Money and the Rule of Law

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6.1 Instead of Discretion

F. A. Hayek, Milton Friedman, and James M. Buchanan were the three great classically liberal economists of the twentieth century who applied their minds to the challenges of monetary institutional design. As we saw in the previous chapter, their ideas and proposals differed, often significantly. However, there is a single unifying theme throughout their writings on monetary theory and policy. Hayek, Friedman, and Buchanan were each trying to bring monetary institutions under the control of the *rule of law*. Their concern was finding monetary arrangements that could work well (stabilize aggregate demand, prevent financial crises, etc.) while satisfying the normative constraints that citizens of self-governing republics rightly place on their public institutions.

In this chapter, we explain what we mean by rule of law, and why monetary institutions ought to be subject to it. In doing so we draw upon a rich tradition of social philosophy and political economy in the classically liberal tradition. This tradition affirms the importance of the rule of law for reasons that are still widely accepted today. Constraining public institutions such that they respect individual rights, adhere to their publicly given mandates, and operate according to the common good (as opposed to the particular good of interest groups) is important to all the political philosophies represented in the public square today. Conservatives, classical liberals, and progressives often disagree on the *consequences* of a policy, that is, whether it does in fact contribute to the common good. But they agree on the ultimate institutional standards by which policy is to be evaluated. This agreement on principles at the "meta-constitutional level" suggests an important and neglected critique of discretionary central banking: it fails to adhere to the rule of law in any meaningful sense.

Readers may find this claim bizarre, especially as applied to the Federal Reserve. After all, the Fed was created by an act of Congress. Throughout the twentieth century, Congress provided the ultimate guidance for monetary policy by specifying objectives (full employment and price stability post-1977)¹ while prudently leaving decisions over the appropriate means to monetary policymakers. The conventional wisdom holds that this is a triumph that reconciled democratic government with expert management, one that has been broadly economically beneficial (Bean et al. 2010). By now readers will not be surprised to learn we strongly dispute the earlier discussion. Beginning with the second consideration, it is far from clear that the Fed has improved US economic performance (Bédard 2014; Boettke and Smith 2013, 2015; Hogan 2015; Hogan et al. 2018; Paniagua 2016; Selgin et al. 2012). For reasons described in the previous chapters on knowledge and incentive problems, the Fed's century-long experiment with discretionary central banking is at best inconclusive, and at worst a failure. Furthermore, the Fed's behavior since its inception does not represent a marriage of democratic self-governance with specialized macroeconomic expertise. It represents the subjugation of the former by the latter. That the Fed was established and guided according to the formal procedures outlined by the US Constitution is necessary for the Fed to be lawful, but it is not sufficient.

Current monetary arrangements represent not the rule of law, but the rule of central bankers (White 2010). Instead of discretion, monetary authorities ought to be constrained by a "higher law" that the monetary authority itself cannot change and is simple enough to admit minimal interpretive latitude (Buchanan 2010a; Hendrickson and Salter 2018; Salter 2014a; White et al. 2015; Yeager 1962). Our argument harkens back to an older understanding of political economy as the body of knowledge informing our conceptions of the "good society," occupying the space "Between predictive science and moral philosophy" (Buchanan 2001). Our work thus can be viewed, along with those of Frankel (1977), Steil and Hinds (2009), and Zelmanovitz (2015), as an analysis of money and monetary policy in the realm of social philosophy more generally.

We make our argument on two separate but complementary lines. First, we build the case for lawful money on the same grounds as lawful institutions more generally. Second, we explore why unlawful monetary institutions yield harmful political, financial, and macroeconomic outcomes. If

¹ See Steelman (2011).

we have a rule of law applied to monetary institutions and policy, we can have macroeconomic stability. But if we forsake the rule of law, we inadvertently lose both.

