

How to make money: Distributive justice, finance, and monetary constitutions

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Abstract

A capitalist society has two defining features. The first is well-known. A capitalist economy leaves coordination of exchange and production largely to private authority. The dissertation investigates a second feature. In a capitalist economy, individuals and firms coordinate exchange through contracts that involve obligations to pay money. Financial contracts allow individuals to defer payment and save money for expenditures at a later point in time.

My dissertation assigns a crucial role to the structure of institutions and to the rules that create and define the authority over money. I refer to such a structure as a monetary constitution. In existing capitalist societies, money is not entirely under public control, as proponents of socialism or full reserve banking require. Nor is it entirely in private hands as libertarian free bankers would ideally have it. Instead, the supply of money to the economy takes place through a hierarchical order of money creation. Money issued by the central bank stands at the top of the hierarchy. Below it, private financial institutions issue different forms of credit money. In this sense, the monetary constitution is a hybrid of both public and private authority over money.

Political philosophy has said virtually nothing about the authority over money. I aim to persuade the reader that this is a grave neglect. The three main claims of the dissertation are:

1. Money and finance are central to any account of distributive justice that is adequate for a capitalist society.
2. There are five objections to unregulated private money creation.
3. Existing monetary constitutions need fundamental reform.

In support of the first claim, I argue that money is a crucial metric for any theory of distributive justice that is adequate for a capitalist society. I also put forward a new account of the crucial role of credit and saving in realising a fair intertemporal distribution. Finally, the second and third claims support the first claim where it concerns the authority over money.

In support of the second claim, I argue that unregulated private money creation leads to (1) financial instability, (2) macroeconomic instability, (3) unsustainable use of natural

resources, (4) an unfair distribution of economic means, and (5) an undemocratic concentration of political power. I also put forward a new account of why financial instability matters from the perspective of distributive justice.

In support of the third claim, I argue for the incremental abolition of private money creation. Although the delegation of public money creation to an independent central bank is not objectionable in principle, I go on to argue that existing mandates are insufficiently democratic and need reform.

Preface

This dissertation is the result of my own work and includes nothing which is the outcome of work done in collaboration except as declared in the Preface and specified in the text.

It is not substantially the same as any that I have submitted, or, is being concurrently submitted for a degree or diploma or other qualification at the University of Cambridge or any other University or similar institution except as declared in the Preface and specified in the text. I further state that no substantial part of my dissertation has already been submitted, or, is being concurrently submitted for any such degree, diploma or other qualification at the University of Cambridge or any other University or similar institution except as declared in the Preface and specified in the text.

It does not exceed the word limit prescribed by the Degree Committee.

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1 Justice and money

To understand a capitalist society, political philosophers must take two defining features into account. First, capitalist coordination means that exchange and production are left largely to the authority of private individuals and firms. A theory of justice that has no resources for dealing with issues of personal responsibility will be inadequate for theorising a capitalist society. In discussing the topic of distributive justice, philosophers have paid ample attention to private authority, but have neglected a second feature. In a capitalist society, individuals and firms coordinate exchange through contracts that involve obligations to pay money. In the following, I will seek to convince the reader that this is a grave neglect and that theories of justice should give money a much more prominent role than is now generally the case.

In theorising justice, philosophers develop moral principles for evaluating the major social and political institutions of a society. Although economic institutions have always been important to this endeavour, political philosophers have only recently turned their attention to financial markets. Money, and the institutions that govern it, are in the background of many topics that these philosophers have so far treated in isolation. My dissertation contributes to these efforts by putting the role of money centre stage. I will both describe the decisive role of money and, more innovatively, put forward normative concepts that recognize its significance.

Despite the obvious importance of money in the coordination of exchange and production, political philosophers have often treated it as a mere proxy for what should be of final interest to normative theorizing. Instead, as I discuss in §2 ‘The metric of democratic capitalism’, philosophers have focused on topics such as the distribution of welfare, economic resources, capabilities, social power and standing. This, I will argue, led them to ignore the crucial role of monetary metrics in the politics of a democratic society. In §3 ‘Income, credit, and saving’, I argue that political philosophers have also inadequately thematised the role of financial contracts. In these two foundational chapters I put forward an understanding of money as central to any account of justice for a capitalist society.

After an investigation of money itself, I turn to the institutions that govern money. The existing financial system raises a wide range of political questions, which I explore to further illustrate the crucial role of money and finance for distributive justice. In the dissertation, I

focus on the extensive role of private authority over the creation of money in existing capitalist societies. As I explain in §4 ‘The monetary constitution’, the authority to issue money is not only held by publicly-owned central banks, but also by private banks. In §5 ‘Financial instability’ and §6 ‘Incremental abolition’, I articulate a range of objections to this feature of the financial system and explain how they relate to longstanding topics in the theory of distributive justice. The question of what reform is required, a topic that is itself very much contested, again raises new challenges, which I also seek to address in §6 and also in §7 ‘The ethics of delegating monetary authority’.

In the course of the dissertation, I argue for three claims.

1. Money and finance are central to any account of distributive justice that is adequate for a capitalist society.
2. There are five objections to unregulated private money creation.
3. Existing monetary constitutions need fundamental reform.

In this introductory chapter, I outline these main claims in more detail and explain how my argument for them will contribute to the existing philosophical literature. I also say more about the sense in which theories of distributive justice have unduly neglected money and finance. In §1.1 I discuss capitalism and the monetary constitution to outline the subject matter of the dissertation. I also discuss the difficulties that political philosophers face in dealing with the often arcane world of finance and what the challenge is that I set myself in the following chapters. In §1.2 I outline the conception of distributive justice that informs the dissertation. In §1.3 I provide an overview of the individual chapters of the dissertation.

1.1 Money

In this section I outline the subject matter of the dissertation and its contribution to the philosophical literature. In §1.1.1 I explain the crucial role of money and finance in a capitalist society. In §1.1.2 I outline how capitalist societies distribute the authority over money between private financial institutions and public political institutions. In §1.1.3 I discuss existing philosophical work on financial markets and two challenges that the field faces: describing financial markets accurately and developing adequate moral concepts for

reflecting on them. In §1.1.4 I explain how the dissertation contributes to meeting both challenges.

1.1.1 Capitalism and money

As I already mentioned, capitalist societies have two features that are crucial from the perspective of justice.¹ The first is well-known. A capitalist economy leaves coordination of exchange and production largely to private authority. Property rights demarcate a domain within which it is up to economic agents themselves to make decisions. The consequences of their choices are for them to bear and economic agents are generally not accountable to everyone who is affected by their decisions. Rather, political institutions are responsible for ensuring just outcomes on the systemic level. The role of choice in generating distributive outcomes has been a central topic in debates over distributive justice in recent decades.²

Although the issue of private authority will come up repeatedly, my attention in the following will go to a second feature. In a capitalist economy, individuals and firms coordinate exchange through contracts that involve obligations to pay money. To allow economic agents to meet their obligations to pay at a particular point in time, a capitalist economy has a financial system. This system, which involves both public and private institutions, has not been given due recognition by existing theories of distributive justice.³ The aim of my dissertation is to persuade the reader that this is a grave neglect.

The dissertation brings out three ways in which money and finance have such a role.

First, a capitalist economy is a monetary economy. It is, as John Maynard Keynes puts it, ‘an Economy in which Money plays a part of its own and affects motives and decisions and is, in short, one of the operative factors’.⁴ In §2 I will develop my version of this claim by explaining that in a capitalist economy, money acts as an independent unit of account. Economic agents do not owe each other hours of labour or amounts of natural resources.

¹ On the definition of capitalism, see Black 2012; Streeck 2012; Hodgson 2015.

² Important contributions are Rawls [1971] 1999a, Nozick 1974; Dworkin 1981a; 1981b; Cohen 1989; Anderson 1999; Scheffler 2003. Blake & Risse (2008) put forward an insightful overview of the issues at stake.

³ A search for ‘money creation’ and ‘money supply’ on PhilPapers returns six articles, but none are in a philosophy journal. The terms do not even appear in a full-text search of *Philosophy and Public Affairs*.

⁴ Keynes [1933] 1963, p. 7.

Rather, they owe each other money and use the money to acquire the economic means they need. Failure to meet obligations to pay when these are due results in an insolvency procedure.

Second, because money itself coordinates exchange and production, it has a central role in political deliberation on topics as diverse as economic inequality and the impact of alternative policy measures. Catastrophic climate change will not only kill millions of people, scientists think, but will also cost \$12 trillion in lost growth, or 10% of world GDP, by 2050.⁵ As I argue in §2, there are good reasons to use money rather than alternative metrics in political deliberation, which in turn impacts the theory of distributive justice that is appropriate for a capitalist society.

Third, as I argue in §3, due consideration of money also forces us to recognize the pivotal role of financial contracts in a capitalist economy. Philosophers cannot simply treat economic justice as a matter of redistributing income and wealth. In focusing on such non-financial metrics, they miss out on the role of financial contracts in allowing individuals and firms to spend money before they earn it and earn money to be spent at a later point in time. Taking the issue of intertemporal spending requirements into account means recognizing that a just intertemporal distribution requires ample provision of finance.

Theories of distributive justice have not only neglected money and finance. There likewise remains a sizable gap in the understanding of the financial institutions of existing capitalist economies. Crucial economic institutions such as the banking system, capital markets and the central bank have only recently captured the attention of political philosophers. Due recognition of money and finance as topics of distributive justice should lead us to think in new ways about the role of these institutions. In §4 I will therefore discuss what I refer to as the monetary constitution to outline the main features of the existing financial system and the way it distributes access to finance. Monetary constitutions, I will argue, merit our detailed attention because their design has pervasive consequences for the ability of capitalist societies to realise just outcomes. As I argue in §§5, 6, and 7, the institutions that currently govern money are not up to their task. I put forward an ambitious programme of reform.

⁵ UNDP 2016.

1.1.2 The hybrid monetary constitution

The monetary constitution is the set of legal and non-legal rules that govern the authority over money. I will now provide the reader with a first brief outline of the main features of existing monetary constitutions.

The central bank is often described as the ‘monetary authority’, but in the existing financial system, the provision of money actually takes place through a hierarchical order of money creation. Money issued by the central bank stands at the top of the hierarchy. Below it, private financial institutions issue different forms of credit money. In this sense, the monetary constitution is a hybrid of both public and private authority over money.

Money, in this system, is created in the act of granting credit. I refer to the authority over the decision to issue new money as monetary authority. It has a formal and an effective component. The formal sense of monetary authority concerns whether it is within the law for a given institution to issue money. Effective monetary authority concerns the ability to issue assets that economic agents use as means of payment. Counterfeiters have the effective ability, but not the formal right. During a period of hyperinflation, the central bank retains its formal rights, but its effective ability is very limited. When I talk about monetary authority, I will be talking about institutions that have both forms of authority.

The monetary constitution governs who is allowed to issue money. It is a set of legal and non-legal rules that create and define the authority over money. The monetary constitution determines not only the limits of public authority over money but also delineates a sphere of private authority over money. In the latter chapters of the dissertation I will call existing ways of delineating these spheres into question. To do this, I first describe the existing monetary constitution in more detail.

It will turn out that monetary authority is itself diffuse and difficult to situate. Even if economic textbooks still describe the volume of money as set by the central bank, my dissertation will start from the otherwise widely accepted view that this account of false.⁶ In fact, structures of monetary authority are strikingly invariant across different capitalist societies. Money creation is largely in the hands of private financial institutions, banks, which

⁶⁶ I review the economic literature on this topic in §4.3.

are regulated and supervised by a publicly-owned central bank. Although banks are subject to banking regulation and face economic incentives to ensure that their operations are profitable, they too have the authority to issue money. As a form of private authority, issuing money is a decision that banks make based on their own private motives.

Although both the central bank and private banks have monetary authority, their authority is ordered in a hierarchy. Central banks issue money that serves as the means of final settlement. It takes the form of cash and central bank deposits. The central bank deposit is a deposit for banks and is used to settle large volume payments between financial institutions. The central bank does not, save in exceptional circumstances, provide credit to the economy directly. Instead, money creation for the real economy is a private prerogative of commercial banks, which seek profit within the confines set by regulation and monetary policy. The central bank thus leaves the authority over credit money to banks, which decide on the provision of credit, at what interest rates and under what conditions. Public authority is limited to the operations of the central bank and to the decisions of governments in how to regulate their banking sector. Together, private banks and central banks constitute the heart of the financial system.

1.1.3 The financial system and philosophy

The dissertation contributes to the work of recent authors in ethics, political philosophy and epistemology that seek to develop a philosophical understanding of the financial system. I will now discuss the challenges that philosophy faces in developing a theory of distributive justice for financial markets.

It is far from uncontroversial that financial markets should have any place in a theory of justice. Elizabeth Anderson, for example, claims that a just distribution of economic means involves three things: (i) a minimum level of income and wealth at the bottom; (ii) a maximum at the top; and (iii) measures to ensure that most individuals are somewhere in the middle.⁷ If financial markets matter for realising distributive justice, this is so in ensuring that the distribution of income and wealth meets these three constraints. But it is hard to see how

⁷ Anderson 2007, pp. 265f; See §5.2.1.

today's regulation of financial markets can be justified in this way. Anderson, indeed, invokes financial instability as a welcome means for redistribution:

While the most advantaged may find it distressing to be subject to market risks that threaten to reduce them to merely middling status, there is no public interest in securing them against such risks.⁸

In §5 I will return to this claim and explain why I believe it is false. Here I merely aim to show that a theory of distributive justice that focuses on income and wealth has no obvious place for financial institutions.

The claim that the financial system should have some place in a theory of distributive justice is not new. Great political thinkers such as David Hume, Adam Smith, and Karl Marx wrote extensively on monetary institutions and their role in the distribution of societal wealth.⁹ More recently, John Rawls remarks in his *A Theory of Justice* that the political institutions of a property-owning democracy should retain adequate public control of financial markets.¹⁰

In conformity with political decisions reached democratically, the government regulates the economic climate by adjusting certain elements under its control, such as the overall amount of investment, the rate of interest, and the quantity of money, and so on.¹¹

But despite recognizing a role for financial institutions, Rawls' treatment has two deficiencies, which my dissertation seeks to avoid. First, there is the issue of getting the facts straight. The passage suggests that political institutions, more specifically, democratic governments, can effectively control the rate of interest and the volume of money. But as §1.1.2 explained, in a hybrid monetary constitution, political institutions do not have such control. The central bank leaves it to private banks to determine the cost and volume of credit available to individuals and firms. Moreover, the central bank cannot at the same time set

⁸ *Idem*, p. 267.

⁹ See Arnon 2011 for a discussion of the history of monetary thought with a particularly prominent, although not entirely favourable role, given to these thinkers.

¹⁰ I write on Rawls' views on this topic in more detail in my 'Central Banking in Rawls' Property-Ownning Democracy' (unpublished manuscript).

¹¹ Rawls [1971] 1999a, p. 241.

interest rates and volumes of money. Second, Rawls' claim in the passage does not follow from his two principles of justice, which concern basic liberties, fair equality of opportunity, and the distribution of primary goods. The remark appears in Part II of his book, where Rawls applies his principles to institutions. But macroeconomic stability is crucial for neither equal basic liberties nor equality of opportunity. As I argue in §3, his account of the primary goods income and wealth also precludes any prominent role for finance. In this sense, the principles that Rawls develops in Part I of the book are inadequate for supporting his claims on the authority over money in Part II.

But neglect of money is not specific to Rawls. In his 'Money and Freedom', Gerald Cohen takes as his starting point a negative conception of freedom, according to which individuals are free in so far as they are not hindered by others from doing things.¹² Although Cohen rejects such a conception, it leads him to write on the social role of money in a way that reduces its role to making the use of economic goods permissible to individuals. Money, according to Cohen, allows individuals to do thing, use certain resources, board certain trains, that would not otherwise be permissible to them.

[T]he whole point of money is to extinguish interference: that is its defining function, even if further conditions are required for it to perform it. Compare: the defining function of a knife is to cut, but that is not to say that any knife can cut any block of stone.¹³

But, in focusing on money as a means of preventing interference, he puts forward a narrow account of money's social function. In fact, this conception of money is not very different from that of libertarians like Robert Nozick, who conceive of money as a mere medium for facilitating the consensual exchange of goods and services.¹⁴ Cohen's narrow account fits the libertarian he seeks to criticize but is not adequate for understanding the complex interrelation of money and more egalitarian conceptions of freedom. In a capitalist economy, money serves as an independent unit of account that enables decentralized coordination of production and exchange over time. This role as an arbiter for entitlements and obligations

¹² Cohen 2011.

¹³ *Idem*, p. 178.

¹⁴ E.g. Nozick 1974, p. 18.

concerning economic resources brings up a range of new normative issues that are sidelined by a narrow focus on money's role in facilitating exchange. In §5, for example, I discuss the role of money in individual life planning. Money is not just a thing that gives individuals access to economic means. Money is itself a medium that individuals use to reflect on the life plans that are open to them. In contrast to the libertarian, a liberal egalitarian should understand such reflection as a constitutive part of living a free life. This is only one of the many ways in which, so I will show, money and freedom are interrelated.

The Global Financial Crisis of 2007 and 2008 has led philosophers to give more attention to financial markets. This trend fits with a general turn away from various forms of ideal theory and towards more empirically informed philosophy. Authors have discussed a wide range of topics such as credit provision and debt,¹⁵ ethics for financial institutions,¹⁶ ethical and sustainable investment,¹⁷ microcredit,¹⁸ financial inclusion,¹⁹ central bank independence,²⁰ financial instability,²¹ monetary policy,²² and sovereign debt.²³

In tackling such topics, philosophers face two challenges, already illustrated by the deficiencies of the accounts of Rawls and Cohen. First, there is a descriptive challenge in accurately portraying the relevant facts. In many economics courses taught at universities in recent decades, for instance, exchange and production are modelled as if taking place in a barter economy.²⁴ Money is controlled by the central bank and merely serves as a neutral veil for non-monetary prices. In fact, most economic models in the tradition of general equilibrium theory have no independent role for money. Although Walras' model takes one of its n commodities as its *numeraire*, his system of simultaneous equations determines the

¹⁵ Gourevitch 2012; Vague & Hockett 2013; Douglas 2015.

¹⁶ Boatright 2010; Baradaran 2014; De Bruin 2015.

¹⁷ Sandberg 2013; Schücking 2015.

¹⁸ Ronzoni & Valentini 2015; Sorell & Cabrera 2015.

¹⁹ Hudon 2009; Brownlee & Stemplowska 2015; Gershan & Morduch 2015; Herzog forthcoming.

²⁰ Best 2016.

²¹ James 2012; Linarelli 2017.

²² Claveau, Dietsch, & Fontan 2016.

²³ Reddy 2003; Barry 2011.

²⁴ I describe the historical development of this conception of economics in my 'Scope and method in the early *Methodenstreit*' (unpublished manuscript).

value of this commodity in the same way as that of the other $n-1$ commodities. The model thus describes what is essentially a barter economy.²⁵ In some more recent macroeconomic models, the volume of money is given and economic prices are determined by technological possibilities and consumer preferences.²⁶ The real world of financial institutions, however, is incomparably more complex and the role of money is crucial. Economists often disagree amongst themselves so that it is difficult to decide who gets the facts right. To accurately portray financial markets, philosophers need to delve into the empirical issues.

Second, there is the conceptual challenge of finding adequate normative concepts for reflection on financial markets. Writing on finance often does not require an entirely new normative framework. In the following, my thinking about the relation between private and public authority will draw on familiar liberal egalitarian ideas. But, neither should philosophers just take existing normative theories off the shelf. To reflect on the issues of distributive justice that arise in financial markets, philosophers need normative concepts that are suitable for a capitalist economy in which money is crucial. Here, again, the economics taught at universities will often not be of much help. Under conditions of perfect competition, private financial institutions are led by an invisible hand to realise an efficient intertemporal allocation of resources. The only distributive questions concern initial endowments. Even ignoring its reliance on interpersonal aggregation, the assumptions of neoclassical welfare economics are simply not met by financial markets as we find them in existing capitalist economies. Nor can philosophers simply have recourse to existing theories of distributive justice. In §§2, 3, and 5 I discuss ways in which philosophical arguments apply a pre-existing theory of distributive justice to financial markets and thereby fail to fit the salient features of a capitalist economy. Rawls' focus on income and wealth, for example, provides him with a metric of justice that fails to assign an adequate place to options for credit and saving.²⁷ Luck egalitarian theories such as that of Cohen are, so I argue, inadequate for theorising personal responsibility in a capitalist economy because of the pervasiveness of uncertainty.²⁸

²⁵ Hicks 1967; Ingham 2004.

