me in my car and job story above.

It’s all about optimizing *productive capacity*, which, as we noted above, is a function of productive/distributive – that is, of social – relations, relations among the several ‘I’s who all constitute our political and productive joint ‘we’. Too little money – too little finance capital – diminishes such capacity (Again, the car story). Too much money – too much finance capital – diminishes the reliability of money as a claim-transfer device, hence again productive capacity. Let us then call the need to avoid both over- and under-issuance a ‘capacity’ constraint.

It is possible, of course, for there to be less than an optimal ‘amount of money’ in circulation – that is, credit available or outstanding. That was, again, the point of my car and job example prior to the development of finance in my story. But it is also possible for there to be *more* than this optimal ‘money supply’. If those promissory obligations that are money or finance capital proliferate more rapidly than our aggregate capacity actually to fulfill them through real productive activity, then we’ll have ‘over-promised’, ‘over-committed’. We will have issued more promissory notes than can ever be realistically redeemed. More obligations than can ever be realistically followed-through on.

In such case the promises will lose some of their value – ultimately, their reliability, their ‘bankability’ – just as your promises to meet your friends for dinner, or to speak at some gathering, will come to be ‘discounted’ in time should you often renege on your obligations. Where the promise in question is the money kind of promise, overissuance can result in its coming to be worth even less than ‘the paper it’s printed on’.

This is all we are talking about when we talk of ‘inflation’. And that is the real constraint upon issuance. It is *that*, not the gold supply or even the current, as distinguished from the current-plus-feasible-near-future, resource supply, which is the sole relevant ‘scarcity’ where money-issuance and hence finance capital are concerned. And this is because finance capital is not ‘intermediated’, but *generated*. It is ‘created’ as *money* is ‘created’ – that is to say it is ‘extended’, or ‘issued’.

What, then, do Treasury issuances (‘government bonds’, ‘sovereign debt’ instruments) and taxes do, if they do not ‘fund’ the government as liberal economic and monetary orthodoxy has it? Easy: Selling Treasuries and levying taxes takes money out of circulation. Sometimes it’s helpful to do this when we through our government instrumentalities are collectively spending, because if we don’t there is sometimes a risk of over-issuance and hence of inflation.

But sometimes there’s also no need to do this – indeed, there is need to do the very *contrary*. That is the case, for example, during a slowdown, recession, or debt-deflation – when not inflation, but its polar opposite is the salient danger (As it has been since the crash of 2008⁴⁵). In such cases joint, public spending supplements inadequate several, private spending, and need not be ‘funded’ – that is, accompanied by contractionary measures like taxing and bond-selling – at all.

Any thoughtful tax lawyer can attest that this is what the tax code is for – it’s for altering the allocation of money flows, not for ‘raising money’ which needn’t be raised when the public, just like the Medieval Italian banker, can simply issue it. And anyone at the New York Fed trading desk, who buys or sells Treasuries every morning in pursuit of Fed ‘open market operations’ aimed at fine-tuning the daily money supply, will tell you that Treasury securities are for providing the markets with ‘safe assets’ and for buying and selling to alter the money supply, not for ‘borrowing money’.

It’s a shame that liberal orthodox economists, who evidently needn’t know how the actual tax code and actual bond markets actually work, don’t hear those lawyers and traders. That, it would seem, has been left for the heterodox to do.

The task of keeping the quantity of circulating promissory obligations – that is, of money, of finance capital – in sync with realistically realizable production I call

⁴⁵ See Robert Hockett, *Debt, Deflation, and Debacle* (White Paper, Federal Reserve Bank of Philadelphia 2013). Also Alpert, Hockett & Roubini, *The Way Forward* (White Paper, New America Foundation 2011); Alpert & Hockett, *The Debt Goes On* (White Paper, Federal Reserve Bank of St Louis 2016); and Alpert & Hockett, ‘Private Debt and Public Debility’ (2017) 60 Challenge 4.

the ‘credit-modulatory’ task.⁴⁶ What’s needed is to modulate credit aggregates in keeping with actual productive capacity. This is the best way to understand what Fed ‘monetary policy’ is about – it’s about the modulation of credit-money aggregates, which is to say promissory obligation aggregates.