We proceed in this chapter as follows: In Section 6.2 we provide arguments for the rule of law in general, as well as its important role when it comes to money. In Section 6.3 we examine the theory and practice of discretionary central banking. We do this to anticipate and counter the means-ends argument that constrained discretion is so superior to the rule of law that, despite the prima facie importance placed upon the latter, consequentialist considerations impel us to accept the former. In Section 6.4 we consider the implications of our argument more generally, with special focus on the relevance of broader social-philosophic concerns to the analysis of monetary institutions and policy. This last analysis sets the stage for our subsequent and final chapter, on specific institutional alternatives to discretionary central banking that are both lawful and effective.

6.2 The Rule of Law: Generality, Predictability, and Robustness

A crucial component of the rule of law is generality. The rule of law holds when the restraints society places on individual behavior take the form of general rules that can be equally applied to all. General rules serve a crucial *epistemic* function (Epstein 1995; Hayek 1960 [2011]). They provide information in similar ways as the laws of the physical world. Just as nature's laws provide information regarding the consequences of natural phenomena, general rules spell out the consequences of social phenomena (Brennan and Buchanan 1985 [2000b]; Hayek 1973; Ostrom et al. 1994). When rules are general and abstract, they increase coordination and reduce conflict.²

Such a rule for monetary policy would serve the important role of anchoring the public's expectations with respect to equal treatment. Viewed this way, information considerations naturally flow into incentive considerations. For example, if the monetary authority were strictly bound by a rule which prevented them from granting liquidity or credit to politically favored firms, these firms would have no incentive to expend resources on maintaining a privileged position. Firms would also be more likely to internalize the risk they take in conducting financial intermediation. If the Fed cannot underwrite the irresponsible behavior of private

² For instance, see Easterly (2001), Knack and Keefer (1995), and Mauro (1995).

firms during turbulent times, there will be less irresponsible behavior during normal times. A truly general rule for monetary policy would do much to eliminate moral hazard from our financial system.

An essential condition for a free society is that the government ought to "have the monopoly *only* of coercion and that in all other respects it operates on the same terms as everybody else" (Hayek 1960 [2011], p. 332, emphasis added). Note that operating "on the same terms as everybody else" is not an argument against public authority having some role in monetary institutions, but rather against agents empowered by that authority operating outside a framework of rules. If monetary policy-makers are not bound by a rule, they are in a privileged position to dictate to market actors the terms of the commercial game by meddling with the medium of exchange. And as we have seen since the 2007–2008 financial crisis, they are also in a privileged position to allocate credit to politically connected firms at the expense of systemic liquidity.

Predictability is the second necessary constituent of the rule of law. Both generality and predictability require a degree of abstractness, and both are embodiments of our moral intuitions regarding "fair play" and the importance of process in matters of governance. Whereas generality is concerned primarily with equal treatment, predictability is concerned primarily with effective behavior. Rules should be predictable because predictability enables those subject to the rules to form reliable expectations about the future. Predictability also requires that rules be created and enforced in a nonarbitrary fashion. If a law is general in its applicability but is not predictable in its content, or how it will be applied, then that law will not do much to promote social cooperation under the division of labor. In fact, the law may even impede it.

In the previous chapter, we encountered predictability in the form of a stable purchasing power of money (cf. Buchanan 1962). While this is a valid means of institutionalizing predictability, we do not necessarily endorse it. What we do endorse is achieving predictability through general agreement on the rules that underpin monetary policy. Securing this agreement requires that we bring a "constitutional attitude" (Buchanan 1999) to the study of monetary institutions and policy (Boettke et al. 2018). We must avoid both majoritarian passions and elitist tinkering in order to achieve predictability. The former subjects monetary policy to the unstable and arbitrary vagaries of day-to-day electoral politics; the latter represents the capture of monetary policy by a technocratic class that regularly fails to appreciate "how little they really know about what they imagine they can design" (Hayek 1988, p. 76).