²⁶ Friedman 1968; Romer 2011, Chapter 5.

²⁷ As I argue in §3.

²⁸ As I argue in §5.3.4.

1.1.4 Contribution of the dissertation

The dissertation contributes to both the descriptive and the conceptual challenge that philosophy faces in dealing with financial markets.

First, I contribute to describing the role of financial markets in the distribution of economic means. The most important contribution in this regard is §4, where I introduce the idea of a hybrid monetary constitution. The authority over money stands in the background of a wide range of issues now treated by philosophers in isolation. As I discuss in §3, individual decisions to save and take out credit have systemic repercussions. In an economic upturn, fired on by a liberal provision of credit, all want to spend before they earn, which eggs on the business cycle, thereby causing inflation, financial instability, and an unsustainable level of GDP growth. Conversely, in a downturn, banks contract credit and individuals are more eager to save, which leads to a slump in economic activity, unemployment and low levels of investments. This systemic perspective is crucial because it shows that individual access to options for credit and saving raise distinct distributive conflicts, which go beyond individual entitlements to credit and saving. In this dissertation, I put forward a detailed account of the role of the hybrid monetary constitution in realising a fair intertemporal distribution of money. This will introduce monetary authority as crucial to the philosophical study of financial markets.

A second contribution is my account of monetary systems and the ability to issue money as constitutional. Philosophical discussions of constitutionalism have focused on the role of the judiciary in reviewing exercises of legislative and executive power for conformity with a written constitutional document. In these discussions, the paradigmatic issue is the relation of the US Supreme Court to the elected branches of government.²⁹ There is also an extensive literature on the operation of the legislature and the executive in the realisation of various democratic and egalitarian ideals.³⁰ While an analysis of constitutional authority over money shares some features with the traditional concerns of the literature, it also raises its own

²⁹ E.g., Bickel 1986; Dworkin 1999; Waldron 2006.

³⁰ E.g., Christiano 1996; Waldron 1999; Richardson 2002.

distinct questions. §§4 and 7 develop a detailed account of hybridity and the distribution of authority over money in existing capitalist societies.

The dissertation also makes more specific contributions. In §2 I discuss defining features of a capitalist mode of coordination as part of my argument for money as a metric of justice. In §3 I describe how financial contracts enable life plans. In §5 I discuss the cyclical patterns of manias, panics and crises from the perspective of distributive justice. In §6 I review existing proposals for reform of the banking system. In §7 I put forward a new account of the central bank as a political institution. Although these discussions are descriptive, they also make a contribution to political theorizing of financial markets. Adequate normative principles for financial markets need an account of the features of financial markets that matter for identifying these principles.³¹

The main contribution of the dissertation, however, is in developing normative concepts that are adequate for thinking about money and finance. To this end, I extend the liberal egalitarian theory of distributive justice. I put forward an account of money as a metric of justice (§2). I also explain how options for credit and saving fit into this account (§3). Finally, I put forward a new account of financial instability. This account assigns a crucial role to the way in which macroeconomic fluctuations disrupt individual life plans (§5). The dissertation also makes contributions to the normative evaluation of political institutions of a capitalist society. I argue for the role of experimentation in political representation (§6) and develop a framework for evaluating the delegation of political decisions to unelected officials (§7). To explain these contributions in more detail in §1.4 of this chapter, I will now introduce the liberal egalitarian framework from which I start.

1.2 Liberty and equality

Existing capitalist societies are characterized by pervasive economic inequalities. To evaluate such inequalities, political philosophers have proposed different theories of distributive justice. A theory of distributive justice puts forward principles for deciding which inequalities are permissible, which are not, and what demands apply to institutions for ensuring a just distribution.

³¹ Wollner & Risse 2014.

The starting point for my account is a liberal egalitarian conception of justice, which receives its classical exposition in Rawls' *A Theory of Justice*. Throughout the dissertation, I will rely on his formulations of these ideas, although a much wider group of political philosophers have articulated similar ideas.³²

In this section I first outline three Rawlsian ideas. I describe the values that inform liberal egalitarianism in terms of two moral powers (§1.2.1). I explain that demands of distributive justice apply to the basic structure (§1.2.2). I then outline the idea of liberal neutrality (§1.2.3). In §1.2.4 I draw on these ideas to put forward an account of the public and the private sphere that will inform the dissertation. I conclude with some caveats concerning the scope of the normative discussion (§1.2.5).

1.2.1 Liberal egalitarianism

A liberal egalitarian endorses a specific conception of equality and liberty. Liberal egalitarianism is egalitarian in that it holds that individuals have equal moral worth. This means that their interests should be weighed against the interest of others irrespective of contingent characteristics such as gender, race, or social background. The ideal is opposed to social hierarchies between citizens and the concentration of power in the hands of elites. Instead, individual citizens are thought of as bearers of fundamental rights irrespective of their 'talents, intelligence, wisdom, decision-making skill, temperament, social class, religious or ethnic affiliation, or ascribed identity'.³³ For a liberal egalitarian, social rules stand in need of justification in light of this foundational commitment to equality.

Liberal egalitarianism is liberal in that it ascribes extensive freedoms to individuals. They are left free to pursue their conception of the good life while taking into account the freedom of others. It is left to individuals to form their conceptions of value, to weigh competing values and draw on these values in their life planning. Individuals are free to take risks and expected to bear their consequences. Again, the commitment to freedom places a demand of justification on social rules and the authorities that issue them. For a liberal egalitarian, how to live well is not for political institutions to judge.

³² E.g., Nagel 1975; Raz 1986; Barry 1989; Anderson 1999; Dworkin 2000; Scheffler 2003.

³³ Scheffler 2003, p. 22.

Liberal egalitarianism, finally, takes justice to have priority over aggregate social welfare or other forms of interpersonal aggregation. The interests of some cannot simply be overridden for the benefit of the majority. Doing so would fail to adequately respect the ‘distinctness of individuals’.³⁴ Liberal egalitarianism is incompatible with the use of neoclassical welfare economics as the final standard by which to evaluate economic institutions. To respect the rights of individuals, institutions should be acceptable to all who are affected by them, not just those who stand to benefit.

All liberal egalitarians share a commitment to these ideas. I do not have much to say about their justification and I do not believe that much could be said at all. Readers who do not share these foundational commitments can still agree with my main claims concerning money and finance, but will disagree with some steps in my argument. The aim of the dissertation is to contribute to the interpretation of the liberal egalitarian ideal as applied to a capitalist economy. That interpretation is not obvious, however, and raises many questions of its own. Liberal egalitarians disagree over how to interpret the values of equality and liberty, and how to weigh these interests of individuals where they conflict. I will be interested in such disagreements, not in the justification of the more basic moral values that underpin them.

To focus on the substantive issues at stake, I will often rely on the work of Rawls to articulate these basic moral values. Drawing on his work, I analyse what it means to treat individuals as free and equal in terms of two moral powers. The first moral power is the capacity for a conception of the good. To be free in this sense, individuals must be able to have, devise and revise, and pursue a particular conception of the good against the background of a just basic structure. I will refer to this conception of freedom as *liberal freedom*. The second moral power is a sense of justice, which concerns the ability ‘to understand, to apply and to act from [...] the principles of political justice that specify the fair terms of social cooperation’.³⁵ To be free in this sense is to be able to participate in the political process and to accept but also challenge a justification for a political decision. I will refer to this conception of freedom as *political freedom*. In §2 I will discuss political freedom in formulating my account of democratic justification. In §6 I will draw on the same ideas in my argument against the

³⁴ Rawls [1971] 1999a, p. 26.

³⁵ Rawls 2001, p. 19.

concentration of political power in the banking system. In §7 I develop a framework for thinking about central bank independence and political participation. My primary focus, however, will be on liberal freedom, for which, so I will argue, finance and money are crucial.

1.2.2 The basic structure

I now explain the Rawlsian idea that demands of distributive justice apply to the basic structure of society.

The conception of individuals as having two moral powers is compatible with the demand that all are equally successful in exercising their moral powers. This is not what liberal egalitarians believe. Their conception is egalitarian: societies should have institutions in place to secure that individuals are treated as equals with regard to their two moral powers. But it is also liberal: it is up to individuals to successfully exercise these powers. To reconcile these two demands, liberal egalitarians focus their theorising on the major social and political institutions of a society.³⁶

Institutions shape the options that are available to individuals in making their life plans. They make up

a public system of rules which defines offices and positions with their rights and duties, powers and immunities, and the like. These rules specify certain forms of action as permissible, others as forbidden; and they provide for certain penalties and defenses, and so on, when violations occur.³⁷

Institutions, then, generate a wide range of professional and societal roles that come with various benefits and burdens. They specify the terms on which individuals take part in the cooperation that is constitutive of the social order.

Following Rawls, I will understand the topic of distributive justice as that of the distribution of societal outcomes generated by social and political institutions. By societal outcomes I

³⁶ Rawls 1996, pp. 257-288; [1971] 1999a, pp. 6-10, pp. 73-77. For objections to this focus on the basic structure, see Cohen 1997; 2008. For responses, see Williams 1999; Tan 2012, pp. 19-83.

³⁷ Rawls [1971] 1999a, pp. 47f.

mean the extent to which individuals are successful in exercising their two moral powers. There is not one institution that enables individuals to do this. Rather, the lives that individuals lead are conditioned by the whole of what Rawls refers to as the basic structure. The basic structure is

the way in which the main political and social institutions of society fit together into one system of social cooperation, and the way they assign basic rights and duties and regulate the division of advantages that arise from social cooperation over time.³⁸

Within the context of the basic structure, the ability of individuals to successfully exercise their moral powers depends on motivation, talent, and luck. In this way, institutions will accommodate diverse life choices. Their chances of success and the outcomes that they can hope for depend to some extent on these choices. If they are motivated, talented, and lucky, their life plans will succeed. If they are not sufficiently talented, motivated, or lucky, they might fail. Even if they fail, they are still free. In this sense, the idea of a basic structure comes with a strong conception of personal responsibility, which limits the extent to which outcomes are regulated by distributive justice.³⁹

Limiting demands of distributive justice to the basic structure allows the liberal egalitarian to reconcile the ideals of liberal and political freedom.⁴⁰ Liberal freedom is realised by allowing individuals to pursue a particular conception of the good while taking the social and political institutions as given. A just basic structure is such that if individuals follow the societal rules, the distribution of benefits and burdens that results is just, whatever the outcome turns out to be. The basic structure thereby realises what Rawls refers to as imperfect procedural justice. Within the context of the rules set by the basic structure, distributive justice is ‘left to take care of itself’, although ‘in a restricted range’.⁴¹ Political freedom is realised by allowing individuals to take up positions in political institutions where citizens collectively decide on the rules that constitute their terms of social cooperation. Theories of distributive justice put forward principles that are to inform such deliberation.

³⁸ Rawls 2001, p. 10.

³⁹ Scheffler 2003; Blake & Risse 2008.

⁴⁰ Cohen 2003; Tan 2010.

⁴¹ Rawls [1971] 1999a; 2001, p. 50.

1.2.3 Liberal neutrality

So what does it mean for a basic structure to treat individuals as equals? I will now explain this idea in terms of two conceptions of liberal neutrality.

Principles of justice are normative for the basic structure. Accordingly, they provide a basis for evaluating and justifying the rules that govern the private sphere. The principles spell out criteria by which to evaluate the basic structure as it affects the lives of individuals. Whether a given basic structure is sufficiently just depends on whether it meets the demands spelt out in such principles.

Citizens disagree on what justice requires. This disagreement results in part from what Rawls refers to as the burdens of judgment. The burdens of judgment explain disagreement amongst reasonable citizens. Rawls provides the following list of these burdens: (a) empirical evidence on issues can be conflicting and complex; (b) even where the facts are clear, there are different ways to weigh their relevance; (c) the empirical and moral concepts we use to debate questions are vague and there can be disagreement over their application; (d) our personal experience shapes how we ‘assess evidence and weigh moral and political values’, but we often do not know exactly how; (e) there are different ways to compare competing considerations; (f) there is a limit to the values that particular institutions can be expected to live up to, so that we have to choose some and weigh their importance against others.⁴²

Recognizing that some disagreement is unavoidable, political philosophers seek to articulate more abstract criteria by which to evaluate the quality of alternative conceptions of justice. In this evaluation, a crucial role goes to liberal neutrality. Principles of justice must be neutral in that they do not take a stance on topics where citizens hold a wide range of competing but reasonable views. In this way, liberal neutrality requires that a conception of justice provides a shared basis for the justification of the basic structure.

There are two importantly different senses in which principles of justice can be neutral. First, there is what may be called *political neutrality*, which concerns different views that citizens have on what justice requires.⁴³ From the perspective of political neutrality, whether or not

⁴² Rawls 1996, p. 56f.

⁴³ Larmore 1990; Rawls 1996; Habermas 1998; Gaus 2010; Nussbaum 2011; Quong 2011.

institutions are just cannot be determined with reference to a deep moral or religious truth. Instead, principles of justice must make a claim to being acceptable to reasonable citizens irrespective of such particular commitments. To be neutral in a political sense, the justification must be composed of principles that recognize that there is often room for reasonable disagreement over what justice requires.

My argument in the dissertation will not depend on this conception of neutrality, but neither should anything I say conflict with it. Rather, the crucial questions are about *egalitarian neutrality*, which concerns different views on what constitutes a good life.

Egalitarian neutrality requires treating individuals as equals with regard to their ability to pursue a particular conception of the good. Principles of justice are neutral in this sense if they do not privilege life choices that are tied to any particular religious or moral beliefs. My interest in what follows, then, will not be in deep disagreements over religion and metaphysics, but rather in much more mundane life decisions. Some people want to work as accountants, others want to open their own coffee bar. Depending on such conceptions of value, individuals will not only want to spend their money in different ways but also at different points in time. In §2 I argue that a metric of justice should be neutral between different conceptions of what it means to live a life well. In §3 I argue that a narrow focus on income fails to be neutral between life plans which involve spending money in different ways over time. Some life plans will require spending money before it is earned, while others involve earning money before it is spent. Principles of distributive justice, so I will argue, should accommodate such different conceptions of value.

The question of the extent to which liberal egalitarians should endorse a principle of neutrality is controversial.⁴⁴ Perfectionist liberals tend to reject a strict adherence to neutrality. They believe that liberal egalitarianism should be understood as a pluralist theory that recognizes a wide range of valuable ways of living one's life as valuable.⁴⁵ My argument in the following will not depend on any strong anti-perfectionist conception of neutrality. What matters for the conception of neutrality at issue here is that principles should accommodate a wide range of ideas concerning what it means to live a life well. The notion

⁴⁴ For more detailed discussions: Raz 1986, pp. 114f; Dworkin 2000, pp. 237-284; Patten 2012.

⁴⁵ Berlin [1959] 1990; Raz 1986.

of neutrality that I invoke should, therefore, be acceptable to both perfectionists and anti-perfectionists.⁴⁶

Philosophers do not generally agree that principles of justice, even at an abstract level, can be established through a priori philosophical argument. Instead, as famously argued by Jürgen Habermas, questions of distributive justice are to be settled in the actual deliberation of a political community.⁴⁷ This issue raises profound questions, but not much hangs on it here. Even if Habermas is right, his argument does not preclude articulating criteria by which to evaluate the quality of alternative conceptions of justice. The criteria of neutrality are not only applicable to philosophical theories that seek to articulate the appropriate moral premises for political deliberation.⁴⁸ They also apply to conceptions of justice that are invoked in actual democratic deliberation. The normative concepts that I develop are meant to inform such deliberation.

1.2.4 Public and private authority

I have outlined the framework of distributive justice that informs the dissertation. As already noted, a central topic of the dissertation is the relation between the public and the private sphere of a capitalist society. Financial markets involve a complex interrelation of private and public institutions and it is often contested where the boundaries should be drawn. I will now explain how I understand this distinction in terms of (i) the agent that makes a decision; (ii) the moral demands that apply to that decision; and (iii) the type of justification that the agent should formulate for the decision.

To ensure that the basic structure meets a demand of political equality, societies need political institutions. Political institutions exercise public authority over citizens. In saying that a decision is left to public authority I mean that (i) decisions are in some way made by citizens jointly, rather than individually; (ii) that the goal of decisions is to ensure outcomes that are fair to all individuals concerned; and therefore that (iii) decisions are to be justified

⁴⁶ Joseph Raz claims that his version of perfectionist liberalism is compatible with the device of the original position (1986, p. 126).

⁴⁷ E.g., Habermas 1998; Benhabib 2002.

⁴⁸ My focus here is specifically on justifications provided by political institutions, for which it is not controversial to say that relatively stringent norms apply. See, e.g., Young 2002, p. 167.

with reference to a conception of justice. That at least some decisions are made in this way is crucial for respecting the political freedom of citizens. They should be able to participate in the exercise of public authority and receive a justification for decisions that are made. To this end, constitutional legal and non-legal rules that govern the exercise of public authority are to ensure that decisions are taken jointly, in a way that is fair to all individuals concerned and so that citizens have an adequate justification. In §4, I say more about the idea of a constitution and in §7 I discuss what democratic participation is required for the exercise of public authority by the central bank.

The basic structure of a capitalist economy does not only consist of political institutions. In a capitalist economy, the coordination of exchange and production of economic means is largely left to private authority. In the private sphere of a capitalist economy, individuals, but also larger associations such as private firms, are free to make their own choices. It is left to them to value ends and make plans to pursue them. Choices are a matter of personal responsibility in the sense that (i) decisions are left to private individuals, either individually or jointly; (ii) the outcomes of decisions are largely for them to bear; and (iii) they are not expected to justify their decisions with reference to a conception of distributive justice.

A basic structure can meet some demands of distributive justice by relying on private authority. Consider the right to nutrition. In the context of a capitalist economy, nutrition is provided by firms, which are subject to public regulation. Social security is in place to ensure that individuals can pay for it. The distribution of food itself, however, is not under the direct authority of any political institution. Rather, it is left to private authority, where decisions are made by private individuals who are allowed to make a profit and not expected to say much about how their work contributes to a just society. A capitalist society can meet the rights of individuals to nutrition without relying on public authority over the exchange and production of food. The primary burden of justification goes to the political institutions that regulate the market. Only when political institutions fail does the responsibility for providing nutrition shift to private citizens.

The question of which decisions societies should leave to political institutions and where private authority does better will be a recurring topic in the dissertation. A theory of distributive justice that is adequate for a capitalist economy needs to have principles that can inform deliberation on such questions.

1.2.5 Some caveats

I conclude with some caveats concerning my account of political institutions and national borders.

Under a system of representative government, citizens delegate their responsibility for realising just outcomes largely to political institutions. In his work on representative government, Bernhard Manin describes four crucial features of political representation from the 18th century onwards.⁴⁹ First, governments are elected by citizens at regular intervals. Second, the government is independent in that systems of elected government do not provide citizens with any means of direct control. They cannot issue imperative mandates, which would require the government to pursue a particular course of action and citizens are not able to recall their vote when the government acts against their views. Third, citizens have extensive freedom in expressing their opinions on the decisions of the government. Fourth, there is a public sphere in which decisions undergo the trial of debate.

The political institutions that currently govern the authority over money look very different from Manin's system of representative government. First, while most coercive laws are distinctly national in origin, the rules that govern the banking system are increasingly global. From the 1950s and 1960s onwards, the UK and US created a large offshore financial system, where the currency is the Dollar, and which national governments have limited ability to regulate.⁵⁰ With the increased integration of financial markets in the following decades, the need for a global regulatory framework arose. Crucial to this framework are the Basel Accords, which I will discuss in more detail in §§4 and 6.

Second, these accords and other important parts of financial regulation are not drafted by parliaments but by transnational institutions such as the Financial Stability Board and the Basel Committee on Banking Supervision.⁵¹ In the context of these institutions, public officials from central banks and treasuries negotiate the terms of global financial regulation.