It is easy to see why this task must be performed ‘centrally’, by a ‘central bank’ or monetary authority – that is, by ‘us’ in our plenary collective capacity, the capacity of our most inclusive joint ‘we’. Individual ‘I’s and less inclusive ‘we’s are not up to this task. That is partly because they’re not ‘big’ enough, but more importantly because the central bank, as the issuer of all public and, therefore (derivatively), ‘private’ credit, is the only authority that is collectively ‘authorized’ to adjust the aggregate *supply* of such credit.

Failure to see this – failure to see that even prudently rational, non-venal private participants in our financial markets are subject to too many what I call ‘recursive collective action problems’ to be capable of spontaneously getting credit aggregates right⁴⁷ – accounts for many a policy blunder that’s ended in financial bubble and bust. A first task for policy as we work to reconstruct a financial system after a crisis, then, is to get clear about this centrality of ‘us’ in our public capacity to even what we label ‘private’ financial markets.

But that is only a first task. The second is what I call, not the modulatory, but the allocative task. While even many liberal economists will concede the need for public action to solve those collective action challenges that afflict decentralized financial markets in the forms of over-issuance and under-issuance of credit-money, no liberal economist seems to recognize that similar challenges confront allocation.

Individuals – ‘I’s in their several capacities – live relatively brief lives and have little if any control over background conditions that determine the rationality or otherwise of ‘patient’ investment in ‘real’ productive projects in the ‘real economy’. Those background conditions include, among other things, various prices that I elsewhere call ‘systemically important’ – prices like prevailing wage and salary rates, commodity (foodstuffs, energy, essential minerals, etc) prices, and certain widely used benchmarks and indices such as Libor, the S&P 500, and so forth.⁴⁸

Where such ‘systemically important prices and indices’ (SIPs), as I call them, fluctuate wildly, it can become much more rational, given the short time horizons

⁴⁶ Hockett, ‘A Fixer-Upper for Finance’ (2010) 97 Washington University Law Review 1213; Hockett, ‘The Macroprudential Turn’ (2013) 7 Virginia Law & Business Review 1.

⁴⁷ Again Hockett, ‘Recursive Collective Action Problems’, (n 17). Also Robert Hockett, ‘Systemically Significant Prices’ (2016) 2 Journal of Finance Regulation 1.

⁴⁸ Ibid.

of individual human lives, to borrow in order to speculate on price-swings in secondary financial markets rather than participate in primary financial markets concerned with actual productive activity. We have, as a polity, effectively recognized this truth in respect of one systemically important price – namely, prevailing money-rental, or ‘interest’ rates – and have accordingly authorized our central bank to ‘target’ these rates with a view to confining their fluctuations within a narrow band. But there are many more systemically important rates than interest rates.

Against this backdrop, it makes sense for us as a polity to take a more active role in credit-money allocation in addition to our role in credit-money modulation. A good way to do this would be to re-introduce a modern rendition of the old Reconstruction Finance Corporation (RFC) that financed much of the New Deal during the 1930s and 1940s.⁴⁹ This institution dwarfed all Wall Street institutions combined during the era that it was active, and never once experienced even a single ‘losing’ quarter during its years of investing. The RFC forthrightly allocated credit, from increments as small as \$20 for an African-American barber shop in Los Angeles to increments as large as millions of dollars for rural electrification projects.

A revived RFC – let’s call it a ‘National Investment Council’ (NIC) – could collaborate with the Fed in maintaining price stability in respect of SIPs additional to interest rates, and could direct credit toward projects that, for any number of reasons including individually rational ‘short-termism’ and collective action problems, ‘private investors’ do not adequately provision. It could even function as an ‘employer of last resort’ (ELR) both to maintain employment and to affect that remarkably ignored systemically important price known as the prevailing wage rate.