The last feature is robustness. Robust rules will be general and predictable, but not all general and predictable rules are robust. Robustness often goes hand-in-hand with generality and predictability, but nonetheless is conceptually distinct. For a rule to be robust, it must work well even when those subject to the rule have limited knowledge and confront opportunistic incentives (Boettke and Leeson 2004; Leeson and Subrik 2006; Levy 2002; Pennington 2011). Taking robustness seriously requires that we get beyond what Coase (1990) dismissively refers to as blackboard economics: assuming that agents have all the relevant information and confront all the right incentives to behave in the manner prescribed by economists' models. In monetary theory and policy, this often takes the form of devising an optimal monetary policy, calibrated to the foibles and follies of the market, while assuming that the implementers of this policy can access the pertinent information and themselves do not confront any perverse incentives. This is an unacceptable asymmetry because it is assumed rather than demonstrated.

In the context of monetary rules, Selgin (2016, p. 282) argues that "that the rule must be capable of perpetuating itself, by not giving either politicians or the public reason to regret its strict enforcement and to call either for its revision or its abandonment in favor of discretion." Thus, robustness embodies both generality and predictability, but it also entails additional requirements. Orthodox monetary theory and policy are most likely to deliver promising results in terms of these additional requirements. The tools and techniques most economists use when studying these issues are well-adapted to answer questions of comparative efficacy. But they cannot be the whole story. Monetary policy will never be truly robust until it incorporates generality and predictability concerns as well.

Generality, predictability, and robustness are all required by monetary institutions because of the essentially public role these institutions perform. Whatever their origin, form, or function, monetary institutions are a crucial component of the social order. They do not only affect markets, but politics and civil society as well. The social role of money makes securing regular and predictable conduct within monetary institutions crucially important (Zelizer 1994; Zelmanovitz 2015). Thus, in spite of comparative scholarly neglect, the rule of law is of primary importance for monetary institutions and policy.

Money is one of civilization's greatest labor-saving technologies. Because money is, in essence, a society's most saleable good (Menger 1892), it economizes on the transaction costs associated with exchange. These saved resources, especially time, can then be directed elsewhere, constituting real wealth gains. Furthermore, money permits the coordination of production and consumption plans by providing a common denominator for adjudicating between these plans (Frankel 1977; Simmel 2011). Without monetary calculation, there would be no way of making comparisons of the value of various consumption and productive plans (Kirzner 1997). This process of "intersubjective" communication shows that money is the structure of the language market actors "speak" to each other when trading (Hayek 1945; Wagner 2010). Money is thus a basic institution of proper concern not just to monetary economists and macroeconomists, but political economists and social philosophers. That money has been neglected by the latter is no reason to concede its de facto monopolization by the former.

When the rules governing money are not general, predictable, and robust, it impedes the efficacy of the market process by obstructing the ability of traders to coordinate their desires and plans through the medium of money. When monetary governance takes the form of discretionary central banking, it transforms money from an enabler of mutual cooperation into an instrument of control, subordinating the goals of market actors to the goals of monetary policymakers. Ordinarily the market, provided it operates under the rule of law, enables individuals to achieve their plans and pursue their projects while allowing others the same freedom (Lomasky 1990). Unlawful money, while it does not necessarily destroy this freedom, does *impede* it. It thus requires justification.

We used the earlier discussed example of markets and property rights for a reason: Monetary relationships *are* property relationships. Because money is a good, property rights to goods in general are also applicable to money in particular. If money is subject to arbitrary manipulation by public authorities, this amounts to a de facto infringement on property rights. To prevent this, we need the rule of law in monetary institutions. General, predictable, and robust rules, applied to monetary institutions, add protections against discretionary and ad hoc interferences in the purchasing power of money. They also prevent the monetary authority from abusing its power to engage in de facto fiscal policy, such as preferential credit allocation, as many central banks around the world have done for the past decade (Meltzer 2011; Selgin 2012). A society that does not conform its monetary institutions to the rule of law thus leaves its members vulnerable on several dimensions regarding the security of their property.