⁴⁹ Manin 1997.

⁵⁰ Helleiner 1996.

⁵¹ Avgouleas 2012; Brummer 2015.

Parliaments only come in to implement these agreements by making them into domestic law.⁵²

Third, even within national borders, many of the most consequential decisions regarding financial markets are left to central banks. In §7 I discuss how under central bank independence, governments delegate control over monetary policy to a central bank board or independent committee. Their members are not elected but are rather appointed by governments. Positions come with long, fixed terms. Central bankers justify monetary policy by invoking a legal mandate, which they are largely free to interpret. The primary mechanism of democratic accountability is such a legal justification.

These three observations raise many questions but, with the exception of §7, I do not engage with these issues here.⁵³ The focus of the dissertation is on political institutions in so far as they are part of the monetary constitution. If the central bank is not independent, the government itself has authority over money creation, but such independence is now very rare. Because public money creation is part of the monetary constitution, I put forward a framework for evaluating the role of governments in setting monetary policy in §7. There, my focus is on the question of how to design the monetary constitution. The question of what type of political institutions should decide the design of the monetary constitution falls outside the scope of the dissertation. Still, in light of this status quo it would be misleading to talk of governments as the default agents. Instead, I will use the general term political institutions for the institutions that are responsible for ensuring that the basic structure meets demands of distributive justice. By using these vague terms, I sidestep the difficult question of how to legislate for a global monetary order.

A similar issue concerns national borders. I often talk about the basic structure as if it is one clearly defined set of institutions within national borders. I do not systematically discuss the issues of global justice that money raises. In §4 I do briefly extend the descriptive account of the monetary constitution to the global order, but I do not provide any normative premises to evaluate the status quo. It is also fair to say that many of the problems that I raise are specific to high-income economies, although I do occasionally touch on global issues. As far as I can

⁵² *Idem*.

⁵³ I also discuss these topics in van 't Klooster forthcoming a; forthcoming b.

see, my arguments concerning money, finance, and the objections to existing hybrid structures should apply to both high- and low-income economies.

1.3 Outline of the dissertation.

This section will outline the road ahead. In §1.3.1 I describe the content of the individual chapters. In §1.3.2 I discuss how the three main claims of the dissertation are internally related.

1.3.1 Individual chapters

In §2 ‘The metric of democratic capitalism’, I discuss the crucial role of money as a metric of justice for a society that is capitalist, but also a democracy. I draw on historical accounts of socialist planning to outline two defining features of a capitalist economy; Coordination is left to private authority and money serves as an independent unit of account. I then reflect on what this means for the metric of justice that is appropriate for such a society. To this end, I outline three criteria for ways of making interpersonal comparisons. First, metrics should be sufficiently neutral between alternative conceptions of the good. Second, disagreement over the application of a given metric should be limited. Third, political institutions should be able to effectively control what a metric measures. I review the most prominent accounts of the evaluation of outcomes in the literature: welfare, resources, capabilities, primary goods, and social relations. I then argue that for capitalist institutions, money is the metric that does best in meeting these criteria.

In §3 ‘Income, credit, and saving’, I put forward my account of how theories of distributive justice should deal with questions of financial inclusion. Philosophers have often thought about options for credit and saving as a means for realising a more fundamental good, such as welfare or capabilities. But such an account is incompatible with the argument in §2 for the crucial role of money. More recently, philosophers have argued that all individuals are entitled to a determinate minimum level of options for financial contracts. I argue that such an account obscures crucial distributive conflicts. Rather, so I argue, we should think of income, options for credit and options for saving as means for realising a just intertemporal distribution of money. A just distribution is neutral between those who wish to spend money before they earn it and those who earn money to spend it later, as well as those who spend their income immediately. Under capitalist coordination, realising a just intertemporal

distribution requires adequate options for credit and saving, which should, therefore, be at the centre of an account of distributive justice. I conclude by arguing that capitalist provision of options for credit and saving systematically privileges the already well-off.

In §4 ‘The monetary constitution’, I turn to the authority over money and my conception of the monetary constitution. I explain how under a hybrid monetary constitution, the private banking system creates money in the act of granting loans, while at the same time subject to constraints imposed by political institutions. A crucial role in the monetary constitution goes to the central bank, which provides banks with reliable access to central bank credit.

Financial regulation, the public central bank, and the private banking system together determine the options for credit and saving that are available to citizens. In this sense, the monetary constitution of existing capitalist societies involves a hybrid of private and public authority over money.

Starting with §5 ‘Financial instability’, I turn to the normative evaluation of the hybrid monetary constitution. A banking crisis, a regular occurrence in societies with a hybrid monetary constitution, can disrupt individual lives in dramatic ways. I discuss the dynamic by which financial crises unfold and put forward an account of why financial instability is objectionable from the perspective of distributive justice. I focus on two types of distributive consequences. First, I draw on §3 to argue that financial instability undermines the ability of political institutions to realise a just distribution of income and options for credit and saving. Second, I argue that financial instability undermines the epistemic position of individuals. The deceptive period of stability before the crisis leads individuals to make life plans which they would not have made had the information available to them been better. I also explain why epistemic positions are to be taken seriously in the normative evaluation of capitalist societies.

In §§6 and 7 I turn to the question of how political institutions should respond to these and other objections to the existing financial system. In §6 ‘Incremental abolition’ I outline five objections to unregulated private money creation. Drawing on §3, I focus on the unfair distribution of money that results from capitalist coordination. Drawing on §5, I discuss financial instability. I also raise objections to private authority over money that invoke macroeconomic instability, ecological unsustainability, and political inequality. I then turn to the difficult question of how to reform private money creation. I review proposals for

abolition of the hybrid monetary constitution known as Full Reserve Banking. I argue that although at least some of these proposals promise to address the objection to hybridity, it is not clear that they will, nor is it clear that better regulation of a hybrid system cannot achieve the same goals. I discuss what uncertainty of this kind means for the theory of political representation and argue for the importance of experimentation. On this basis, I propose a programme of incremental abolition. By gradually reducing the role of private authority over the provision of credit and deposits, political institutions will generate the evidence that is needed to reform the existing financial system.

Finally, in §7 ‘The ethics of delegating monetary authority’ I explore the constitutional structures that govern public money creation through a discussion of central bank independence. In contrast to those who reject central bank independence entirely, I argue that it should in principle be permissible for governments to delegate political choices to unelected experts. From a democratic perspective, what matters is whether the act of delegation serves the government’s ultimate economic policy aims. But, as I argue, central banks today face different, and much more complex, political choices. Nonetheless, they have retained their pre-crisis independence, and their monetary policy mandates remain virtually unchanged. I will argue that this situation is untenable and that reform is overdue.

1.3.2 Structure of the argument

I will now explain the relationship between the three main claims in more detail (See Figure 1.1 for an overview).

Main claim 1 holds that money and finance are central to any account of distributive justice that is adequate for a capitalist society. This is the central claim of the dissertation and has two sub-claims, which I refer to as the *distributive* and the *institutional* claim. The distributive claim concerns the crucial role of the distribution of money in a capitalist society. My main arguments for the distributive claim are in §§2 and 3. In §2 I argue that where capitalist coordination governs exchange and production, money acquires a crucial role as a metric of justice. In §3 I argue that a just distribution of economic means should not only concern income, but also options for credit and options for saving. These arguments together serve to establish a crucial role for the distribution of money.

The institutional claim holds that the authority over money is crucial for theories of distributive justice. I argue for the institutional claim by establishing the second and third main claim of the dissertation.

In arguing for the second main claim in §§3, 5, and 6, I outline five distinct objections of distributive justice to private money creation. In §3 I argue that the current system of private authority over money privileges the wealthy, thereby failing to realise a fair intertemporal distribution of money. In §5 I argue that the current system of private authority gives rise to cyclical patterns of manias, panics and depression, thereby undermining a fair interpersonal distribution and the ability of individuals to make life plans. In §6 I restate these objections and add three new ones. Private money creation (i) exacerbates business cycles through the extension of credit in economic upturns and contraction in downturns; (ii) enforces the status quo of unsustainable levels of natural resource use, rather than contributing to required transition; and (iii) centralises political power in a small number of private financial institutions. These arguments show that leaving money to private authority can hinder a society in meeting the demands of distributive justice that apply to it. A theory of distributive justice should, therefore, have something to say on the extent to which authority over money should be private.

The third main claim of the dissertation provides support for the institutional claim by arguing that the existing monetary constitution needs fundamental reform.

In §6 I turn to reform of the rules and institutions that govern private money creation. Main claim 2 establishes that there are weighty objections to private authority over money. To establish that reform is desirable, there should also be an alternative that does better. I review existing proposals for reform, both those that argue for abolishing private money creation altogether and those that merely argue for stricter regulation. I argue that the arguments on both sides are inconclusive. I put forward a proposal for incremental abolition of private money creation. In §7 I argue for reform of the independent mandate of central banks and their exercise of public authority over money.

These arguments together should convince the reader of the crucial role of both the distribution of money and the authority over money in any account of distributive justice.

Main Claims	Sub-claims	Supported by
Main claim 1: Money and finance are central to any account of distributive justice that is adequate for a capitalist society.	<i>Distributive Claim:</i> The distribution of money and finance is central.	§§2 and 3
	<i>Institutional Claim:</i> The authority over money and finance is central.	Main claims §§2 and 3
Main claim 2: There are five objections to unregulated private money creation.		§§3, 5 and 6
Main claim 3: Existing monetary constitutions need fundamental reform.		§§6 and 7

Figure 1.1 – The main claims of the dissertation

2 The metric of democratic capitalism

A society's major social and political institutions will unavoidably benefit some more than others. Theories of distributive justice propose criteria for deciding which inequalities are permissible, which are not, and what role goes to institutions in realising just outcomes. In §1 I have outlined a liberal egalitarian conception of distributive justice. This conception is egalitarian in that it requires that institutions treat individuals as equals. But it is also liberal in that it is left to individuals to make their own plans assuming these institutions as given. In this chapter and the next, I turn to the questions of how to decide whether institutions do enough to realise a just distribution and what role goes to monetary and financial institution.

In the past decades, philosophers have put forward detailed theories that focus on the distribution of welfare, economic resources, capabilities, primary goods, social power and standing but have largely neglected money and finance. This is a striking departure from our everyday political discourse, and I think that it is a mistake. I will seek to amend this neglect by arguing that the distribution of money should be at the centre of any theory of justice for a capitalist society. In the next chapter, I discuss the distribution of money over time by means of financial contracts. In this chapter, I turn to money as a metric of justice and do two things.

First, I put forward an account of what I take philosophers to have neglected. In thinking about capitalist institutions in non-monetary terms, philosophers have proposed theories that are suitable for a barter economy, but not for a monetary economy. I explain that in existing capitalist societies, money plays a role of its own as an independent unit of account.

Second, I investigate how money fits into debates over the metric of justice. I approach this topic by emphasising two features that define a capitalist democracy. Such a society (a) assigns an important role to capitalist coordination of the economy and (b) has democratic political institutions that are accountable to citizens. I argue that for a society with these two features, widely used metrics of distributive justice are simply inadequate. Instead, the democratic justification of capitalist institutions should give a prominent role to money. In this sense, money is the metric of democratic capitalism.

The rest of the chapter is structured as follows.

In §2.1 I discuss the coordination of exchange and production in a capitalist economy. The capitalist mode of coordination leaves authority over production and exchange largely to private individuals and firms. Money incentivizes them to realise an efficient use of economic means. If distribution is left to capitalist coordination, political institutions will only have limited knowledge of and ability to control what happens in the economy.

In §2.2 I turn to the second feature of a capitalist economy, which is that it has democratic political institutions that are accountable to citizens. I argue that a metric that can have a role in democratic justification should meet three criteria: First, egalitarian neutrality: the metric should be sufficiently neutral between alternative conceptions of the good that individuals hold. Second, objectivity: the room for disagreement over the way in which political institutions measure outcomes should be limited. Third, controllability: political institutions should be able to control outcomes effectively.

In §2.3 I review the most prominent accounts of the evaluation of outcomes in the literature: welfare, resources, capabilities, primary goods and social relations. I argue that where exchange and production are left to capitalist coordination, money is often the most appropriate metric.

2.1 Capitalist coordination

In this section I explain the coordination of exchange and production that is characteristic of a capitalist economy. I do this by discussing the general concept of economic coordination (§2.1.1). I then discuss the centralised coordination of socialist economies and its most notorious weaknesses, namely bureaucratic incentives and collection of information (§2.1.2). In §2.1.3 I explain that the capitalist mode of coordination has two key features: (i) It assigns legal authority over production and exchange largely to private individuals and firms; (ii) Money is used to determine entitlements to resources and obligations to provide resources. In §2.1.4 I explain how capitalist coordination solves the problems faced by social planners. In §2.1.5 I argue that where distribution is left to capitalist coordination, political institutions will only have limited information concerning consumer preferences and economic means.

2.1.1 Modes of coordination

To explain the idea of economic coordination, I will introduce a simple model by Piero Sraffa of a self-reproducing system of production and exchange over time.⁵⁴ This model is particularly useful here because it is compatible with different modes of coordination and thereby helps to bring out their differences.

The Sraffian model describes the economy as a self-reproducing system of exchange and production over time. The outputs of individual sectors serve as input to other sectors in order to reproduce the economic system in the next period of production. The simplest Sraffian economy has only two sectors. Consider an example in which one sector produces iron and the other produces wheat which are both used for consumption and production. The wheat sector consumes 280 quarters of wheat and 12 tons of iron. It produces 400 quarters of wheat. The iron sector consumes 120 quarters of wheat and 8 tons of iron and produces 20 tons of iron. At the end of the period, one sector will hold 400 quarters of wheat and the other 20 tons of iron. For this economy to reproduce itself in such a way that production can be the same in the next period, both sectors need to produce one ton of iron for every ten quarters of wheat. In Sraffa's scheme this is represented as follows:

$$280 \text{ qr. wheat} + 12 \text{ t. iron} \rightarrow 400 \text{ qr. wheat}$$
$$120 \text{ qr. wheat} + 8 \text{ t. iron} \rightarrow 20 \text{ t. iron}$$

For this simple economy to reproduce itself, the sectors must produce the required volumes of goods and exchange these goods at certain points in time. For exchange to take place, the sectors must also decide on prices at which to exchange commodities. The iron sector needs 120 quarters of wheat, in exchange for which it provides 12 tons of iron. In this sense, the price of iron is 10 quarters of wheat. Barter at this price will allow both sectors to reproduce themselves. The coordination of an economy determines entitlements to economic means and obligations to provide them.

The simplest example of a mode of coordination is barter. The two-sector economy can reproduce itself if the iron and the wheat sector are both willing to exchange 1 ton of iron

⁵⁴ Sraffa [1960] 1975.

against 10 quarters of wheat. Reproduction of the economy is possible in so far as there is such a coincidence of wants. The question of coordination becomes more challenging when we extend the model to think of a more complex economic system. The left-hand side describes the resources that the sector uses (denoted a, b, \dots, k) and their quantities (A, B, \dots, K). The right-hand side lists the resource that the sector produces (a, b, \dots, k) and its quantity (A, B, \dots, K). For this system to reproduce itself in its entirety, there must be a set of prices (denoted p) at which sectors sell their products and that allow sectors to acquire the resources needed as input for production:

$$A_a p_a + B_a p_b + \dots + K_a p_k \rightarrow A p_a$$

$$A_b p_a + B_b p_b + \dots + K_b p_k \rightarrow B p_b$$

.....

$$A_k p_a + B_k p_b + \dots + K_k p_k \rightarrow K p_k$$

As the number of sectors increases, coincidence of wants becomes very unlikely. In an economy with a higher number of goods and services, some sectors will unavoidably require inputs from other sectors that do not accept their output in return. For this reason, no historical economy ever relied only on barter as its mode of coordination.⁵⁵

To realise an efficient distribution of economic means, a complex economy needs a mode of coordination that is more sophisticated than barter. In the most general sense, efficiency concerns the costs of producing individual resources and the value that these resources have for their final consumer. To say that an allocation is efficient means that it is not possible to better satisfy the preferences of any individual consumer in light of consumer needs and technological possibilities without making someone else worse off.⁵⁶ The concept of efficiency is limited, though, in that it ignores distributional concerns. It takes resource endowments as given and asks how exchange and production should be organized to enable individuals to best satisfy their preferences. But even if efficiency is not the only criterion by which to evaluate an economic system, it matters in its own right and it is also closely related

⁵⁵ Pre-capitalist economies assigned a crucial role to tradition, where coordination takes place based on long-standing entitlements and obligations. E.g., Graeber 2011.

⁵⁶ Buchanan 1985, pp. 14f.

to other evaluative criteria. An economic system that is grossly inefficient will fail to meet the entitlements of at least some individuals to a fair share of economic means.

Capitalist economies are premised on the belief that an efficient allocation is best realised by leaving decisions to private individuals. But leaving coordination to private individuals may also hinder political institutions from realising outcomes that they morally prefer. There is, then, no simple answer to the question of how to allocate resources efficiently. Rather, this is one of the decisive questions that a society faces in designing its major social and political institutions. I will now explore the nature of this choice in more detail.

2.1.2 Centralised coordination

Consider centralised coordination. Under centralised coordination, exchange and production are a matter of public authority. As I explained in §1.3.4, this means that (i) decisions are made by political institutions; (ii) whose goal is to ensure that outcomes are fair to all; and which (iii) use principles of justice to justify the distribution of entitlements and obligations that apply to economic agents.

The socialist economies of the 20th century saw experiments with entirely centralised economic coordination. But elements of centralised coordination are crucial to any existing capitalist society. All governments provide individual and collective goods and services such as education, health, defence, and security. In existing democratic systems, government expenditures are decided based on legislative approval of a government budget. In this sense, every existing capitalist society still assigns a crucial role to public authority over production and exchange.

While centralised coordination can allow for a rapid transformation of the economy, it can also make adapting to new circumstances difficult. 20th-century socialist economies, for instance, realised industrialisation at a pace rarely seen in any capitalist economy. Until the late 1960s, eastern and western economies were perceived to grow at a roughly similar pace. As their economies become more complex, however, socialist states faced considerable difficulties in keeping up with the pace of technological innovation and changing consumer

preferences. Drawing on the historical account of Michael Ellman, I will discuss two flaws of socialist economies.⁵⁷

First, there is a problem of bureaucratic incentives. In historical socialist economies, the incentives of political officials often worked against the development and efficient use of technological possibilities, available resources and labour. In general, Soviet industries had only one monopoly R&D institution responsible for developing new ideas and deciding on their use. These institutions often chose to retain existing ways of production even when better alternatives were available. Political institutions tended to make choices that benefited their organisation rather than the wider economy. For example, because the Soviet Union only evaluated the quantity of steel produced, it suffered from a persistent lack of sufficiently high-quality steel. Although bureaucratic incentives did to some extent track the interests of consumers, there was no systematic mechanism to ensure that these incentives in fact lined up with them.

Second, planners had immense difficulty collecting the information they needed to realise consumer preferences and technological possibilities. This is because when the number of sectors in an economy increases, the informational complexity of the economy goes up dramatically. As a consequence, it becomes increasingly difficult to collect information regarding both the preferences of individual sectors and their productive capacity. Thus, in a complex economy it is not only difficult to make the necessary computations once information is available. It is also difficult to collect the relevant information in the first place. An increasingly rapid pace of change compounds these difficulties. The Soviet planning bureau Gosplan, for example, spent 80% to 90% of its efforts in collecting information. The complexity of their task was enormous. As Gosplan officials write:

For the problem which enables the maximum production of shoes subject to the structure of demand and the given resources to be calculated, shoes are divided into 257 types, and the full nomenclature of shoes and related items runs to about 36,000 items.⁵⁸

⁵⁷ Ellman 2014, pp. 137-180.

⁵⁸ Cited in Ellman 2014, p. 159.

The problems of setting the right incentives and collecting information are not unsolvable in principle. Institutions can learn, and where they fail to achieve their ends, they can be reformed. But the autocratic nature of socialist regimes was, to say the least, not conducive to such processes. The technical challenges of centralised coordination were greatly compounded by lack of democratic accountability and other institutional mechanisms to incentivise improvement. These objections will be important again in §6 when I turn to the discussion of public provision of credit.⁵⁹

2.1.3 Decentralised coordination and money

The difficulties faced by social planners have led developed countries to assign an important role to capitalist coordination of exchange and production. As discussed in Chapter one, capitalist coordination has two features that are crucial for my account: first, decision-making is decentralised and second, money acts as an independent unit of account.