Because it would be temporally extended – in effect, ‘perpetual’ – just as our polity itself, our joint ‘we’, is temporally extended, it could rationally make longer-term investments that more temporally limited individuals – mere ‘I’s – cannot rationally make. And so, provided the modulatory task were adhered to simultaneously to the allocative task – less credit would flow toward bubble – inflating short-term speculation on secondary markets, while more flowed toward actual productive activity in primary markets.

⁴⁹ Robert Hockett, *Financing the Green New Deal: A Plan of Action and Renewal* (forthcoming Palgrave Economics 2020); Hockett, ‘Finance without Financiers’, (n 34). Also Robert Hockett & Saule Omarova, ‘Private Wealth and Public Goods: A Case for a National Investment Authority’ (2018) 43 *Journal of Corporation Law* 1.

Yet another sense, then, in which our joint ‘we’ is both greater and more effective than our mere several ‘I’s. As our Fed is ‘our’ means of *modulating* ‘our’ money, our PIA can be ‘our’ means of better allocating ‘our’ money. Here too, though, if you’d like to read more I’ll refer you to my more technical writings.

5 Conclusion: Our Republic, Our Money, Our Productive Selves – Our Joint ‘We’ Recovered

We have traveled a long road. I think that in consequence we can see, though, the error of liberal political and monetary orthodoxy alike now in bold relief.

It is wrong to conflate joint ‘we’s with several ‘we’s, politics with citizens and households and firms, because politics, which are just us in our joint, public capacities, are possessed of a ‘vertical’ politico-normative dimension not had by individuals or sub-state units of organization. Through them we can in consequence issue claims upon everything – public money – while individual citizens and households and firms in our several, private capacities can issue claims only upon ourselves, claims that will not be ‘accepted’ by others until successfully swapped, via lending transactions, for ever-sought claims on the lot of us – that is, our Fed-issued dollars.

It is wrong to conflate resources with claims upon resources because claims can be generated in excess of current resources as long as doing so prompts the production of additional resources. And it is wrong to believe capital inevitably ‘scarce’, ‘private’, and ‘intermediated’ because this too is to conflate resources with claims upon resources – and to forget moneys are claims to performance of promises – all under the systematically ambiguous word ‘capital’, which can refer either to tools and machines or to claims upon tools and machines, money.

Once we see all of this, we see that liberal orthodoxy is dark superstition. We see it’s mythology, a strange and scared conjuring apparently rooted in distant spells cast by kings or queens and their crowns made of bright shiny metals, traditions that treat debts as sins (some languages use the same word for both), and mystical conflations of signs with things signified. Hence my reference to what I called ‘negative fetishism’ in connection with these forms of self-estrangement I referenced in introducing this essay.

Politics are not ‘others’, when democratic republics they are us. Currency and coin are not money, they represent money. Money is not paper or metal, it’s the flipside of obligation – a claim on performance or resource. Debt is not sin, it is worthiness of credit – credibility. And metals are neither inherently precious nor ‘base money’. Believed, collectively endorsed promissory obligations are the basis

of money – they are what banks give you public money – *our* promises – for when accepting your private money – *your* promises.

This is all we need see to overcome both political and monetary – hence productive – self-estrangement. This is all we require to recover our full, whole, collective and productive selves – our polity and our economy. This is all we require to ‘own’ these again. It begins with recovering our state and our money.

That, you can see, is to recover a good bit of ourselves.

Acknowledgment: Warm thanks to Hillary Allen, Dan Alpert, Kaushik Basu, Lawrence Baxter, Sarah Bloom Raskin, Natalie Braun, Jeni Dhodary, Aaron James, Paul McCulley, Bill Simon, Alan Thomas, and Michael Thompson.