6.3 "Higher Law" and the Constitutional Turn

What the thinkers surveyed in the previous chapter have in common is their emphasis on getting the "rules of the game" right. Whatever their differences, Hayek, Friedman, and Buchanan each recognized that monetary policy does not occur within a vacuum. The way to get better monetary policy is not to develop more "accurate" models, nor to employ more publicspirited central bankers. Instead, the solution had to take the form of *binding constraints* on the range of options available to monetary policymakers, or whatever institutions are chosen to implement monetary policy.

If the Fed's ordinary operating procedure is a matter of law, then the solution to the problems of monetary policy – which are really problems with discretionary central banking – is to bind the monetary authority's hands by invoking a "higher law." This higher law should not be thought of in a normative sense, as is typical in the literature on the natural law, for example. Instead, higher law refers to a set of constraints, rationally chosen, that stave off the anticipable pernicious consequences of monetary discretion, in favor of true monetary rules. These rules must be clear and specified in advance; they must actually constrain the operation of monetary policy; and there must be negative consequences for those who break them.

Of the classical liberal thinkers who have turned their attention to the promise of a higher law for monetary policy, James Buchanan is the most explicit in his treatment of the rules of the game, as opposed to the expected outcome of the game played within given rules. This dichotomy is central to his entire research program. During his time as president of the Southern Economics Association, Buchanan gave an address with the intriguing title, "What Should Economists Do?" (Buchanan 1964). In this speech, he cautioned economists away from the strict Robbinsean conception of their science, as that which studies the allocation of scarce means among alternative competing ends. This reduces economics to nothing more than a mechanical decision science, which Buchanan believed limited the power of economics. Instead, Buchanan proposed economics be conceived as the study of exchange behavior, with analytical focus on the institutions within which exchange takes place. Economics is still a science of rational choice, only rational choice is relegated to the analytical background. In the foreground are the rules that govern the various spheres of exchange in which we find ourselves: markets, politics, and civil society. It is the rules of the game that determine whether we confront competitive or cooperative scenarios.

The link between this conception of economics and the rule of law is obvious: The rule of law is that feature of governance institutions that promote generality, predictability, and robustness, and hence facilitate the widest possible social cooperation under the division of labor. Given the stakes, the practicing economist naturally turns his attention to these institutions: what they are, where they come from, and whether they can be rationally reflected upon and improved. Buchanan's application of the tools of economics to the study of rulemaking can be thought of as the constitutional turn in economics, and hence the rebirth of contractarian political economy in the mid-twentieth century. "Constitutional political economy" is the name of the subfield Buchanan pioneered, for which he was awarded the Nobel Prize in 1986 (cf. Buchanan 1987). It is important to note that for students of constitutional political economy (also called constitutional economics), a constitution is the set of rules for making rules. These "meta-rules" are the object of analysis, both positively and normatively, within constitutional political economy. The concept of a constitution should not be confused with the Constitution of the United States, or any particular formal constitution. Indeed, the US Constitution was the lodestar for the rebirth of contractarian political economy (cf. Buchanan and Tullock 1962; Meadowcroft forthcoming), but any social system that operates according to a set of rules within which "ordinary" or "regular" behavior takes place operates according to a constitution, either de facto or de jure. It is this conception of a constitution that Buchanan brought to the study of monetary policy, which includes his arguments for the constitutionalization of money (Buchanan 2010a, 2010b).

As a normative individualist and a positive contractarian, Buchanan has reasons to prefer formal constitutions, both for the basic governance of society (US Constitution) and for particular institutions of public import (a constitution for monetary policy). The task of political economists is to use economic reasoning to ascertain the predictable consequences of alternative sets of rules, as an input into democratic deliberation over what rules we will voluntarily adopt, so as to turn social dilemmas into opportunities for mutually beneficial cooperation (Buchanan 1987; Brennan and Buchanan 1985). Constitutional rules exist in order to constrain, and constitutional economics informs our choice among constraints (Buchanan 1990, p. 3). Ideally, these constraints are adopted to prevent factions from operating the machinery of governance to the benefit of some groups at the expense of others, promoting instead governance that is in the interest of all. This quest for a "generality norm" (Buchanan and Congleton 1998 [2003]) seeks to "eliminate the off diagonals" in the various social interactions that can be modeled as Prisoners' Dilemmas, thus incentivizing the agents subject to the constraints to pick strategies that result in maximal social payoffs.