First, concerning decentralised coordination. In a capitalist economy, decisions over exchange and production are treated as a matter of private authority.⁶⁰ This means that (i) decisions are made by individuals rather than political institutions; (ii) the outcomes of these decisions are to benefit or burden those who make them; and (iii) individuals need not justify their decisions with reference to principles of distributive justice. A system of private property rights serves to codify the distribution of private authority.

Capitalist economies feature two kinds of economic agents with private authority over exchange and production. First, individuals who consume goods and services as part of their life plans, either alone or as part of larger households or other associations. Second, firms that make decisions in producing and selling goods and services.

The second feature of a capitalist economy is the crucial role money has as an independent unit of account. One can easily imagine a non-capitalist form of decentralised coordination. The crucial feature of a capitalist economy is the role it assigns to money. Although individuals and firms are different in many ways, their operations both depend on the generation of cash inflow from private economic transactions. To this end, they sell goods,

⁵⁹ §6.2.4 and §4.

⁶⁰ §1.3.4.

services and labour, as well as receive wages and income from capital. The activities of economic agents also create obligations to pay bills, taxes, and repay loans.

Under capitalist coordination, money has a role that is distinct from its role in other modes of coordination.⁶¹ In virtue of the prices at which sectors exchange their goods, every self-reproducing economy can be said to have money as a unit of account. Prices are the ratios of exchange between individual resources. But, exchange under barter and centralised coordination remains essentially an exchange of goods and services. The economy is coordinated through legal obligations denominated in non-monetary terms and theoretical prices can be defined in terms of any resource produced in the economy. Thus, it does not matter whether we say that the price of a ton of iron is 10 quarters of wheat, or that the price of a quarter of wheat is 100 kilos of iron. In this sense, there is no role for money as an independent unit of account.

In the context of a capitalist economy, money, however, does serve as an independent unit of account.⁶² By this I mean that economic agents have monetary entitlements and obligations that are distinct from the entitlements and obligations that govern economic means. If someone buys a ton of iron, it is possible that they will in the end indirectly ‘pay’ for it by selling 10 quarters of wheat, but they do not acquire a legal obligation to provide wheat. The agent that receives the payment is not entitled to wheat, but only to the agreed upon monetary price. Money serves as an alternative to coordination of production and exchange in real terms.

2.1.4 Capitalist incentives

Under capitalism, economic agents are incentivised to invest time and effort into the decisions they make concerning the use of economic means. A capitalist economy leaves economic coordination to private authority and the outcomes of choices are, for better or for worse, for individuals to bear. The benefits of good choices as well as the burdens of bad

⁶¹ The connection of money to division of labour is an important topic in the works of Adam Smith and Karl Marx. See Weber 2015.

⁶² Marx discusses money as an independent unit of account in the first chapter of *Capital*. Also Keynes [1930] 2012; [1933] 1963; Ingham 2004.

ones are meant to incentivise individuals to realise an efficient coordination of exchange and production.

Consider first individual consumers. Available resources, labour and technology all have a price, which consumers pay if the production of economic means requires their use. It is up to consumers to make their income line up with their expenditures and to use these expenditures in the best way to realise their life plans. I will turn to the role of money in life planning in §3.1.

Consider now the way in which a capitalist economy incentivises efficient production.⁶³ To make profits, firms seek to discover what goods and services consumers want and how to provide these to them given available resources, labour and technological possibilities. Yet, firms often lack information concerning their technological constraints and the willingness of consumers to buy certain products. If a firm makes the right assumptions about where to invest in light of technological possibilities and consumer needs, its operations will be profitable. If it gets the decision wrong, however, the firm needs to try again. A firm that systematically gets investment decisions wrong goes out of business. In the process of developing and testing assumptions, the firm develops expertise, the right infrastructure and other means for providing better goods and services. In this way, the profit-motive leads firms to use their situated knowledge to realise an efficient use of economic means. Firms, in turn, are incentivised to pursue profits by their owners.

By leaving decisions on production and exchange to private authority, capitalist coordination promises to address both problems faced by socialist planning. First, it incentivises firms to make efficient use of resources and technological possibilities for meeting the needs of individuals. This is a solution to the problem of bureaucratic incentives. Second, by leaving decisions to individual consumers and firms, a capitalist economy also reduces the need for political institutions to collect information.

⁶³ For the classical perspective, e.g., Shaikh 2016. For the neoclassical perspective, e.g., Bowles 2009. For the Austrian perspectives Hayek 1945; 1982; 2002; Kirzner 1997; Burczak 2006. For the Post-Keynesian perspective, Lee 2006. For empirical studies, e.g., Bartelsman & Doms 2000; Foster, Haltiwanger & Syverson 2008.

2.1.5 Capitalism and knowledge

The issue of whether economies should rely on capitalist coordination and if so, when, is very much contested. My aim here is not to say much about this issue. Rather, I want to argue that when the choice is made to rely on capitalist coordination, political institutions will have limited information regarding consumer preferences and technological possibilities. Political institutions will also have limited control over individual outcomes. These epistemic and practical limitations will be the basis for my argument for money as a metric of justice.

There are two reasons why political institutions will tend to have limited knowledge of and control over outcomes that result from capitalist coordination. First, capitalist coordination is only justifiable for coordinating economic decisions where the ability of political institutions to collect and process information effectively is limited to begin with, as historical socialist economies demonstrated. Second, by relying on capitalist coordination, political institutions further reduce their ability to collect information and control outcomes. I discuss both reasons in order.

On the first reason. The justification of capitalist coordination rests crucially on the epistemic and practical limitations of political institutions. Although market competition leads to efficient outcomes, it does little to realise more general considerations of fairness. Consider two forms of systematic unfairness. First, a capitalist economy requires individuals to make choices in the face of a largely uncertain future. The risks individuals take are rarely conscious gambles but are, as a rule, rather steps into the unknown. Taking these risks is incentivised by the promise of high returns for those who are successful. But this leads to a second problem, which is that the unconstrained operation of the market process primarily benefits those with high wealth and marketable skills. Capitalist coordination provides these individuals with social prestige and power, while those without wealth and skills are systematically disadvantaged. There is no clear tendency towards equality inherent in capitalist coordination.⁶⁴

In the face of these objections, the justification for capitalist coordination cannot rest on the right of any individual to use economic means as they please. Such a notion of unconstrained

⁶⁴ E.g., Piketty 2014; I discuss this issue in more detail in §3.3.

discretion may fit the use of consumer goods, but not fundamental decisions on the rules that govern exchange and production. This is not to deny that individuals may have some interest in free choice over the use of means of production. For example, entrepreneurship may be seen as a form of expression, which the state should not needlessly obstruct.⁶⁵ But, the interest of individuals in these forms of self-expression cannot by itself justify the effects on others of a given mode of economic coordination. A successful egalitarian liberal case in favour of capitalist coordination must rely at least in part on the efficiency argument above. Even a staunch free-market defender such as Hayek admits that capitalist coordination can only be justified where centralised coordination cannot realise efficient outcomes: ‘Wherever the use of competition can be rationally justified, it is on the grounds that we do not know in advance the facts that determine the actions of competitors.’⁶⁶ And, reflecting on this fact, ‘the manner in which the benefits and burdens are apportioned by the market mechanism would in many instances have to be regarded as very unjust if it were the result of a deliberate allocation to particular people’.⁶⁷ Again, my point is not to defend or critique capitalism, but to describe the circumstances in which it can make sense for a society to rely on capitalist coordination.

Once a society had made that decision, this also work to increase the epistemic and practical limitations that political institutions face. When private agents make decisions over exchange and production, they decide on private grounds and are under no obligation to communicate the considerations to others. Under capitalism, a large part of the economy is far removed from political institutions. Information on consumer needs remains with individuals, while production possibilities are known by individual firms. Where exchange and production are left to decentralised coordination, political institutions will face considerable epistemic obstacles. Because decisions are left to individuals in accordance with a system of private property rights, outcomes are also no longer entirely under the control of political institutions.

I now turn to the question of what these epistemic and practical limitations mean for the democratic justification of capitalist institutions.

⁶⁵ E.g., Tomassi 2012.

⁶⁶ Hayek [1968] 2002, p. 9.

⁶⁷ *Idem*, p. 64.

2.2 Democratic justification

Political institutions of a capitalist society have limited information concerning consumer preferences and available economic means. They also have limited control over individual outcomes. In §2.3 I will explore how these epistemic and practical considerations constrain the metric that is suitable for the evaluation of individual outcomes. Before turning to my comparison of different metrics discussed in the literature, this section explains why epistemic and pragmatic considerations should be important in the first place. I do this by focusing on the role of a metric in democratic justification.

In §2.2.1 I explain what I mean by a metric and how this understanding of what constitutes a metric relates to existing debates in the theory of distributive justice. In §2.2.2 I outline three criteria for the intersubjective comparison of outcomes that follow from the role of a metric in democratic justification: neutrality, objectivity, and controllability.

2.2.1 Metrics of justice

Public deliberation and justification of political decisions are a crucial feature of systems of representative government. In a democratic society, institutions and officials that exercise political authority are expected to explain to citizens why they institute certain rules or take certain actions. A democratic justification is a justification of a political decision by officials or political institutions of a society, which is addressed to the members of that society.

Providing a democratic justification has two important functions. First, public scrutiny of political institutions contributes to making better decisions. By demanding a justification, members of a political community ensure that the decisions of political institutions meet certain minimal demands of justice. By ensuring that the deliberation of political institutions is accessible and open to a wide range of individuals, citizens can contribute to the quality of decisions and hold those who make decisions to account. In short, adhering to the demand of democratic justification ensures that proposals contribute to just outcomes.

Second, public reason has a crucial role in meeting the political rights of members of a political community. Members of a political community are not only expected to treat each other as equals with regard to their particular conception of the good, but also with regard to their sense of justice. As explained in §1, to be free and equal, citizens must not only be able to participate in the political process, they must also have access to a justification for political

decisions. Members of a political community are entitled to a democratic justification of political decisions.

My aim in the following is to find metrics of justice that are appropriate for democratic justification. I will use the term metric of justice to refer to the unit by which political institutions compare outcomes of individuals. My focus will be on metrics as used to justify the institutions of the basic structure that shape those outcomes. In justifying the institutions that make up the basic structure, political institutions must have some way of comparing individual outcomes. For example, the difference principle refers to the greatest benefit of the least-advantaged. If political institutions invoke it, how should they spell out what it means to be more or less advantaged than others? I believe that this is the linguistic context in which the idea of a metric of justice is most naturally at home. Therefore, I will investigate what metric is appropriate for comparing the outcomes of capitalist coordination by considering their role in a democratic context.

In §2.3 I will engage principally with metrics for the distribution of economic means, but my claim that money is the metric of democratic capitalism has a more general application. As I will now explain, there are broadly two ways to think about distributive justice. My argument is meant to apply to both.

On a distributive account, the evaluation of outcomes concerns the means that are available to individuals to pursue their conception of the good. The choices made in the design of the basic structure will further the ability of some to pursue their particular conception of the good to the disadvantage of others. The question that the distributive egalitarian asks is whether the distribution of means treats all individuals as equals. It is here that the question of a metric comes in to compare the means that are available to individuals.⁶⁸

Relational egalitarians, in contrast, are concerned with the social relations that individuals stand in. Just institutions prevent economic inequality that ‘reflects, embodies, or causes inequality of authority, status, or standing’.⁶⁹ For the relational egalitarian, individual outcomes are evaluated in terms of the social standing that citizens have. My focus will be on

⁶⁸ For the notion of the metric, see Sen 1980. Also, Dworkin 1981a; 1981b; Arneson 1989; 2000; Cohen 1989.

⁶⁹ Anderson 2010, p. 3.

distributive egalitarianism, but the line of argument that I develop applies in the same way to relational egalitarians, which I discuss in §2.3.5.

2.2.2 Three criteria

I will now argue that a metric for democratic capitalism should meet three criteria: egalitarian neutrality, objectivity and controllability. These are criteria that I will apply whenever I discuss ways of comparing outcomes from the perspective of justice. I use these criteria in the discussion of intersubjective fairness in §2.3 of this chapter, intertemporal fairness in §3, and financial instability and epistemic positions in §5.

First, any democratic justification is subject to a demand of egalitarian neutrality. To serve its role in democratic justification, intersubjective comparison cannot depend on the ways in which individuals value their lives. Rather, any adequate metric should respect disagreement over what is of final value. It would not be neutral to invoke the desirability of different lives in evaluating the relative advantage that individuals derive from social cooperation. For this reason, the metric should not make direct reference to the value of the life plans that individuals pursue. Rather, it should enable democratic exchange that treats a wide range of conceptions of the good with equal concern.

Mere neutrality is insufficient to ensure that a metric provides a good basis for democratic justification. A crucial insight that I take from Rawls is that the epistemic needs of a political community can shape what forms of intersubjective comparison are appropriate for that community. Against the utilitarians, Rawls argues that a metric must be a ‘publicly recognized objective and common measure that reasonable persons can accept’.⁷⁰ I will expand on this insight by considering in more detail what sort of metric reasonable persons can accept knowing that they will live in a capitalist society.

Rawls invokes epistemic considerations to argue that parties in his original position would choose primary goods as the metric of a public conception of justice. I will not take a stance on what metric is appropriate at the level of the original position. My interest is in the question of what metrics will be needed in later stages of democratic deliberation (what

⁷⁰ Rawls [1971] 1999a, p. 81. For more detailed discussion, see Scheffler 2003; Hockett & Risse 2005; Blake & Risse 2008.

Rawls refers to as the constitutional, legislative and judicial stages). This focus fits the applied aims of the dissertation. Moreover, it is in these later stages that epistemic and practical considerations are known that determine what metric is suitable. For example, in the original position, the parties do not know whether they will live in a capitalist or a socialist society.⁷¹ But, as I argued in §2.1, the role of money as an independent unit of account is specific to capitalist societies. Money will have a different, less prominent role in other societies. Therefore, parties in the original position will not be able to decide whether money meets their democratic needs until they know whether they live in a capitalist society.

Consider two further criteria. First, like Rawls, I will assume that the evaluation of outcomes must be objective. By objective, I mean that disagreement over the measurement of individual outcomes should be limited. Objectivity implies that the metric meets a criterion of political neutrality, but the reasons that speak for the criterion of objectivity are not dependent on a principled endorsement of political neutrality. Rather, this criterion can be defended in terms of the more general reasons for democratic justification from §2.2.1. By invoking an objective metric, citizens can verify whether institutions meet the relevant demands of justice. If they do not, citizens can hold political institutions to account. Moreover, an objective measure contributes to ensuring that a justification makes sense to citizens. The less room for disagreement over the size of benefits and burdens of individual citizens, the better political institutions will be able to justify decisions.

Consider now my third criterion. Political institutions should focus their justifications on outcomes that they can adequately control. Rawls only invokes epistemic conditions in his argument for primary goods. Robert Hockett and Mathias Risse have extended his argument for primary goods to include practical considerations.⁷² As they argue, because the final aim of public deliberation is to realise and maintain just institutions, a democratic society needs to

⁷¹ Rawls 1999a, p. xv.

⁷² Their demand of publicity requires that a metric can ‘(1) actually be collectively regulated with reasonable effectiveness [...], (2) can be verified to a reasonable degree of certainty [...], and (3) can be verified without drawing on essentially private information, information that can only be obtained through declarations of or intrusion upon the relevant parties.’ (Hockett & Risse 2006, p. 9). Their demand of guidance requires that ‘citizens be able to relate to a currency of regulation in such a way that a language of politics drawing on that currency can guide their actions and decisions as citizens.’ (Idem, p. 12).

measure outcomes in a way that it can control. The role of the metric is not only to evaluate whether the basic structure is sufficiently just. If it is not, institutions should be reformed. A metric should, therefore, compare outcomes in terms of something that is under sufficient control of political institutions. I will interpret this criterion to require effective control, which can either mean direct control or indirect control through a reliable social mechanism.

As I will now discuss, both objectivity and controllability raise particular problems in the context of a capitalist economy, which existing metrics do not address.

2.3 Fair intersubjective distribution

In this section I argue that in the evaluation of capitalist institutions, a crucial role should go to money itself as a metric of justice. The reason for this is that money is the metric that does best in being neutral, objective and is under the control of political institutions.

In section §2.3.1 I show that money meets the demands of objectivity and controllability, but is not always neutral. I then discuss more moralized ways of evaluating outcomes: welfare (§2.3.2), resources (§2.3.3), capabilities and primary goods (§2.3.4), and social relations (§2.3.5). As I show, the demands of objectivity and controllability often preclude comparisons in these terms. On balance, there is a strong case for comparison in monetary terms.

2.3.1 Money

Consider first the role of money as a metric of justice. Amongst existing proposals for a metric, the only account that gives a role to money is the Rawlsian account of primary goods.⁷³ Primary goods, according to Rawls, are things that are valuable for pursuing a conception of the good irrespective of what that particular conception is. Primary goods are all-purpose means in that they are ‘things which it is supposed a rational man wants whatever else he wants’.⁷⁴ As Rawls explains:

⁷³ On primary goods, see Rawls [1971] 1999a, p. 78f; Rawls [1982] 1999b; Rawls 2001, pp. 168-176.

⁷⁴ Rawls [1971] 1999a, p. 79. I believe Rawls means every individual.

Income and wealth are general all-purpose means required to achieve a wide range of (permissible) ends, whatever they may be, and in particular, [...] advanc[e] the ends of the (complete) conceptions of the good that citizens affirm or adopt.⁷⁵

In this chapter, I will simply focus on the claim that the relevant metric should be monetary. The argument is compatible with the view that comparisons of distributive shares should be made in terms of income and wealth, but also leaves open other ways of comparing monetary outcomes. In §3 I will argue that income and wealth are inadequate for the evaluation of the distribution of money. Rather, comparisons of distributive shares in monetary terms should focus on the distribution of income, options for credit and saving. My focus here will be on the question whether measuring distributions in monetary terms is an adequate basis to begin with.

A monetary metric is both objective and something that political institutions can control. In so far as ownership relations are clear and goods are traded in markets, there is an objective basis for measuring distributive shares.⁷⁶ States routinely establish these facts in order to tax citizens. Governments can effectively control the monetary value of distributive shares through taxation, expenditures and the organisation of economic institutions.⁷⁷

Even if money is an all-purpose means, a monetary metric itself is not entirely neutral between different conceptions of the good.⁷⁸ Money is not normally valuable in and of itself. Rather, it has value to individuals in so far as they need it to buy things. Many things are not for sale, e.g., well-functioning communities and social status. There are good economic reasons not to provide some things through capitalist coordination; education, health services and transportation tend to be put in this category. Therefore, merely considering distributive shares in monetary terms can accommodate a wide range of conceptions of the good, but will be more conducive to some than others. Accordingly, it will sometimes be more neutral to

⁷⁵ Rawls 2001, p. 169.

⁷⁶ Even if states currently have difficulty establishing the relevant ownership relations, there are effective ways to increase objectivity. See e.g., Zucman et al 2015.

⁷⁷ Murphy & Nagel 2002; O'Neill & Williamson 2012; O'Neill 2012.

⁷⁸ For this objection, see Schwartz 1973, p. 304; Nagel 1973, p. 228f.

use metrics that consider what individuals can do with money, the goals that it allows them to achieve, or the broader relational consequences of a certain distribution.

The fact that monetary metrics will advantage some life plans over others is thought to count decisively against it, but I think this is to put too much value on neutrality. Once we also consider objectivity and controllability, the picture shifts. If political institutions cannot know and/or control what individuals can do with money, or the goals that it allows them to achieve, then there is no value in added neutrality. I will now consider prominent alternative metrics in contemporary theories of justice and explore to what extent they can meet the demands of objectivity and controllability. I argue that where coordination of exchange and production is left to a capitalist coordination, these metrics will often do very badly on criteria of objectivity and controllability. In these circumstances, money is the more appropriate metric.