Applied to monetary policy, the purpose of subjecting the monetary authority to a higher law via constitutional constraints is preventing discretion from perverting the goals associated with macroeconomic stabilization. As one well-known example, Fed officials historically had strong incentives to err on the side of being too "loose" in their creation of liquidity and credit. After all, no Fed official wants to be remembered as being at the helm while a second Great Depression brewed. But these officials' predilection for creating "soft landings" is precisely what incentivizes market actors to engage in the sorts of behaviors that place their firms, and sometimes the entire financial system, at risk in the first place. A monetary constitution restricting the Fed's ability to create liquidity and credit except in specific ways that are general, predictable, and robust can thus improve the efficacy of the Fed while forestalling moral hazard.

6.4 Unconstitutional Money

Whatever else might be said in its favor, contemporary scholarship on macroeconomics and monetary economics almost entirely ignores the importance of the rule of law for monetary institutions. Much of monetary theory today is implicitly romantic (Hogan et al. 2018). It does not make realistic appraisals of the incentives and information confronted by both private and public actors. Instead, monetary policymakers are assumed to confront no serious incentive problems, and confront no serious information problems, when implementing policy. Given these assumptions, of course, monetary discretion seems appropriate. But once we take seriously that public actors just as much as private actors confront less-than-ideal incentives and possess less-than-perfect information, the institutional space for alternative monetary arrangements significantly expands. It is because we live in an imperfect world that we must take robustness seriously. This is why the rule of law matters for all institutions of public importance, which, without question, includes monetary policy.

6.4.1 Discretionary Central Banking: Enabling the Juggler

Long ago, Adam Smith (1776 [1981], p. 930) warned of the "juggling trick" in which all governments are tempted to engage. This juggling trick consists of a trifecta of deficits, debt, and debasement of the currency.

The incentives of public actors to finance government spending with debt rather than taxation is obvious: citizens enjoy receiving public benefits but do not enjoy paying for them. Unlike current citizens, future citizens do not (yet) get a vote. Therefore, public actors, especially elected officials, face strong pressure toward deficit spending, and hence accumulating deficits. This, in turn, creates a tense situation for the monetary authority. Passive accommodation by the monetary authority creates an environment favorable to political actors; central banking, as a political job, cannot ignore the political incentives incumbent in its activities. The pressure for easy money to accommodate profligate politicians was a danger recognized even by John Maynard Keynes (1920, p. 236), who well understood the destructive consequences:

There is no subtler, no surer means of overturning the existing basis of society than to debauch the currency. The process engages all the hidden forces of economic law on the side of destruction, and does it in a manner which not one man in a million is able to diagnose.

The juggling trick of debt, deficits, and debasement is a political "loose joint" that is the result of a number of imperfections in public institutions. One such defect is a failure to enshrine the rule of law in monetary affairs. We do not argue that adopting a true monetary rule under a monetary constitution will be sufficient to prevent the juggling trick from continuing. But we do argue that it is necessary. The political-institutional environment created by unlawful money is one that is inherently favorable to technocratic tinkering in the short run, and passive debt accommodation in the long run. This is not in any way a consequence of malice or irresponsibility on the part of central bankers. Rather it is the outcome selected for by the environment. Without the rule of law binding to the mast the hands of monetary policymakers, they cannot help but dash the macroeconomy on the rocks in response to the urge for technocratic tinkering in ordinary times, moral hazard-inducing bailouts during extraordinary times, and passive accommodation to perpetual deficits in both (Ball 2016; Boettke and Smith 2013; Hogan et al. 2015; Salter and Luther 2019; Salter and Smith 2018).

The deficits problem has largely been dismissed by monetary economists, who argue that the public's incorporation of inflation expectations in response to excessively easy monetary policy implies that the monetary authority cannot consistently ease the real debt burden. This point is correct, but as is the norm in modern monetary scholarship, neglects foundational institutional considerations that complicate the story. The ultimate reason for concern is the informal feedback loop between fiscal and monetary agents. Deficits undermine the ability of monetary authorities to pursue independent monetary policy. When the federal government spends more than it takes in as revenue, the Treasury must finance the deficit by borrowing from the private sector in the form of government bonds. As government issues more bonds, increased demand for loanable funds pushes interest rates up (Hein 1991). Monetary authorities often are under pressure to create conditions that favor new debt issuance by offsetting interest rate increases (Cochrane 2011a, 2011b). Historically, such cases are not uncommon, occurring even in the United States following World War II.

There are several channels through which debt accommodation by discretionary monetary policymakers may work (Boettke and Smith 2013). As one example, legislative, executive, and Treasury officials typically push for maintaining lower interest rates to both keep the interest rate cost of issuing debt low and stimulate the economy. As Alan Blinder (2000, p. 1429) explains:

A large fiscal deficit (or debt) can undermine central-bank credibility in a number of ways. Most obviously, if the country has a limited (or zero) capacity to float interest-bearing debt, the central bank may be forced to monetize any budget deficits—with inflationary, or even hyperinflationary, consequences. This danger is greater if the central bank lacks independence But even if massive inflationary finance is unlikely, outsized fiscal deficits and/or large accumulations of public debt (relative to GDP) put upward pressure on interest rates, which may induce a more accommodative policy from the central bank.

Ultimately, because of the political logic linking fiscal and monetary strategies, monetary policy and perpetual deficits are inseparable (Bach 1949, p. 1175; Brennan and Buchanan 1981; Buchanan and Wagner 1977 [2000]; Weintraub 1978, pp. 359–360). It may even make more sense to model them as a single institution, at least under contemporary fiscal and monetary institutions. Again, contemporary scholarship largely ignores these institutional considerations. Technical refinement of models, rather than comparative institutional analysis, is viewed by the profession as the ordinary and proper content of published work. Because contemporary monetary theory rarely takes such concerns into account, channels for the mutual impingent of fiscal and monetary affairs rarely make it into the model.

Our argument is backed by empirical evidence suggesting a link between fiscal deficits and monetary accommodation (Allen and Smith 1983; Blinder 1982; Bradley 1985; Canzoneri et al. 2001; Fair 1978; Freedman et al. 2010; Friedman 1994; Grier and Neiman 1987; Hamburger and Zwick 1981; Levy 1981; Smith and Boettke 2015; Weintraub 1978). Monetary accommodation, in turn, undermines economic coordination and causes misallocations of capital (Salter 2014b). It is admittedly not the case that fiscal policymakers consciously create excessive debt, and monetary policymakers consciously accommodate them. Rather, contemporary fiscal institutions *select for* perpetual debt, and contemporary monetary institutions *select for* accommodation (cf. Alchian 1950). A constitutional perspective on monetary institutions brings this into focus, whereas in much modern monetary scholarship they remain obscure if analyzed at all.

6.4.2 The Failure of Nonconstitutional Constraints

Many of the proposed solutions to political economy concerns in the contemporary monetary literature amount to pseudo-rules. As Selgin (2016, p. 282) recognizes, the problem with pseudo-monetary rules is that they are "either not well enforced or not expected to last." When they are adopted, they tend to be ineffective precisely because they are pseudo-rules. They are gestures toward the rule of law, rather than the rule of law itself. For example, debt limits and balanced budget requirements have not restrained excessive public spending and hence have not relieved monetary authorities from the pressures of accommodative policy (Boettke and Luther 2010). In addition, spending constraints in both the United States and the European Union have not stopped the juggling trick (Wagner 2012, chs. 1 and 2). While some expenditure rules are more effective than others, even the more effective pseudo-rules have been worked around, modified, or ignored (Cordes et al. 2015; Primo 2007). On the monetary side explicitly, voluntarily followed monetary rules were abandoned prior to the financial crisis (Taylor 2009a, 2009b). Although the "effective degree of independence has gradually increased over time" (Bernanke 2010), the Fed's independence repeatedly has been compromised by political pressures and pressures for debt accommodation (Boettke and Smith 2013; Smith and Boettke 2015).