2.3.2 Welfare

Welfare egalitarians are interested in whether citizens can achieve things that they value. Because demands of distributive justice apply to the basic structure, welfare egalitarians do not consider those outcomes directly. Rather, as a metric of justice, welfare concerns the lifetime expectation of welfare that citizens can achieve provided they make sufficiently prudent choices.⁷⁹

From the perspective of welfare egalitarianism, money is only of interest where it allows individuals to achieve things that they value. The value of ends to individuals can be characterized in terms of hedonic states, subjective preferences or more objective conceptions of well-being.⁸⁰ Money allows individuals to realise their ends, but, at least in most cases, it has no value in and of itself. The welfare theorist, therefore, evaluates individual outcomes without assigning any final value to money beyond its role as a mere means.

Under centralised coordination, welfare can meet the demands of objectivity and controllability. To be able to make their plans, political institutions must know what individuals will need to do for the production of goods and services, what use these goods

⁷⁹ On opportunities for welfare, see Arneson 1989; 2000; Cohen 1989.

⁸⁰ For an overview of alternative theories of welfare, see Sumner 1996.

and services have to those who consume them, and whether consumers can access them. Therefore, in so far as political coordination of the economy is possible, it is often possible to evaluate outcomes in terms of welfare.

But, the same conditions cannot be assumed to hold for capitalist economies. Indeed, complexity is a crucial reason to rely on capitalist coordination in the first place. Under capitalist coordination, welfare tends to be both unknown and, even when known, outside the direct control of political institutions. It is true that it is both controversial what kind of state welfare is and whether it is open to objective measurement.⁸¹ Obstacles to measurement are most obvious where welfare is understood as a hedonic state, as such states need not be reflected in behaviour at all. But even if welfare can be reliably inferred from behaviour, capitalist coordination as a rule precludes collecting the information needed to impute such states. As a consequence, there will be a range of possible views to take on the distribution of welfare that results from capitalist institutions. Any attempt to measure welfare will not be objective in the required sense. If production and exchange are decided on by private economic agents, welfare cannot be effectively controlled either. What goods and services are available is left to private authority and is therefore outside the direct control of political institutions. The dynamics of constant change and innovation that characterize capitalist societies also preclude relying on a stable social mechanism to control opportunities for welfare.

These practical considerations do not constitute an objection to welfare egalitarianism outside the context of capitalist coordination. I have merely shown that welfare is inappropriate for democratic exchange over capitalist institutions. Because welfare cannot be adequately measured and controlled, democratic justification must have recourse to a different metric of justice.

The reader may not be surprised that a capitalist economy raises particular difficulties for welfare as it is often thought to be a subjective state. The question is whether other metrics do better. I will, therefore, say more about other prominent alternatives in contemporary theories of justice and show that similar problems apply.

⁸¹ Idem.

2.3.3 Resources

Resource egalitarians evaluate individual outcomes in terms of the distribution of resources.⁸² The value of a resource is equal to what others are willing to give up for using the resource in their particular life plan.⁸³ Interpersonal comparison, therefore, requires that the value of resources can be determined on some actual or hypothetical market.⁸⁴ But, resource egalitarians are not primarily interested in money prices. Rather, they care about a fair distribution of resources, where the value of resources depends on what others would have been willing to give up for acquiring these resources. In this sense, they are interested in what I will refer to as the *theoretical price*.

There are at least three reasons to think that resources do better than welfare on the criteria of objectivity and controllability.⁸⁵ Political institutions can determine the distribution of resources without knowing anything about private subjective states. Moreover, the resource egalitarian compares the values of resources in terms of their theoretical prices, and, so the argument goes, a capitalist society can rely on markets to discover these prices. Finally, even in the absence of markets, it is surely easier to control the means available in markets than the opportunities for welfare that they give rise to.

These reasons are in line with my argument for money as a metric, but do not have the same force for resources. Dworkin and others tend to equate the theoretical price of resources with their money prices.⁸⁶ For example, Rawls notion of income and wealth as a primary good is sometimes mistakenly described as a form of resource egalitarianism.⁸⁷ But this is a mistake.

A proper recognition of the difference between the money price and the theoretical price of a resource makes clear that its advantages are not as large as they seem. Resource egalitarians care about theoretical prices. To discover the theoretical price of resources, a hypothetical or

⁸² On resource egalitarianism, see Dworkin 1981a, 1981b, 2000. I discuss Linarelli (2017)'s resource egalitarian account of financial instability in §5.

⁸³ e.g. Dworkin 1981b, p. 294.

⁸⁴ Dworkin 1981b, p. 284.

⁸⁵ Dworkin 1981a, p. 187.

⁸⁶ E.g. Dworkin 1981b, p. 296.

⁸⁷ E.g. Arneson 2008.

actual market must determine their value. But, using a hypothetical market makes theoretical prices conditional on an estimate of subjective value, which, as I have already discussed, raises considerable issues of objectivity. Indeed, as Dworkin admits, any account of a hypothetical insurance market ‘would be speculative and open to a variety of objections.’⁸⁸

Resources must then be priced in actual markets to provide a sufficiently objective measure. This raises the question whether prices in actual markets can be assumed to track the theoretical prices of resources or, at least, whether the theoretical prices of resources can be inferred from observed prices in a sufficiently objective way. If markets function more or less in line with textbook microeconomics that would be the case.⁸⁹ Under conditions of perfect competition, markets will realise a Pareto-optimal allocation of resources, in which no individual is willing to give up any of their resources to acquire a resource at market prices. Therefore, prices will approximate the price that would induce others to give up their resources to acquire it, just above their theoretical price. Once the price of a resource drops to the theoretical price, someone buys it.

If political institutions can assume that markets indeed realise a Pareto-optimal distribution, they can rely on money prices as an objective metric for the distribution of resources. But few, if any, markets in a capitalist economy do realise a Pareto-optimal distribution. Rather, to use money prices as a guide to the theoretical prices of resources requires a judgment on whether a market approximates the ideal of a Pareto-optimal distribution and, if not, what the theoretical prices of resources would be in the counterfactual situation of a Pareto-optimal distribution. This task is no less daunting than that of imagining a hypothetical insurance market.

The absence of adequate information about theoretical prices also precludes effectively controlling the distribution of resources. Because the theoretical prices of resources are unknown, political institutions can do little to ensure that markets realise a fair distribution.

⁸⁸ Dworkin 1981b, p. 299.

⁸⁹ Dworkin 1981b, pp. 287f.

2.3.4 *Capabilities and primary goods*

Resource and welfare egalitarianism provide a complete account of how to compare distributive shares. I now turn to two approaches that are more open-ended. Both the capabilities approach and the primary goods approach characterise what is to be distributed, but give a more prominent role to political institutions in spelling out what distributive shares consist in. Any list of capabilities or primary goods is preliminary and open to revision.

Primary goods, as already explained, are all-purpose means. They are things that are valuable to individuals irrespective of their conception of the good. In addition to income and wealth, Rawls distinguishes four further primary goods: (i) civil liberties such as freedom of thought and expression; (ii) freedom of movement and free choices of occupation; (iii) powers and prerogatives of offices; and (iv) the social basis of self-respect.⁹⁰ This list, however, is open-ended in that it can be extended by other means that are neutral and objective in the same way.

For a capability theorist, what matters are capabilities, which are the things individuals can do.⁹¹ The capability theorist does not care about money directly. Rather, what matters are functionings, various things that individuals value doing or being.⁹² Capability theorists reject primary goods as a metric of distributive justice. Primary goods are of value in so far as they provide individuals with certain functionings, but because primary goods do not necessarily do this, the capability theorist believes that it is not an appropriate metric. Rather, what matters is what individuals can do with their share of primary goods.

Capabilities and primary goods are both open-ended in that it is up to political institutions to specify what counts as a capability or primary good. It is therefore not incompatible with these accounts to say that money should be used as a metric. Amartya Sen sometimes claims that the capability theorist should not care directly about levels of income and wealth.⁹³ But this view doesn't follow from the capability framework. Rather, I have already explained that, in the context of a capitalist economy, what individuals can in the end do with money is

⁹⁰ Rawls 2001, p, 58.

⁹¹ On capabilities, see Sen 1980; 1999; Nussbaum 1992.

⁹² Sen 1999, p. 75.

⁹³ *Idem.*

often not known objectively and/or outside the control of political institutions. Therefore, any justification of a set of non-monetary capabilities or primary goods will face the problems of objectivity and controllability already discussed. In those circumstances, money presents itself as the appropriate metric. In line with its focus on what individuals can do, the capability theorist should simply focus on the ability of individuals to buy things. In §2.3.1 I explained that income and wealth count as primary goods.

2.3.5 Social relations

Relational egalitarians evaluate individual outcomes in terms of the social relations that citizens stand in within their community.⁹⁴ This conception of distributive justice is distinct from the accounts that I have previously discussed in that it does not focus on the evaluation of outcomes, but rather on the social relations that individuals stand in. Just institutions should prevent economic inequalities to the extent that these create systematic inequalities in the authority, status or standing of individuals.⁹⁵ Because the relation between economic inequalities and social standing is complex, and even more difficult to establish than resources and welfare, money again comes in as an important metric for the evaluation of capitalist institutions from a relational egalitarian perspective.

Social standing is difficult to measure and outside the direct control of political institutions. Crucially, it is difficult to measure the role of economic inequalities in undermining equal standing. Still there is a clear relation. In fact, social standing can be affected by relatively modest forms of economic inequality. To give some empirical evidence, DeCelles and Norton (2016) show that when economy class passengers merely walk past first class seats while boarding a plane, antisocial behaviour in flight is over two times more likely. Antisocial behaviour such as being abusive, antagonizing crew members and passengers, or endangering flight safety is almost 12 times more likely for the first class passengers than the economy class passengers walk past. From a theoretical perspective, Martin O'Neill suggests at least five ways in which economic inequalities can undermine social standing.⁹⁶ Those who lack money (i) may not be able to meet their basic needs; (ii) will be seen as inferior by

⁹⁴ Anderson 1999; 2008; 2010.

⁹⁵ Anderson 2010, p. 3.

⁹⁶ O'Neill 2008. Also, Scanlon 1997.

themselves and others; (iii) can be subject to social domination; (iv) experience low self-esteem; and (v) can be forced into servile and deferential behaviour.

By distributing money fairly, a capitalist democracy fosters equal standing. First, the distribution of money is itself a way to acknowledge equal standing. Income, but also the options available for saving and the conditions under which individuals acquire credit signal a valuation of ways of living. By explaining distributions of money, political institutions take away the impression that economic inequalities reflect unequal standing. Second, a fair distribution of money provides individuals with the means to live as equals in those respects that they find important. A capitalist democracy cannot control where passengers sit in aeroplanes, but it can control to what extent they can buy different quality plane seats.

Because the effects of capitalist coordination on equal standing can be neither objectively measured nor controlled, a fair distribution of money is the best way of determining what it means for institutions to assign equal standing to individuals. Relational egalitarians should also evaluate individual outcomes in terms of money.

2.3.6 *Objections*

My claim in this chapter concerning money as a metric of justice is unlikely to strike a reader without a philosophy background as surprising. But for some philosophers, the claim will be surprising, if not obviously false.⁹⁷

Consider first this objection: even if I am right that money has an important role in the day-to-day operations of the government, that does not show that it is a *metric of justice*. Instead, my argument only shows that money should be used to apply a more adequate metric. For example, a welfare egalitarian may argue that I merely show that political institutions should measure and control money because they cannot measure and control welfare directly.

Money, on this account, is a proxy for the true metric, rather than itself a metric. But this objection relies on an implausible conception of moral concepts. The claim that a concept that acts as a proxy for a more fundamental moral concept is not a true moral concept would apply to almost all moral concepts. Consider a utilitarian who believes that what makes an

⁹⁷ For objections to invoking epistemic and pragmatic constraints on moral concepts, see Arneson 2008; Cohen 2008.

action right is that it maximizes subjective welfare. For such a theorist, almost all of our everyday moral vocabulary is at best a proxy for utilitarian concepts. But, presumably, the utilitarian should not take this to show that our every language does not involve true moral concepts. It just shows that for the utilitarian, there is a level of moral concepts that is in some sense more fundamental.

Consider now Richard Arneson's objection to primary goods, which has four steps. His starting premise is the observation that the decision on whether a metric is an appropriate proxy for what is of final value requires a prior decision on what is of final value. From this he infers, second, that the metric of justice should be something that is of final value. But, third, at least some primary goods are not of final value. Therefore, primary goods are an inappropriate metric of justice. Arneson is, of course, correct that if the metric is supposed to tell us what is of final value, money will be a grossly inadequate candidate. But I reject his move from the starting premise to claim that the metric should be something that is of final value because I do not ascribe a role to money in deliberation on what is of final value. Rather, my argument concerns the role of money in the democratic process. As I explained in §2.2.1, every egalitarian liberal should recognize the value of democratic exchange. To realise a just society, individuals need a democratic process in which they deliberate and justify outcomes generated by their economic institutions. It is in this role that money is crucial.

A different objection claims that my account of a metric of justice is unduly conservative. By taking capitalism as given, I forego the critical potential of a metric, such as welfare, which applies to both capitalist and non-capitalist modes of coordination. This, then, would bar fundamental critiques of capitalism. In response, I argue that a focus on distributive outcomes of capitalist institutions does not preclude fundamental critique of such institutions. For an example of how such critique might look, consider the income and wealth statistics of Thomas Piketty.⁹⁸ More generally, the most effective objections to capitalism describe the inequalities generated by such coordination on its own terms. Marx himself focused almost all his analytic efforts on the mechanisms that govern the distribution of income to capital and labour, rather than the comparison of this distribution with distributions under a

⁹⁸ Piketty 2014.

hypothetical socialist alternative. If the decision is made to replace democratic capitalism with an alternative, political institutions should then use a different metric for intersubjective comparison.

Finally, there may be an objection according to which there is a non-monetary metrics that I have not discussed but does better than money even for capitalist institutions. I have compared money to the most prominent alternatives in the literature on distributive justice and shown where the strengths of money lie. I recognize that there could be alternative metrics that I have not discussed but are superior to money on all three criteria that I have distinguished. My argument seeks to establish that such a metric cannot do well on objectivity and controllability without using nominal prices in measuring outcomes. In any case, I recognize that there is a lot more to be said about metrics. Careful consideration of the criteria of objectivity and controllability should have an important role in such discussions.

2.4 Conclusion

In this chapter, I argued that money is the metric of democratic capitalism. Where exchange and production are left to capitalist coordination, money is a neutral metric, that also meets the criteria of objectivity and controllability. In §2.1 I explained that under capitalist coordination, political institutions will only have limited knowledge of technological possibility and consumer needs. They are also limited in their ability to control economic outcomes. In §2.2 I discussed in what sense a democratic society features a relation of accountability between citizens and political institutions. I invoked this relation to spell out three criteria for an appropriate metric of justice: neutrality, objectivity and controllability. In §2.3 I argued that due to the epistemic and pragmatic limitations of political institutions in the face of capitalist coordination, money does best in meeting these competing considerations.

3 Income, credit, and saving

Money, says the proverb, makes money. When you have got a little, it is often easy to get more. The great difficulty is to get that little.⁹⁹

We now have money centre stage in the theory of distributive justice, but it is not yet clear that much follows from what I have said concerning finance. For all I have said, realising a just distribution of money may require nothing more than limiting income and wealth disparities. Indeed, this may be described as the received view of economic justice. Although many theorists reject Rawls' account of primary goods, they share his account of what it means to distribute money fairly: A just distribution of money consists in a just distribution of income and wealth.¹⁰⁰

But if demands of distributive justice are limited to income and wealth, then the role of the financial system is likely to be very limited. At best, the demands that apply to financial institutions are instrumental for realising non-financial outcomes. Individuals are entitled to credit and savings in so far as this contributes to a just distribution of income and wealth. My aim in this chapter is to show that this neglect of finance is mistaken: Political institutions cannot realise a just distribution without paying close attention to financial markets. I argue for three claims:

First, I argue that wealth should have no place in the evaluation of outcomes at all. Wealth is an accounting variable that is derived by netting assets and liabilities. I put forward three objections against assigning to it direct significance in evaluating distributions.

Second, I argue that income does have a place in the evaluation of outcomes, but cannot have this role by itself. Rather, it needs to be complemented by the consideration of the options for credit and saving that are available to individuals. Life plans have different intertemporal spending requirements. Some individuals wish to spend income before they receive it. Others

⁹⁹ Smith [1776] 1904, Book 1, Chapter 9.

¹⁰⁰ Authors who conceive of a just distribution of money narrowly in terms of income and wealth include Anderson 2007; Arneson 2002; Claveau, Dietsch, & Fontan 2016; Dworkin 1981b, p. 296; Frankfurt 1987; Nagel 1978, p. 106; Satz 2010, p. 63; Scheffler 2003, p. 23; von Mises 2005, p. 14; van Parijs 1995, pp. 30-47; Walzer 1987, pp. 95-128.

save income to spend later. A narrow focus on income privileges life plans that involve spending money as it is earned. To meet a demand of egalitarian neutrality, a just distribution must be neutral between alternative intertemporal spending requirements. Therefore, a just distribution of money consists in a just distribution of income, options for credit and options for saving.

Third, I argue that leaving the provision of options for credit and saving to private authority privileges the wealthy and therefore fails to realise a just intertemporal distribution of money.

In thinking of options for credit and saving as part of the metric of justice, I propose a new way of thinking about individual entitlements to financial inclusion. The most widespread way of thinking about options for credit and saving is to think of them as instrumental for realising a more fundamental good, measured in metrics like welfare or capabilities. In the previous chapter, I argued against the evaluation of individual outcomes in terms of more fundamental metrics. An alternative perspective is to think of the entitlement to financial inclusion as a right to an invariant minimum level of financial provisions. In this chapter, I argue against the idea of a right to financial inclusion. Instead, I propose a third perspective: Options for credit and saving are constitutive parts of a just distribution of money. By thinking of entitlements to finance as a component of a fair distribution of money, I highlight the distributive conflicts that arise from the different intertemporal spending requirements of life plans. This chapter thereby makes a crucial contribution to my aim of developing normative concepts that are suitable for reflection on distributive justice in a capitalist society.

The chapter is structured as follows. In §3.1 I describe the role of money in life plans and show that options for credit and saving have a crucial role in determining what life plans are available to individuals. Inability to spend money before it is earned or to earn money and spend it later severely constrains the life plans available to individuals.

This account informs my claim in §3.2 concerning money as a metric of justice. I first argue against wealth and then explain why income by itself is insufficiently neutral between alternative intertemporal spending requirements. I discuss the role of options for saving and credit in realising a fair intertemporal distribution of money and conclude by arguing against the idea that financial inclusion should be understood in terms of invariant rights.

In §3.3 I turn to a critique of capitalist provision of options for credit and saving. As I show, private authority over money systematically offers better options for credit and saving to the already well-off.

3.1 Capitalist life planning

In §2 I focused on the private authority of firms in a capitalist society. I now turn to the extensive role of private authority in individual lives. My focus will be specifically on intertemporal constraints that individuals face. Knowing that their life plans will require income to be successful, individuals must seek to ensure that their expenditures and revenues line up over time. Financial contracts allow them to do this. This section lays the ground for my arguments in §§3.2 and 3.3, by developing a framework for thinking about the crucial role of credit and saving in determining the life plans that are available to individuals.

In §3.1.1 I explain in more detail what it means to have a life plan for the pursuit of a conception of the good. In §3.1.2 I discuss the role of economic contracts in life plans. I explain in what sense life plans are subject to capitalist budget constraints in §3.1.3. In §3.1.4 I explain how financial contracts extend the rational life plans that are available to individuals.

3.1.1 Life planning

This section expands on §1.2.1 to explain what it means to treat individuals as equals with regard to their capacity for a conception of the good. A conception of the good is ‘an ordered family of final ends and aims which specifies a person’s conception of what is value in human life’.¹⁰¹ To exercise the capacity for a conception of the good is to be able to have, devise and revise, and pursue a conception of the good.

This capacity has three aspects. First, it concerns the ability to decide what is of value to individuals. Rawls suggests that such conceptions are closely tied to deep moral and religious views of individuals, but the core idea is much more basic. Some people want to work in a flower reseller, others want to have their own coffee bar. Some people want to have lot of money when they retire, others do not. Everyone has ideas on how to live their life and, more

¹⁰¹ Rawls 2001, p. 19.

fundamentally, ideas on what it means to live a life well. This is what it means to say that an individual has a conception of the good.