Inflation targeting in some form is frequently treated as a monetary rule that has been agreed upon by scholars and practiced by policymakers. For instance, New Zealand, Canada, the United Kingdom, and Australia, among others, have adopted the practice of inflation-targeting (Meyer 2001). But again, this is not a true rule, at least not by itself. Bernanke et al. (1999, p. 4, italics in original) carefully stress that inflation targeting "serves as a *framework* for monetary policy rather than a *rule* for monetary policy." Inflation targeting comes in a variety of forms, with varying degrees of flexibility in

the lengths of the adjustment period and even with built-in escape clauses (Meyer 2001). For instance, the European Central Bank (ECB) maintains a stated medium-term inflation target in order to pursue its formal objective of price stability (Meyer 2001; White 2011, p. 3).

However, it is far from clear that inflation targeting constrains central banks (Taylor 2007; White 2007; see also Arestis and Sawyer 2003). The problem is the broad flexibility inflation targeting offers when it comes to setting and defining targets. Such flexibility emerges, in part, because of the genuine uncertainty of what the target inflation rate should be (Epstein and Yeldan 2009, p. 9; Pollin and Zhu 2009, p. 130). For instance, New Zealand, the first country officially to implement inflation targeting, started in 1989 with an inflation target of 0–2 percent, but gradually widened it to 0–3 percent, and then to 1–3 percent.

Importantly, not all de jure restrictions count as true constitutional constraints. The ECB has an inflation-targeting mandate that looks very much like a constitutional constraint. But looks can be deceiving. The rule is not self-enforcing, in part because there are no costs to ECB decision-makers for deviation. The ECB's inflation-targeting mandate was ignored when the ECB effectively monetized the debt of Greece, Ireland, and Portugal in response to fears over a sovereign debt crisis (White 2011, p. 3). With no penalty for noncompliance with its stated inflation target, the ECB persistently has maintained inflation rates above its constitution-alized target (Salter 2014a, p. 4).

Some form of inflation targeting is popular especially with advocates of constrained discretion (Bernanke and Mishkin 1997; see also Woodford 2012). The fatal flaw in this view is that it conceives discretionary central bankers as disinterested technicians trying to advance social welfare. "If this is the case, some discretion may achieve an outcome that is closer to fulfilling the overall mandate, even if there is a thin line separating the principles handed to the central bank and the operational targets it sets for itself" (Reis 2013, p. 19). But that reasoning misses the point completely. Remember one of the first and most crucial points about true rules: If central bankers can choose whether to follow a rule or not, then it is not a rule in any meaningful sense (Dellas and Tavlas 2016, p. 313). The direction that the rules-versus-discretion literature has taken since Bernanke and Mishkin (1997) does not represent the gradual adoption of "best practices" in central banking. In contrast to this "Whig history" of monetary economics (cf. Mishkin 2009), it is more nearly the case that the literature has ignored what really matters. If true rules do not exist, then de facto what we have is monetary discretion, which is a failure of the rule of law (Brennan and Buchanan 1980 [2000a], ch. 6, 1981).

6.5 What Ought to Be Done?

Our argument boils down to the following: Rule-like behavior is no substitute for true rules. Without true rules as informed by the constitutional perspective on political economy, the rule of law does not prevail. At best, we have somewhat-regular behavior by discretionary central bankers, until we do not. Brennan and Buchanan cogently express this position:

We cannot, and should not, expect the decision-makers in the Bank of England or the United States Federal Reserve Board to behave "as if" they are bound by a nonexistent constitutional rule for monetary issue. They will behave in accordance with such a rule only if it exists. (Brennan and Buchanan 1981, p. 65)

More than a decade since the financial crisis, "monetary economics" in practice still mostly means "an interest rate policy rule." We do not contend that the standard toolkit is inappropriate, but we do contend that it is insufficient. As Buchanan (1962, p. 157, emphasis in original) wrote, "[technical] issues such as these, regardless of individual views, need not be raised in the basic consideration of alternative monetary constitutions. And I think that the air would be cleared substantially if we should agree to leave aside these essentially subsidiary issues until the more basic ones are settled." By "these" Buchanan had in mind the technical aspects of monetary economics and policy models that specified how the relevant macroeconomic variables behave. We reiterate that we do not believe these analyses to be unimportant. But nonetheless, they are properly of secondary importance. As Friedman (1947, p. 415) argues, one cannot decide on the suitability of an institutional arrangement based on formal equilibrium conditions. Rather, one must consider the range of alternative institutions, considering issues such as administrative costs, induced unintended consequences, and ethical values. The reason is simple: Formal equilibria are frequently institutionally dependent and require taking seriously the possibility that governors face incentive and information problems just as severe as the governed. Comparative institutional analysis belongs in the analytical foreground; technical models belong in the analytical background.3

The mainstream literature on monetary policy overlooks political economy concerns because scholars fail to challenge the premise that central

³ Friedman (1947, p. 405) writes, "the formal analysis is almost entirely irrelevant to the institutional problem."

bankers should be judges in their own cause. The policies of central banks in recent crises, as well as the modern record of inflation targeting more generally, demonstrate that central bank discretion is far more problematic than currently appreciated. That is why we need the rule of law. Embracing the constitutional turn in monetary economics can be an important first step in incorporating the necessary breath it has lacked thus far. The most important novel avenue would be reforms to the basic institutional framework of central banking.

As we have seen, money is a "meta-rule." The processes governing how money is produced and supplied to the market – the constitution of monetary policy – set the background conditions against which economic activity takes place. While tinkering for the purposes of achieving specific post-constitutional outcomes is impractical, "getting the constitution right" is a valid concern that, taken seriously, can yield systematically better macroeconomic outcomes. Monetary constitutions thus are an important and potentially fruitful research avenue in post-financial-crisis macroeconomics. Scholarship focused on the comparative properties of various monetary constitutions can move us toward an economic environment conducive to growth and efficiency, while also avoiding the vagaries of day-to-day politics, such as capture by special interest groups.

Grounding money in the rule of law offers a way forward for research areas that, without an appreciation of the pre- and post-constitutional aspects of monetary policy, confront a dead end. This is particularly concerning for the post-crisis conversation on macroeconomic and financial stability. Much of this literature highlights various market failures that explain why private sector financiers, owing to a divergence between private and social costs associated with financial intermediation, precipitated the crisis. They also purport to show that well-crafted policy, such as "macroprudential" policy, can prevent such crises in the future (Galati and Moessner 2013; Hanson et al. 2011; Kahou and Lehar 2017). What those studies fail to realize is the reciprocal relationship between financial intermediation and monetary institutions (Hendrickson and Salter 2018; Salter 2017). Especially worrisome is that a central bank's monopoly on highpowered money creation presents nonnegligible temptations to allocate credit under the cover of stabilization policy (Salter 2014b). As De Paoli and Paustian (2017, p. 319) write, "when trade-offs [between monetary authorities and macroprudential regulators] are present and policy is discretionary, the institutional arrangements become crucial." The link between money and finance does not weaken the argument for true rules. If anything, it makes it much stronger.

Embracing the constitutional paradigm shows that supposed market failures are the predictable results of flawed monetary institutions, because these institutions do not create a structure of incentives and information conducive to macroeconomic and financial stability. Furthermore, we cannot simply assume that policymakers can correct those failures when they are subject to the same imperfections as market agents. A robust monetary constitution, the object of which is to bring money under the rule of law, must provide the mechanisms for channeling self-interested behavior by private *and public* actors into socially beneficial outcomes. Constitutional political economy applied to monetary institutions and policy provides the analytical framework for discovering those kinds of constitutions.

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