The second aspect of the capacity for a conception of the good is to be able to devise and revise a life plan that realises a particular conception of the good. I will often refer to this aspect of freedom simply as life planning. In planning their life, individuals exercise their rational capacity to connect adequate means to ends that they value. Drawing on Henry Sidgwick, Rawls makes a distinction between an objectively and a subjectively rational life plan. The objectively rational life plan is what an agent would decide to do under conditions of perfect information and in the absence of cognitive limitations. As Rawls formulates this idea:

It is the plan that would be decided upon as the outcome of careful reflection in which the agent reviewed, in the light of all the relevant facts, what it would be like to carry out these plans and thereby ascertained the course of action that would best realize his more fundamental desires.¹⁰²

As a rule, individuals lack full knowledge of both their own desires and the means available to realise them. Under the conditions, they can merely aim to make their life plans *subjectively* rational. Someone's subjectively rational plan is the plan that best realises their conception of the good in light of available information and cognitive limits on planning. In doing so, individuals make their conception of the good more determinate and adapt it to the means available to them. I will return to this distinction in §5.

The third aspect of freedom is to be able to pursue a particular life plan. To be free, individuals do not need to be successful in executing their life plans. Egalitarian liberals leave it to individuals to have a conception of the good and to plan their lives using the means that are available to them within political and economic institutions. For individuals to be able to pursue their life plan, the means for this cannot be merely available in the formal sense that there are no laws that prohibit using them. Given their cognitive capacities, reasonable effort, and manageable risks, individuals must be able to pursue a range of life plans. The demands of distributive justice concern whether institutional conditions do enough to help individuals

¹⁰² Rawls [1971] 1999a, p. 366.

in pursuing their conception of the good. To investigate those demands, I now turn to the institutional conditions that are crucial to making life plans in a capitalist society.

3.1.2 Balance sheets and economic contracts

A capitalist society assigns a crucial role to individuals in making financial decisions as part of their life plans. I will now describe these decisions in more detail using stylized balance sheets. A grasp of stylized balance sheets will not only be important for understanding budget constraints on life plans, but also for discussing financial institutions in §§4, 5, and 6.

Balance sheets record the assets and liabilities of economic agents. They provide a clear way to represent the financial position of an economic agent and how this position changes over time. Making life plans requires keeping track of one’s balance sheet. Consider Figure 3.1, which represents the assets and liabilities of John. John works in a mid-level accounting position at a flower reseller. He hopes to be promoted to senior management but for now he is not very rich. John wants to buy a house. On the left-hand side of the balance sheet are John’s small savings and other belongings. The right-hand side of the balance sheet lists liabilities. Liabilities are legal obligations to make payments for or to someone now or in the future. John is currently taking evening classes in accounting, which he pays for using a loan.

John	
Savings £1,000	Educational credit
Other belongings	£20,000
£10,000	

Figure 3.1 – Stylized balance sheet

The balance sheet position of economic agents changes with every economic transaction. Following John Hicks, I will think of an economic transaction as an action that consists of three parts.¹⁰³ First, the transaction is initiated by an implicit or explicit contract between the buyer and the seller. This contract places a legal obligation on the seller to provide some

¹⁰³ Hicks 1989.

good or service to the buyer and a legal obligation on the buyer to pay. For this contract, both parties agree on a suitable means of payment. The transaction is completed when the seller provides the good or service and the buyer makes the payment. Accordingly, an economic transaction consists of (a) the contractual agreement, (b) delivery of the good or service, and (c) payment.

To see how an economic transaction changes balance sheets, consider John again. In buying a house, John acquires a house and incurs an obligation to pay £200,000 to the real estate agency. Figure 3.2 represents the changes in liabilities and assets that result.

John		Real estate agency	
House	Debt to real estate agency £200,000	House	Claim on John £200,000

Figure 3.2 – Delivery of the good and obligation to pay

To pay for the house, John must transfer ownership of money to the real estate agency, as depicted in Figure 3.3. Payment completes the economic transaction by extinguishing John’s liability.

John		Real estate agency	
Bank deposit £200,000	Debt to real estate agency £200,000	Claim on John -£200,000	Bank deposit £200,000
House			

Figure 3.3 – Payment

The three parts of the economic transaction can take place at different points in time. In a spot payment, e.g. buying a cup of coffee with cash, the contract, provision of the good, and payment all coincide. But it is also possible to provide a good before the payment takes place

or, as anyone familiar with internet shopping knows, to provide the good much later. A capitalist economy does not require that the buyer makes all payments before receiving a good, or receives all goods before making a payment.

3.1.3 Liquidity and solvency

Rather than requiring that payment and goods line up over time in a particular order, economic agents have a degree of freedom in how their revenues and expenditures are organised over time. But this freedom is not unlimited. I now explain how liquidity and solvency constraints determine permissible balance sheet positions.¹⁰⁴

A universal feature of capitalist societies is that liabilities are subject to more or less rigorous enforcement through the legal system. In this regard, a capitalist society is different from socialist economies, where, even if accounting of revenues and expenditures took place in quasi-monetary terms, formal bankruptcy would rarely result in the dissolution of firms.¹⁰⁵ Under capitalism, in contrast, inability to meet liabilities has more severe legal consequences. In the case of a firm, its directors lose control over the firm and it is either restructured or the remaining assets are sold off to pay creditors. In the case of individuals, a personal bankruptcy procedure is started. To avoid bankruptcy, the balance sheet position of economic agents needs to meet certain formal legal conditions. These conditions are what I will refer to as budget constraints.

My aim here is not to interpret the legal meaning of the concepts of insolvency and illiquidity, but to explain the practical constraints that individuals face in making plans in light of the basic legal structure of a capitalist economy.

The first budget constraint is the liquidity constraint. Liquidity constraints concern the way cash inflows and outflows line up over time. A liability has a maturity. This is the point in time at which the liability needs to be repaid. A life plan meets the liquidity constraint if it allows the individual to meet liabilities as they mature.

¹⁰⁴ These concepts derive from Janos Kornai. See Kornai, Maskin & Roland 2003; Ellman 2014; Pistor 2013, 2017. Meyer (forthcoming) introduces these concepts into the study of distributive justice.

¹⁰⁵ Ellman 2014.

Life plans can face liquidity constraints in two ways. First, individuals may want to buy something now, but lack the money for it. For John to acquire his house, he must be able to pay for it. But, since John does not have the money, he faces a liquidity constraint. If he could somehow convince the real estate agent to sell him the house, he would immediately default on his obligation to pay. Second, an individual may have money now, but only want to use it to make payments later. This also means that individuals face a liquidity constraint, although we are less used to considering it. Consider now Martha, who makes money in her work as a central banker, but does not want to spend all her income now. Rather, she dreams of using that money in her pension age to stay in the capital. Because she does not know now what she will need in the future, she wants to have money available at a later point in time. Although it is somewhat revisionary to think of the inability to save as a liquidity constraint, I believe that this is so merely because options for saving tend to be quite good compared to available options for credit. In a world of pervasive credit constraints but universal deposit insurance, we tend not to think of both constraints as on a par.¹⁰⁶ But they are both intertemporal constraints on the use of money for payments. The term ‘liquidity constraint’ is equally appropriate for both.

The second budget constraint is a solvency constraint. Solvency constraints concern the total expected cash inflows and outflows of an economic agent over its lifetime. An economic agent is solvent if its future cash inflows enable it to meet all its outstanding liabilities. If John were to buy a house of £1,000,000 and promise to pay in 5 years, he would not be illiquid until the debt matured. Still, John would most likely already be insolvent before then, since he would almost unavoidably default in those five years. While liquidity is a legal fact that is relatively easy to establish, the solvency of an economic agent is a theoretical notion that is subject to pervasive uncertainty. John might win the lottery and still be able to pay for his house. Liquidity, in contrast, can be established merely by considering the assets and liabilities of an economic agent in the present.

3.1.4 Financial contracts

In this section I explain how financial contracts allow individuals to realise life plans that are dependent on credit and saving. Financial contracts enable individuals to pursue credit-

¹⁰⁶ I discuss these topics in §3.

dependent and savings-dependent life plans. John needs £200,000 now, but will only earn that money much later. Martha, in contrast, has £200,000 saved now, but only plans to spend that money later. If Martha had to spend her money now, or if John needed to earn it now, neither could realise their life plan. But, if Martha lends to John, then both can make their expenditures when they need to.

The simplest financial contract is a loan, and the same three-part sequence observed above can be applied to it as an economic transaction. The transaction is initiated through a contract between the borrower and the lender. This contract imposes a legal obligation on the lender to provide the borrower with money and a legal obligation on the borrower to repay that money (presumably with interest).

The simple financial contract of a loan is a very inefficient way of providing credit. It is very unlikely that the borrowing needs of John and the saving needs of Martha line up. Moreover, it will be very difficult for Martha to decide whether John will be able to repay. Finally, by only lending to John, Martha will lose all her money if John defaults. If she would be willing to lend to John at all, then she will want a very high interest rate. Instead, it makes much more sense for John and Martha to rely on some form of financial intermediation (as depicted in Figure 3.4). A financial intermediary provides credit to one group of economic agents and offers options for saving to other economic agents.

Financial intermediary			
Mortgage for John		Savings of Martha	
£200,000		£200,000	
John		Martha	
Money	Mortgage	Money £200,000	
£200,000	£200,000	Savings £200,000	

Figure 3.4 – Financial intermediation

Financial contracts greatly expand the credit- and savings-dependent life plans that are available to individuals. They allow John to buy a house and allow Martha to save for retirement. For this reason, access to options for credit and saving, as I will argue now, are crucial components of a just distribution of money.

3.2 Fair intertemporal distribution

Even though political philosophers tend not to rely on Rawls' account of primary goods, they often follow him in assuming that in so far as a just distribution concerns money, it consists in a just distribution of income and wealth.¹⁰⁷ Recent debates on economic inequality, the work of Thomas Piketty most prominently, also focuses on these two metrics.¹⁰⁸ In this section I argue that this focus is inadequate for a capitalist economy in which individuals make life plans subject to budget constraints. I do this using a conception of egalitarian neutrality that is spelt out in terms of the Rawlsian original position (§3.2.1). I use this criterion to raise two objections. First, I argue in §3.2.2 that wealth should have no place in interpersonal comparison at all. Second, I argue in §3.2.3 that although income should have such a place, a narrow focus on income fails to meet the demand of egalitarian neutrality. Income is most valuable to individuals who spend their money as it is earned, but it is less valuable to those with credit- or savings-dependent life plans. To be sufficiently neutral, a distribution must also address the needs of John, who plans to spend money before he earns it, and the needs of Martha, who wants to save money to spend later. In §3.2.4 I argue that options for credit and saving serve to meet this demand. I conclude in §3.2.5 by arguing for thinking about entitlements to options for credit and saving as part of a just distribution of money, rather than as a right to financial inclusion.

3.2.1 Egalitarian neutrality

Egalitarian neutrality requires treating individuals as equals with regard to their ability to pursue a wide range of conceptions of the good. I have already discussed the idea of egalitarian neutrality in §§1.2 and 2.2. Here I will expand on this idea in terms of the

¹⁰⁷ For references, see footnote 100.

¹⁰⁸ Piketty 2014.

Rawlsian idea of an original position, which will be used in the arguments of §§3.2.3-5 and 3.3.3.

Egalitarian neutrality concerns treating individuals with very different conceptions of what constitutes a good life as equals. Rawls suggests that such conceptions are closely tied to the deeper moral and religious views of individuals, but as I explained in §3.1.1, the core idea is much more basic. Some people want to work as an accountant, others want to have their own coffee bar. Some people want to have a lot of money when they retire, others do not. Everyone has ideas of how to live their life and, more fundamentally, ideas on what it means to live a life well. This is what it means to say that an individual has a conception of the good.

There are different ways of determining whether institutions are sufficiently neutral between different conceptions of the good. Rawls proposes the thought experiment of the original position. This experiment asks what normative principles individuals would agree to if they were characterized by two features. First, all individuals have equal bargaining strength in that they cannot coerce, deceive or use other non-deliberative means of persuasion. Second, deliberation takes place behind a ‘veil of ignorance’. This means that the parties that deliberate do not know what life they will live in that society nor do they know their conception of the good life. As a consequence, they do not know the means that they will need to pursue that good, even if they do know the types of means human life generally requires. It is rational for them to evaluate the design of the basic structure in a way that assumes a wide range of possible conceptions of the good. Principles of justice are sufficiently neutral if they are acceptable to individuals who seek to rationally pursue their interests under these conditions.

The original position is certainly not the only way of thinking about neutrality, but it is a compelling model that fits the general egalitarian and liberal values that I outlined in §1.2. For my purposes, I will assume that institutions must be neutral in the sense that they meet the standards spelt out in the original position. A fair distribution is one that individuals would accept if they had equal bargaining strength and would not give more weight to their own conception of the good.

Rawls uses the device of the original position to evaluate the extent to which alternative metrics of justice are neutral between competing conceptions of the good. As discussed in §2.3.1, Rawls claims that individuals in the original position would agree on income and

wealth as primary goods as the metric in which to evaluate outcomes. His reason for singling out income and wealth, rather than the things people buy, is a concern for liberal neutrality. John wants to be an accountant. But others, who may have very similar income and wealth levels, have other plans. Consider Lydia, who wants to run a coffee bar. Her vision of the good life is very different from that of John. Liberal neutrality requires evaluating the means available to them as in some way equal. Income and wealth serve as primary goods because both John and Lydia can recognize their value without invoking their own conception of the good.

I now turn to the question whether income and wealth are indeed appropriate metrics for the evaluation of outcomes.

3.2.2 Wealth

Although income and wealth meet Rawls' criteria for primary goods, I argue that the ways in which money enables individuals to pursue their conception of the good is not captured adequately by wealth, nor by income considered in isolation. Rather, what matters is whether individuals have the money to make their life meet liquidity constraints. If John has the money, he can buy his house but otherwise not. To meet his budget constraints, he needs to own sufficient means of payment at the right point in time. But neither income nor wealth really capture how owning money enables individuals to meet budget constraints. Because these metrics do not capture this role only from a sufficiently temporal perspective, so I will argue, they do not meet the criterion of egalitarian neutrality. My focus in this section will be on wealth. The next section discusses income.

To calculate someone's wealth, both sides of the balance sheet need to be valued. Wealth is derived by taking all of the individual's financial and non-financial assets (for example their house, their consumer goods, and any savings) and subtracting all their liabilities (for example their mortgage, consumer loans and bank overdrafts). In this sense, the wealth level of an individual is an accounting variable. As depicted in Figure 3.1, John has a negative net worth of £9,000.

Wealth levels may seem to be an appropriate way to compare outcomes for the following three reasons. Wealth meets the criteria of a primary good in the sense that it is something which one would rather have more of than less. Moreover, figures on wealth inequality have

a prominent role in recent debates on economic inequality. They seem to perform their role sufficiently well in that context. Finally, savings and credit can be offset against each other to determine the personal wealth of an individual. Once we take wealth into account, it may seem that there is no need to further evaluate the options for saving and credit that individuals have access to. To own a house encumbered by a full mortgage does not make one rich. Rather, it may seem, what matters is the net monetary value of what individuals own.

Once we think through what wealth really is, however, it will become clear that it is a faulty way of evaluating the distribution of money. I outline three objections to wealth as a metric.

First, while it is of course nice to be wealthy, a narrow focus on wealth fails to provide a good indicator of what economic means individuals can actually use as part of their life plans at a given point in time. It cannot be assumed that with more wealth, individuals ‘can generally be assured of greater success in carrying out their intentions and in advancing their ends, whatever these ends may be.’¹⁰⁹ The reason for this is that an individual might hold a sizable part of wealth in assets that are illiquid. Crucially, this is a different notion of liquidity. In explaining liquidity constraints, I have talked about funding liquidity, which is a property of individuals. To be liquid, an individual must be able to meet payments when these are due. Market liquidity, in contrast, is a property of assets and concerns the cost of converting a given asset into money. A government bond is liquid because there is a market where it can be sold at its present value. Real estate is less liquid in that it can only be converted into money on short notice well below its value. To focus on wealth as a key metric of justice is to forget that overcoming liquidity constraints requires assets that are sufficiently (market) liquid. Conversely, someone with high debts may have low wealth but have extensive means of payment available to pursue life plans. Consider again John, who hopes to own a house by means of a full mortgage. Surely if John gets his mortgage, he will do better in some way than someone who has neither house nor mortgage.

The second reason to reject wealth as an appropriate metric for a capitalist society is that wealth levels are not something which political institutions are in a good position to control. Here, I invoke my claim from §2.2.3 that a metric must be controllable. Political institutions can control income from labour, inheritance or otherwise through taxation and spending.

¹⁰⁹ Rawls [1971] 1999a, p. 79.

Similarly, a tax can be applied to wealth levels, but that is not the same as controlling wealth. Wealth is an accounting variable that results from the interaction of a wide range of different policy choices. Even if political institutions can in theory control absolute wealth levels, there are good reasons to doubt that they should. Effective control over absolute wealth levels is incompatible with the principle of legitimate expectations.¹¹⁰ Liberal egalitarians leave it to individuals to pursue their life plans while taking institutions as given. What individuals are entitled to is determined by the rules that govern institutions. The rules that govern these institutions are to have a degree of stability and predictability so that individual can oversee the outcomes of their plans. The wealth levels of individuals are a result of the many choices they make taking the institutions of the basic structure as given. For political institutions to seek to control absolute wealth levels would undermine the stability and predictability of the rules that govern the private sphere.¹¹¹

Third, even if it were possible to directly control wealth, there is often no good reason to do so. Identical levels of wealth may have a wide range of sources and uses. Both matter from the perspective of justice. Consider inherited wealth. Some think inheriting wealth is objectionable because it is income that does not reflect desert.¹¹² Others believe that an estate tax is uniquely unfair because the deceased has already been taxed for it. From either perspective, the way in which individuals acquire wealth matters for whether it is fairly distributed and how to tax it. Other forms of wealth, for example wealth resulting from entrepreneurial risk, raise other, entirely distinct issues.

Wealth can also be used in very different ways. It can be stored in an offshore bank account or invested in real estate, but wealth can also be held in a company or a charitable trust. Evaluating outcomes in terms of wealth does not adequately capture these relevant distinctions, which are crucial to existing practices of wealth taxation. In evaluating different options for saving, political institutions can recognize these moral distinctions, which are sufficiently objective and controllable to have a good claim to being taken into account. A

¹¹⁰ Rawls [1971] 1999a, pp. 273-277; 2001, pp. 72-74. For an interpretation, Hsieh 2000.

¹¹¹ I discuss the issue of legitimate expectations in more detail in my 'Objective metrics and frustrated expectations' (unpublished manuscript).

¹¹² Piketty 2014; Zucman et al 2015.

distribution that evaluates income and options for saving will capture these distinctions whereas one that focuses on wealth will not.

To clarify, nothing I say here precludes that existing wealth inequalities are indicative of serious deficiencies of existing economic institutions. My argument concerns whether wealth is an adequate metric for evaluating the distribution of money, which I argue it is not.

3.2.3 Income

I now turn to income levels as a way of evaluating the distribution of money. I argue that income by itself is insufficiently neutral between individuals with different intertemporal spending requirements.

Income provides individuals with access to means of payment at a given time. In the wide sense that I am interested in, income can include revenues generated from labour, but also capital gains and gifts in the forms of inheritance and other transfers. Income is distinct from savings in that it constitutes new revenues, rather than being saved from income earned in earlier periods. Income is distinct from credit in that it is acquired without incurring an offsetting liability. Through income, individuals acquire means of payment with no strings attached.

The previous discussion goes some way to vindicate income as a metric for the distribution of money. The most prominent way in which an economy distributes money takes the form of income. There can be neither credit nor saving without income, while we can at least imagine income without credit and saving. Moreover, taken by itself, income can potentially meet all the demands that apply to the evaluation of outcomes.¹¹³ As income provides individuals with money, it is valuable for pursuing a wide range of competing conceptions of the good. Political institutions can also measure it in objective terms, as is crucial to any practice of taxation. Finally, there are different ways in which political institutions can regulate income. In political philosophy, authors often focus on measures of taxation and spending,¹¹⁴ with

¹¹³ As I argue in §2.2.3.

¹¹⁴ Murphy & Nagel 2002; Dietsch 2015.

some attention to ways in which the prior setup of institutions determines the income distribution (e.g. minimum wages).¹¹⁵

Despite its obvious relevance for intersubjective comparison, income by itself does not meet the demand of neutrality. To be neutral, a way of evaluating outcomes must capture something that is valuable to individuals irrespective of their particular conception of the good. We should not interpret this criterion in a way that is too restrictive. Any evaluation of outcomes must be robust with regard to rare conceptions of the good, such as a rejection of well-being or a principled refusal to use money altogether. Still, where possible political institutions should not ignore the conceptions of the good of some at the expense of others.

I will now argue that a narrow focus on income fails to meet this demand of neutrality because it is insufficiently neutral between the intertemporal spending requirements of different life plans.

Intertemporal spending requirements can be of three kinds. First, there are what I will refer to as mere income-dependent life plans. Income-dependent life plans require spending all and only the money that an individual receives in any given month. Young professionals often have such life plans. Typically, they do not have particularly expensive future life plans, nor significant revenues from their professional activities. Poor households, too, have broadly income-dependent life plans as they need all their income to pay for everyday expenditures.

Second, as explained in §3.1.4, there are credit-dependent life plans, which require spending money before it is earned as income. John and Lydia have such life plans. Their income is not enough to realise John's plan to buy a house or Lydia's plan to open a coffee bar. To pursue their vision of the future, they need credit. In this sense, their life plans depend not only on the income they earn but also on what they can spend beyond their monthly income.

Finally, there are savings-dependent life plans. Savings-dependent life plans require saving money before it is spent. For Martha to be able to retire, what matters is not so much her income *per se*, but how much of it she can save for later. In fact, at least some of her income may not have any value to her if she cannot save it.

¹¹⁵ O'Neill & Williamson 2012; O'Neill 2012.

A narrow focus on income fails to address conceptions of the good that involve spending before income is received, or saving income to spend it at a later point in time. Income provides individuals with means of payment at a given time. It is then of most value to individuals who have income-dependent life plans. I will argue that a distribution that focuses narrowly on income fails to be sufficiently neutral between credit, saving and income-dependent life plans.

Using the device of the original position, I claim that individuals will not agree to principles that focus narrowly on income and thereby forego an adequate consideration of credit- and savings-dependent life plans.

I think this is the case because three assumptions apply. I will refer to this specification of the original position as the capitalist original position. First, the parties in the original position know that they will live in a capitalist society, which means that their society involves the constraints on their life plans outlined in §3.1. They know that to pursue at least some potential life plans, they will not just need to meet a solvency constraint, but also a liquidity constraint. Second, they know that political institutions will often need to evaluate outcomes in terms of money (as argued in §2). It is these distributions that they are thinking about. Third, they do not know what sort of lives they will have. They know that it is possible that they will have conceptions of the good that involve credit- or savings-dependent life plans, but they are not sure that they will (as explained in §3.2.1, this is crucial to the setup of the original position). Under these circumstances, so I claim, the parties will refuse to accept a distribution of money understood solely in terms of income. Rather, they will prefer a way of distributing that does better in accommodating alternative intertemporal spending requirements.

My argument does not depend on how one thinks of a fair distribution of income. In §2 I argued that money is an important metric for deciding whether societies live up to demands of distributive justice. Egalitarians will think differently about how to decide what a fair distribution of income consists in. Consider some examples. A strict egalitarian believes that all individuals are entitled to the same level of income.¹¹⁶ A sufficitarian believes that all

¹¹⁶ As discussed in, e.g., Rawls [1971] 1999a. To my knowledge, no contemporary author defends this view.

individuals should have a certain minimum income.¹¹⁷ Applying the Rawlsian difference principle to income means that the distribution of income should be to the greatest benefit of the least advantaged.¹¹⁸ Finally, a non-intrinsic egalitarian believes that a distribution of income should prevent a wide range of bad consequences of economic inequality.¹¹⁹

Despite considerable differences, these egalitarian positions all put forward a prescriptive account of the distribution of money that is appropriate for a society of free and equal citizens. I have argued that if that account narrowly focuses on income, it is inadequate because it fails to consider conceptions of the good that involve credit- or savings-dependent life plans.

3.2.4 Credit and saving

I have rejected a narrow focus on income, but have not yet proposed an alternative. To this end, I will now argue that a distribution that takes account of options for credit and saving does better than one that focuses narrowly on income. For this to be the case such a distribution needs to meet two conditions. First, it must indeed do best in treating individuals as equals with regard to their intertemporal spending requirements. Second, the distribution must also meet the criteria of objectivity and controllability outlined in §2.

A distribution of money will be fairer if it takes options for credit and saving into account. Options for saving are the means available to individuals to transfer the money they own to spend it at a later point in time. In any given period, individuals will have income and savings from previous periods. Their options for saving are the means available to them for providing themselves with money in future periods. Options for saving can take the form of a bank account, but also the purchase of a house, participation in the stock market or cash hidden under a mattress.

Options for credit are the means available to individuals to spend money before they earn it. The feature that distinguishes credit from income is that individuals acquire an obligation to pay in the future. For every Pound spent on credit, individuals incur an obligation to repay the

¹¹⁷ E.g. Frankfurt 1987.

¹¹⁸ Rawls [1971] 1999a.

¹¹⁹ O'Neill 2008.

same amount (and most likely interest), at a later point in time. Options for credit can take the form of a mortgage or some other form of financial contract. Equity can also have a role as credit. For firms, it may not matter very much whether someone lends money or buys shares to fund investments.

To see that a distribution of money will be fairer if it takes options for credit and saving into account, consider again the capitalist original positions. First, the parties know that theirs will be a capitalist society where life plans are subject to liquidity constraints. Second, they think about a fair distribution in terms of a monetary metric. Third, they know that they may want to pursue credit- or savings-dependent life plans, but they do not know whether they will. My claim is that individuals who deliberate under these conditions will agree to a distribution that addresses both income and options for saving, over a mere distribution of income. Knowing that it is very well possible that they will have a conception of the good with credit- or savings-dependent life plans, they will recognise that a distribution without adequate options for credit and saving will potentially severely undermine their life plans.

I now make two clarifications. First, this argument does not establish any determinate level of financial provisions to which individuals are entitled. Rather, it merely shows that individuals will want a distribution of money that takes account of options for credit and saving. As I argue in §3.2.5, the determination of actual options can only take place once more information becomes available about their society, and in particular its business cycle.

Second, I have argued for options for credit and saving by considering the criterion of neutrality, but have not considered whether the metric I propose is sufficiently objective and controllable. I will therefore consider saving and credit in turn.

Political institutions can evaluate the quality of options for saving in objective terms. The quality depends on three characteristics. First, the average expected return of options. As explained in §2.1, a capitalist economy relies on money as an independent unit of account in that entitlements and obligations are denominated in monetary, rather than real terms. Over time, savings can allow for buying more economic means. Savings can also lose value through inflation or financial losses. On some German bank accounts, for example, depositors currently pay negative interest rates. They pay for the privilege to store money. Second, risk. Even if different options for saving have the same average expected return, they may still be more or less risky. Keeping money in an inflation-corrected government bond

provides a very safe way of saving money, albeit at a lower return. Investing money in a business venture will be riskier, but also holds the promise of larger potential gains. Third, different options for saving can be more or less flexible in that liquid assets allow individuals to change their financial plans without incurring high costs.

Political institutions can also control the quality of options for saving. Financial regulation, monetary policy and taxation can be used to influence the returns, risks and liquidity of options for saving. I discuss these means of control in more detail in §§4.3 and 6.2.

The quality of credit, too, can be evaluated objectively. Political institutions can evaluate options for credit in terms of the availability of credit and interest rates paid on it. The credit that individuals have access to depends on risk assessment, which, certainly under capitalist coordination, may to varying degrees be based on subjective criteria. Still, it is possible to make an objective comparison of the chances of receiving credit for different social groups. Indeed, I will invoke such considerations in §3.3 as part of my objection against private provision of options for credit and saving.

Political institutions can also control the options for credit that are available to individuals. Just like options for saving, they do this through financial regulation, monetary policy and taxation. Again, §§4.3 and 6.2 will discuss these means in more detail.

3.2.5 Against rights-based approaches

I have argued that adequate options for credit and saving should complement the distribution of income. Recently, philosophers of finance have argued for the stronger claim that there is a right to financial inclusion. I argue that such claims either unduly limit or unduly extend the entitlement to options for credit and saving.

There are two ways to think about a right to financial inclusion. My argument supports the right in a weak sense. Social and political institutions should provide adequate options for credit and saving as part of ensuring a just distribution of money. In this sense, options for credit and saving are like income. Justice will prohibit some levels of income as too low, but what level this is will depend on many circumstances and is for political institutions to judge in the process of making economic policy. I would not formulate this claim by saying that there is a right to income and to options for credit and saving, but I do not deny that there are rights in this sense.

There is also a stronger claim, which holds that individuals are entitled to a determinate minimum level of financial provisions. This view holds that the entitlement is a right in the sense that there is some invariant level below which the quality of options for credit and saving cannot drop.¹²⁰ I will now argue that this stronger claim is false.

My argument invokes the original position to investigate what sort of entitlements should be considered in evaluating the distribution of money. Knowing that their society will involve economic contracts for access to economic means, the parties will ask how they want their access to these means to be evaluated. I argue that they will want outcomes to be evaluated not only in terms of income, but also in terms of options for credit and saving. On my account, it is crucial that these three entitlements are treated with equal concern. To be neutral between competing conceptions of the good, there must be no *a priori* reason to treat any of these intertemporal spending requirements as weightier. Treating entitlements to credit and saving as rights cannot mean treating them as weightier or less weighty than claims to income. I will now show that a right to financial inclusion is incompatible with an equal treatment of these three *distribuenda*.

The reason that all three should be considered in relation is that the provision of options for credit and saving has systemic consequences. The decisions that individuals make over time in borrowing and spending will impact the interests of many others. Deciding on a fair distribution of money requires taking these systemic consequences into account. Doing so is incompatible with securing an invariant right to financial inclusion. I will now explain this objection in more detail by focusing on business cycles and monetary policy.

In an economic upturn, all want to spend before they earn, which is unsustainable in the long run. At some point, prices start to rise, which can lead to self-enforcing spirals of inflation. Left unconstrained, the dynamics of unconstrained credit extension can also create periods of financial instability, which undermines the stability of domestic credit markets and the international balance of payments. Finally, credit provision will have consequences for the use of natural resources by inducing a higher level of GDP growth than is ecologically sustainable.

¹²⁰ Brownlee & Stemplowska 2015; Meyer forthcoming.

When the economy is in a downturn, individuals will want to save more. This, again, will have pervasive systemic consequences. Whether Lydia's coffee bar will be a success depends in part on the level of spending in the economy. Just like Lydia's credit extends the level of spending in the economy, the saving decisions of Martha cause spending to contract. Rather than going for drinks regularly, she might opt to stay home and save money. Martha's decision to save may also lead her to refrain from replanting her garden. This will impact the flower reseller where John works. In this way, her decision to save will impact the income of John and Lydia.

For these reasons, a capitalist economy needs monetary policy. By raising interest rates, central banks constrain the credit supply during an upturn. In a downturn, central banks seek to expand credit by lowering interest rates. This forces individuals to make riskier investments for the same level of returns. Monetary policy reduces the severity of business cycles but also impacts the quality of options for credit and saving that are available to individuals.

In deciding how to use monetary policy, political institutions face the challenge of dealing with competing entitlements of individuals in a system with complex interdependencies. It is for this reason that conflicts of economic distribution are traditionally thought to be very different from conflicts between liberal and political rights.¹²¹ There is no invariant minimum level to which individuals are entitled irrespective of social circumstances. Instead, what options for credit and saving individuals are entitled to depends in part on the business cycle.

A theory of entitlements to financial inclusion should be able to inform decisions on monetary policy. But taking the conflicting entitlements of individuals into account creates a dilemma for the rights-based approach to financial inclusion. To say that individuals have a right to credit or saving either unduly extends entitlements or unduly limits these entitlements.

The entitlement is unduly extended if the right to credit and saving is thought to apply irrespective of macroeconomic conditions. In this way of thinking about the right to credit and saving, individuals have the right irrespective of how its exercise affects others. But, in

¹²¹ E.g. Rawls 1996, p. 228f. But see Fabre 2000.

securing such a right, political institutions fail to account for the systemic consequences of borrowing and saving. Treating individuals as equals means that systemic consequences should be able to outweigh the interest that one individual has in such financial market transactions. To say that individuals have a right to a minimum level of credit or saving irrespectively precludes consideration of all relevant systemic consequences.

This is not to say that monetary policy should be set without taking into account the entitlements of individuals to financial inclusion. The entitlement to credit and saving is unduly limited if these entitlements are simply sacrificed to achieve optimal systematic outcomes. In setting monetary policy, political institutions should take individual entitlements to credit and saving into account. This is true even if these claims are in the end outweighed by competing considerations.

I will now illustrate both horns of the dilemma by discussing existing arguments for a right to credit. The account put forward by Kimberley Brownlee and Sofia Stemplowska makes the right to credit entirely unconditional. But this means that they do not consider the effects of a given level of credit provision on third-parties.¹²² These systemic consequences will be even more severe for their account as the right is not conditional on budget constraints.

Marco Meyer's account, which is in other respects close to my own, makes the right to credit conditional.¹²³ To say that individuals have a right to credit means that 'some duty-holder has to provide the right-holder, under certain circumstances, with an opportunity to obtain credit.'¹²⁴ In his account, the duty-holder is the state. The circumstance under which individuals have a right to credit that I focus on here is when an individual cannot pursue a life plan, but (i) would be able to do so if the individual were provided with credit and (ii) is able to repay that credit. But, this condition is ambiguous. Whether an individual can indeed repay the sum borrowed depends on interest rates. Thus, the question arises whether the right is determined taking monetary policy into account or not, which brings us back to the dilemma I have sketched. If the state decides on the content of this right independent of monetary policy, it gives more weight to the distribution of credit than to income and options

¹²² Brownlee & Stemplowska 2015.

¹²³ Meyer forthcoming.

¹²⁴ Idem.

for saving. I have argued that this is unfair. But if the state takes monetary policy as a given, it faces the objection that it fails to take entitlements to credit into account. The right to credit only applies once we know monetary policy, but can no longer inform setting it in line with what distributive justice requires.

The idea of a right to credit is sometimes ascribed to Muhammad Yunus, but, if this is indeed his view, the arguments he provides for giving the entitlement to credit a prior, overriding significance are solely instrumental.¹²⁵ If a capitalist society cannot provide individuals with the means to escape extreme poverty or to education without ensuring that options for credit and saving are available for these purposes, this constitutes a ground for providing an invariant minimum level of financial inclusion. In such an account, however, the right to financial inclusion results from a prior right to the means of subsistence or education and does not involve any non-instrumental entitlement to finance at all.

3.3 A capitalist financial system

In §3.2 I argued that a just basic structure should realise a just distribution of options for credit and saving. I now connect these results to the central question of the dissertation, which concerns the authority over money. Under the hybrid monetary constitution, the provision of options for credit and saving is left largely to private authority. As I argue in this section private provision of options for credit and saving systematically privileges the already well-off. In §3.3.1 I discuss options for credit and in §3.3.2 options for saving. In §3.3.3 I use the original position one more time to argue against the advantage granted to the rich by private credit provision. The results of this section will be important for the argument in §6, where I draw on them for one of my five objections to unregulated private authority over money.

3.3.1 Capitalist options for credit

In this section I discuss the problem of credit constraints that is endemic to economies where credit provision is left to capitalist coordination. By taking out a loan, the borrower incurs a

¹²⁵ Hudon 2009; Brownlee & Stemplowska 2015; Gershman & Morduch 2015. In his 2006 Nobel Prize lecture, Yunus merely states that ‘poor people, and especially poor women, have both the potential and the right to live a decent life, and [...] microcredit helps to unleash that potential’.

legal duty to repay, but this duty is difficult to enforce.¹²⁶ Once John receives his loan, he will have extensive discretion in what to do to repay it. John can fail his evening courses or leave his job. Now consider Lydia, who borrows money to open a coffee bar. Lydia can use her loan for a wide range of purposes, some of which might be ill-advised. If, as a consequence of their choices, John and Lydia do not have the means to repay the loan, they default. The lender, in short, faces asymmetric information concerning John's and Lydia's solvency. Lack of information will make it difficult for the financial intermediary to assign an adequate price to the risk of their loans. But this so-called information asymmetry also impacts John and Lydia, who might not be able to get a loan even if they themselves are justified in believing that they are actually solvent.

The lender faces asymmetric information in at least two ways. First, the lender may not know the quality of the project for which the loan is sought. The lender will find it difficult to know whether Lydia is good at running a coffee bar and whether her business plan makes sense. The lender is in the business of granting loans, not the business of opening coffee bars. Lydia's success does not only depend on her entrepreneurial skills, but also on her motivation to make use of these skills, which will generally be unknown.

Second, the borrower cannot credibly commit to a low-risk strategy. Consider the case where, after receiving the loan, Lydia is free to choose between a high street bar, which involves higher risks but larger returns, and a downtown bar, with lower risks and returns. Lydia faces moral hazard in that she can take risks, while her lender bears the costs. If she cannot credibly commit to choosing the downtown bar, the lender will charge her the high-risk interest rate irrespective of her actual choice.

These two forms of information asymmetry increase the interest rate that a lender will demand compared to rates when the lender has more information.¹²⁷ But if interest rates for a project are high this makes successful repayment more difficult. High interest rates, in turn, give rise to a third problem of asymmetric information, namely adverse selection. Individuals with riskier projects will be willing to pay higher interest rates, while safer projects drop out

¹²⁶ Stiglitz & Weiss 1981; Wolfson 1996; Bowles 2009.

¹²⁷ Bowles 2009.

of the market. Taking adverse selection into consideration, lenders offer no credit even if borrowers are willing to accept higher interest rates.

Although all prospective borrowers face these obstacles, those who have wealth will find it much easier to overcome them. One reason for this is that wealthy borrowers can provide collateral. Collateral is property of the borrower that is pledged to secure repayment of the loan. In the event of a default, the lender acquires the collateral. Putting up collateral allows borrowers to overcome credit constraints. Collateral from savings signals that borrowers believe in the quality of their project. Thereby borrowers can signal to the bank that the project is well thought-through. This also creates an incentive to repay and reduces the incentives for a high-risk, high-return strategy. Finally, collateral reduces the risk that the lender takes as the lender acquires the collateral in the event of default.

In sum, private credit provision makes it easier for individuals with more wealth to borrow. Those individuals will also be more likely to receive credit and pay lower interest rates for projects of equal quality. If Martha were to have Lydia's plan of opening a coffee bar, it would be much easier for her to get credit. Her projects need to be less good and she needs to put less work in convincing others of the risks she wants to take. From a social perspective, this means that riskier and less good projects acquire credit while the more promising projects of low-wealth individuals remain unfunded.

These effects are well-documented in the empirical literature.¹²⁸ Very low income individuals pay the highest interest rates and even low-income individuals are almost entirely excluded from business credit. Wealthier households find it much easier to pursue self-employment.¹²⁹ One study estimates that an inheritance of £5,000 makes women from similar family backgrounds three times as likely to be self-employed.¹³⁰ Credit constraints are particularly pervasive in less-advanced economies, where a large part of small and medium-sized enterprises are not able to acquire credit at all.¹³¹

¹²⁸ Bowles 2009, pp. 303-306. For philosophical discussions, van 't Klooster & Meyer 2015; Herzog forthcoming.

¹²⁹ Blanchflower & Oswald 1998; Nykvist 2008; Fairlie & Krashinsky 2012.

¹³⁰ Blanchflower & Oswald 1998.

¹³¹ Banerjee & Duflo 2014.

3.3.2 *Capitalist options for saving*

I now turn to savings. The previous section already made clear that saving well is difficult. In any decision to invest money, the lender faces asymmetric information. First, accurately screening possible investments for their viability and expected returns is difficult. Second, borrowers will have an incentive to take high risks, which, if they materialise, will threaten to wipe out all the savings. Finally, those projects that will offer the best returns will also be those where the problems of screening and moral hazard are most severe.

Savers have broadly two strategies of dealing with these informational problems. The first is the investment of effort and skill in screening. By knowing more about the borrower, economic conditions and the legal terms of contracts, lenders can improve the returns on individual investments. The second strategy is diversification. By investing money in different projects, the saver can reduce the volatility of investments.

The costs of these two strategies do not rise proportionally with the sum of money invested. Screening any given project has a fixed cost in that it does not become more expensive to acquire information about any given project if the sum invested is larger. Diversification is costly because it involves entering into a lot of contracts, but these costs are again not proportional to the sum invested. Drafting a contract may require an expensive lawyer, but the cost of legal services does not go up proportionally with the sum invested. The same contract can be used multiple times for different investments. For these reasons, investing in risky projects becomes cheaper as the sum invested goes up. Because risky projects have higher returns, high wealth creates a higher return on investment.

As a consequence of these dynamics, the effective rate of return on wealth increases with wealth levels.¹³² Figure 3.5 provides an overview of the different assets in which French households in different percentiles of the wealth distribution held their savings in 2012.¹³³ In so far as very low-wealth households have any savings, these are largely held in deposits and as cash. In an inflationary environment, the net return on such assets is often negative. For low-wealth households, savings are largely used to buy a primary residence, which is funded

¹³² Piketty 2014; Saez and Zucman 2016; Calvet, Bach, & Sodini 2015.

¹³³ Garbiniti et al 2017.

with a mortgage that is paid down over time. This form of saving is not without risk.¹³⁴ Consider John, who spends a part of his income to pay down his mortgage of £200,000 on a house worth 230,000. After 5 years, he has paid back £30,000. If the recession now reduces the value of his house by 15%, all his savings are wiped out. Those who have paid down their mortgage do not face this risk and lose at most 15% of their savings. The most profitable options for saving are only available to the very richest. Over the period between 1980 and 2010, for example, universities with an endowment higher than \$1 billion had an average return of 8.8% net of inflation.¹³⁵ While universities with an endowment below \$100 million only earned an average 6.2% return in the same period, these returns are still much higher than those available to average citizens.¹³⁶

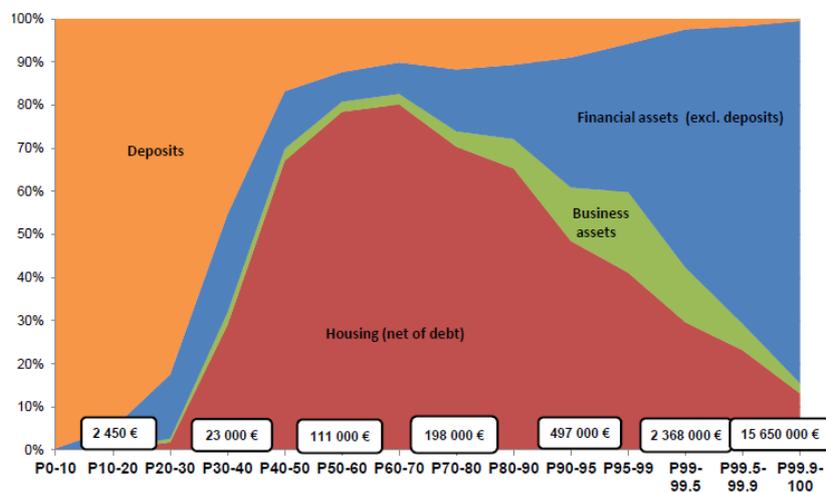


Figure 3.5 – Asset composition by wealth level, France 2012

3.3.3 Fairness

I will now argue that capitalist coordination fails to realise a fair distribution of options for credit and saving because it makes the quality of options for credit and saving dependent on wealth levels. Consider the capitalist original position one last time. First, the parties know that to pursue at least some potential life plans they need to meet a liquidity constraint. Second, they know that political institutions will often evaluate outcomes in terms of money, which, as I just argued, should involve an evaluation of income, options for credit and options

¹³⁴ Mian & Sufi 2015.

¹³⁵ Piketty 2014, p. 448. Discussion in O’Neill 2017, pp. 351f.

¹³⁶ Idem. Pension savings are an exception to this rule.

for saving. Third, they do not know what the intertemporal spending requirements of their life plan will be. For the present argument, I will emphasise a further condition that follows from the design of the original position, which is that the parties do not know what their wealth level will be. I claim that under these conditions, individuals will prefer a capitalist economy where options for credit and saving are independent of wealth levels or perhaps even better for those with less wealth.

There are three reasons for a wealth-independent provision of options for credit and saving. First, the parties in the original position have a crucial direct interest in options for credit and saving, as §3.1 described. The ability to allocate money over time dramatically extends the life plans that will be available with a given level of income. Therefore, even if the parties accept some economic inequalities, for example, because they are to everyone's benefit, they will still want access to finances that is independent of their wealth level. Second, wealth-dependent distributions also conflict with the indirect interest that the parties have in the quality of projects that others pursue. It blocks those with low wealth from pursuing otherwise economically viable business ventures, which reduces the quality of the average project. Third, privileging borrowing and lending by the wealthy will have aggregate effects over time on economic distributions. Even moderate levels of wealth greatly increase self-employed, and therefore the ability of individuals to generate top incomes. Because high wealth levels grow faster than low wealth levels, even a moderately skewed distribution of income can result in massive inequalities over time.

I conclude that parties in the original position will have good reason to object to a wealth-dependent distribution of options for credit and saving. But as I have shown, unregulated capitalist provision of these options leads to a wealth-dependent provision. Therefore, the parties have a reason to reject capitalist provision.

This objection is not decisive. It may very well be that at least some private authority is crucial to realising an efficient use of resources. Just as income inequalities are often justified with recourse to capitalist incentives, so too there may be reasons to favour inequalities in access to finance. I turn to the question of reform in §6.

3.4 Conclusion

In §3.1 I showed that the intertemporal constraints on the availability of money is a crucial constraint on life planning in a capitalist society. In §3.2 I used this observation to argue that a just distribution of money should not consider wealth, but rather available options for credit and saving. In §3.3 I argued that capitalist provision of options for credit and saving is objectionable from a perspective of distributive justice because it systematically privileges the wealthy.

Although this latter claim is not new, it acquires a very different meaning in light of my argument in §3.2. Under capitalist coordination, money, whether income or options for credit and saving, tends to flow towards the top of the wealth distribution. This is not unfair because it contributes to inequalities in wealth. Rather, unequal access to options for credit and saving is in and of itself unfair. An unequal distribution of wealth is objectionable, in part because it gives rise to an unfair distribution of these options.

4 The monetary constitution

The famous banker Meyer Amschel Rothschild is supposed to have said ‘Give me control of a nation's money supply and I care not who makes its laws’.¹³⁷ While it is undeniable that authority over money is a considerable source of social power, it is equally a power that is itself the product of the law. Just like the forms of legislative, executive and judicial power that are more typically the subject of political philosophy, there exists a set of laws and conventions that create and define the authority over money. This chapter will describe that structure, which I refer to as a ‘monetary constitution’.

As I argue in this chapter, capitalist societies today feature what I refer to as a hybrid of public and private authority over money. For socialists and full reserve bankers, the authority over money should be treated entirely as matter of public authority. For free bankers, the authority over money should be left to private authority. Capitalist societies today do not conform to either ideal. Rather, the supply of money to the economy takes place through a hierarchical order of money creation. At the top of this hierarchy stands a public settlement asset that is issued by the central bank. Below it, private financial institutions, banks, issue different forms of credit money. I explain the sense in which this system is hierarchical in terms of an asymmetric relation of dependence. The ability of private banks to issue money depends on their access to credit from the central bank, whereas the converse does not hold.

A better understanding of monetary constitutions will be crucial for the argument in the next three chapters. In §5 I will invoke my account of private money creation in explaining how it causes financial instability. In §6 I will outline five objections to private authority over money and explore whether these objections should lead us to abolish private money creation. In §7 I turn to a discussion of the central bank and its independent role in exercising public authority over money. Before any of these discussions can be had, though, I have to describe in more detail that existing capitalist societies indeed feature both private and public authority over money. This is the aim of the present chapter.

¹³⁷ The origin of this attribution is discussed in detailed by anonymous editors of Wikiquote at <https://en.wikiquote.org/wiki/Conspiracy#Misattributed>.

In §4.1 I explain this chapter's aim of developing an ideal-typical account of the hybrid monetary constitution. My conception of the relevant roles, norms and rules is much wider than other existing usages of the term monetary constitution, which I argue are too narrow. I then explain the aim of the chapter in developing an ideal-typical account of its rules that is meant to fit a wide range of contemporary and historical institutions.

In §§4.2 and 4.3 I develop that account. In §4.2 I contrast private and public forms of monetary authority and explain how these forms of authority are related within a hybrid monetary constitution. I extend the work of Perry Mehrling and Katharina Pistor by arguing that the hierarchy of money should be understood in terms of asymmetrical relations of dependence between different forms of monetary authority.¹³⁸ Although it is uncontroversial that the central bank creates money, it is controversial whether private banks can do the same. To defend the claim that existing capitalist economies have a hybrid monetary constitution, I argue in §4.3 that banks do have considerable discretion to create private credit money. They create money in the act of extending credit, although, as a consequence of the monetary hierarchy, they are subject to capitalist budget constraints imposed by the central bank and banking regulation.

An essential, if not the essential, feature of hybrid monetary arrangements is that public authority over money is limited to issuing the settlement asset. Placing the authority over money entirely in public hands would require a dramatic reform of the financial system. Abolition of private money creation would be the end of the hybrid monetary constitution. In §6 I explore whether this is a desirable goal.

4.1 The constitution and money

In this section I explain the aim of the chapter in developing an ideal-typical account of the hybrid monetary constitution. In §4.1.1 I review existing uses of the term 'constitution'. In §4.1.2 I discuss the sense in which I claim that there is a constitution that governs the authority over money. In §4.1.3 I explain the distinction between public and private monetary authority. In §4.1.4 I draw on Max Weber's conception of an ideal-type to explain my aim in putting forward an account of the hybrid monetary constitution.

¹³⁸ Mehrling 2013a; Pistor 2013; 2017.

4.1.1 Constitutionalism

Constitutionalism is the idea that the exercise of political authority should be constrained by laws and conventions, which make up a constitution.¹³⁹

The term ‘constitution’ is sometimes taken to refer solely to a written text called ‘The Constitution’. But the written constitutional text places only few constraints on the exercise of political authority even, for example, in the US and India, which have some of the most extensive texts. Many of the rules that govern political institutions do not feature explicitly in the written document. And of course, some countries, such as Israel and the UK, do not have such a written text.

Legal scholars, therefore, tend to have a much wider conception of what is and what is not part of the constitution. In their wider sense, a constitution defines the rights and obligations of public officials and institutions. Following Arthur Venn Dicey, the constitution does not just consist of written legal rules, but also of constitutional conventions. A constitutional convention is

a non legal rule which imposes an obligation on those bound by convention, breach or violation of which will give rise to legitimate criticism; and that criticism will generally take the form of an accusation of ‘unconstitutional conduct’.¹⁴⁰

A constitution, then, consists of both the laws and the conventions that govern the exercise of political authority.

While this wider notion of constitution is closer to my use of the term, it is still incomplete since it narrowly focuses on the constraints that apply to the government. An important role of a constitution is to delimit the space within which public decisions are made.

Constitutionalism is not just a doctrine concerning the role of the government. It also informs the ideal of a private sphere which is not subject to permissible government interference. For example, freedom of speech does not only prohibit the government from censoring the press. It also leaves the authority over what can and cannot be said to private individuals. In other

¹³⁹ Waluchow 2014.

¹⁴⁰ Barnett 2017, 42; Dicey [1885] 2013.

words, the constitution determines where the public ends and the private begins. In thinking about a monetary constitution, we should therefore focus not only on its role in constraining public money creation, but also on its role in enabling and constraining private money creation. A monetary constitution consists of the laws and conventions that govern the relation between public and private authority. It is in this wide sense that I will use the term ‘monetary constitution’.

4.1.2 Monetary constitution

As I will use the term, a monetary constitution governs (i) how authority over the provision of money is distributed; (ii) which actions are permissible and which are required from those who hold monetary authority; and (iii) how different actors are to exercise their authority. It consists of laws and conventions that govern the public authority over money and delimits the space that is left to private authority.¹⁴¹

This conception is wider than that of libertarian authors who also use the term. In the works of James Buchanan and Milton Friedman, for example, the term monetary constitution refers to rules that govern public authority over the provision of money.¹⁴² Friedman talks of the need for ‘a monetary constitution, which takes the form of rules establishing and limiting the central bank as to the powers that it is given, its reserve requirements, and so on’.¹⁴³

Normative debates concerning central banking also tend to focus on the monetary constitution understood in this narrow sense. They concern the nitty-gritty of legal rules that govern the central bank itself.

Although central bank mandates are an important part of the monetary constitution, it should not be reduced to such mandates. First, this would ignore non-legal constitutional conventions, which are crucial to decision-making by central bankers. As I discuss in §7.1.2, mandates of independent central banks are often vague and leave crucial questions open. These unwritten rules of monetary policy determine what counts as proper use of the money

¹⁴¹ Christine Desan uses the concept of a monetary constitution once in passing (2014, p.15), but her theoretical perspective is close to the view put forward here in its emphasis on the complex interrelation of private and public authority over money.

¹⁴² Essays collected in Yeager 1962; Weintraub 1983; D’Amico 2007.

¹⁴³ Friedman 1962, p. 225.

supply and what does not. Second, central bank mandates tend to focus on monetary policy, but this is only one thing that central banks do. In fact, setting monetary policy is probably not the most important role of the central bank. Even if it turned out that setting interest rates had no effect on macroeconomic performance, the central bank would remain crucial for its role of providing a currency. But even this role should not capture too much of our attention. Existing debates on the legal concept of a monetary constitution tend to focus too narrowly on defining the rules that apply to the central bank. This focus reflects the mistaken idea that all money is issued by the central bank and omits the role of private money creation.¹⁴⁴

The monetary constitution is not written down in a document, nor do the relevant provisions tend to be part of the written constitutions narrowly understood. The European Treaties, for example, only sketch the role of private financial institutions in a very general sense. Article 119 of the Treaty for the Functioning of the European Union states that the European Central Bank ‘shall act in accordance with the principle of an open market economy with free competition, favouring an efficient allocation of resources’.¹⁴⁵ The Statutes of the ECB further specify that its monetary policy is to be implemented through operations in financial markets, unless a two-third majority of the Governing Council of the ECB decides otherwise.¹⁴⁶ But what exactly those principles are and under what conditions a central bank can extend its operations is not written down. Still, there are unwritten rules, which are often formulated in the language of economic theory. If a central bank were to violate these rules, it would give rise to criticism. Such criticisms will not always consist in charges of the central bank being unconstitutional per se, but they do come with grave moral condemnation. Consider the case of Quantitative Easing (or QE), for which central banks bought a large volume of sovereign bonds. Although the mandates of central banks such as the Fed and the ECB explicitly license trading in a wide range of financial market securities, including sovereign bonds, there was considerable debate over whether QE was printing money to fund government expenditures.¹⁴⁷ Such so-called ‘monetary financing’ is widely seen as an abuse

¹⁴⁴ I defend this claim in §3.

¹⁴⁵ Treaty on the Functioning of the European Union, article 127.

¹⁴⁶ Protocol on the Statute of the ESCB and of the ECB, article 18 and 20. I discuss the ECB mandate in more detail in van ‘t Klooster forthcoming a.

¹⁴⁷ Federal Reserve Act, article 13; Protocol on the Statute of the ESCB and of the ECB, article 18.

of central bank powers.¹⁴⁸ In §4.3 below, I will refer to constitutional conventions in order to explain in what sense private financial institutions are subject to capitalist budget constraints.

4.1.3 The public and the private

In this section I explain in what sense the monetary constitution of existing capitalist societies is hybrid. As discussed in §1.1.2, the monetary constitution delineates a sphere of monetary authority that is subject to public authority from a sphere that is not. In the sphere of public monetary authority, (i) decisions are made by political institutions; (ii) with the aim of treating all citizens fairly; and (iii) justified in terms of a conception of justice. The main public actor in this sphere is the central bank. The monetary constitution also delineates a sphere of monetary authority within which decisions over the provision of money are left in private hands.

Not all monetary constitutions involve both forms of authority. In a public monetary constitution, the authority over money is entirely under public authority. Socialist economies are examples of this but proposals for full reserve banking, the topic of §6, also involve public monetary constitutions. In a purely private monetary constitution, as proposed by libertarian free bankers, the authority over money is entirely in private hands.¹⁴⁹ Existing capitalist societies, however, have what I refer to as ‘hybrid’ monetary constitutions, in the sense that they allow for both private and public authority over the provision of money.¹⁵⁰

The way in which the private and the public are interrelated in different historical capitalist societies has some strikingly invariant features.¹⁵¹ The central bank issues a form of public money, but most of the money used for private economic transactions is issued by the private banking system. The central bank does not, save in exceptional circumstances, provide credit

¹⁴⁸ But see recently Blyth and Lonergan 2014; Turner 2015.

¹⁴⁹ Mises 1912; Hayek 1976; Sechrest 2008.

¹⁵⁰ Ingham 2004, pp. 124f speaks of hybridity in describing the role of central bank money and private credit money in existing capitalist economies. Mehrling (2013b) claims that the central bank is itself a hybrid institution in that it banker to both the government and the banking system. Pistor (2013, p. 322) uses the term ‘hybridity’ to refer to role of both public institutions in the governance and regulation of financial markets generally. The main claim of this chapter is narrower in that it concerns hybridity of the authority over money.

¹⁵¹ Thornton [1802] 1965; Braudel 1982; Ingham 2004; Arnon 2010; Desan 2014.

to the economy directly. Instead, money creation for the real economy is a prerogative of private banks, which seek profit within the confines set by public regulation and monetary policy.

4.1.4 Ideal-types

Before political philosophers can develop normative principles for money, they need an adequate descriptive account of the authority over money. As I noted in §1, contemporary political philosophy currently lacks such an account.

To address this gap in the literature, this chapter develops an ideal-typical account of the hybrid monetary constitution. Following Max Weber, an ideal-type is a description of a type of historical phenomenon. It does not describe historical phenomena in all their detail but focuses on certain crucial features that they share. The resulting ideal-type is thus abstracted; it does not incorporate those features that not all instances of the type share, nor does it reflect the shared features that are less important. In this sense, it is, as Weber puts it, ‘a utopia which has been arrived at by the analytical accentuation of certain elements of reality’.¹⁵² Weber gives as an example the neoclassical conception of the economic agent.

While I claim that the ideal-type that I develop fits existing capitalist economies, I will not discuss the situation in individual countries in detail. For example, I claim that the provision of money to citizens, firms and other institutions is largely left to private authority. To achieve more descriptive accuracy, I would need to say more about the relevant exceptions. For example, in the US, before the Dodd-Franks Act, section 13(3) of the Federal Reserve Act allowed for lending ‘in unusual and exigent circumstances’ to any ‘individual, partnership, or corporation [...] unable to secure adequate credit accommodations from other banking institutions’. I will not explore these kinds of historical variation here.

The previous three chapters provide a normative framework identifying the crucial features of the monetary constitution. According to Weber, researchers determine which features to include in an ideal-type drawing solely on their personal values. He believes that, since such values cannot be left out of the scientific process, scientists should openly avow the values that inform their work. Although I think it is indeed important to acknowledge the role of

¹⁵² Weber [1904] 1949, p. 90.

values, the features I focus on are those that should be of interest to contemporary political philosophers more generally. I will describe the relation between the private and the public spheres, as well as the ways in which different forms of monetary authority impact the distribution of income, credit and savings. These features are crucial for anyone who is interested in how existing capitalist democracies realise, or fail to realise, distributive justice.

4.2 Monetary authority

The relationship between the central bank and the banking system is hierarchical in the sense that central banks have a form of authority over the banking system. In issuing credit money in the form of bank deposits, private banks become dependent on the central bank for credit. The central bank decides under what conditions it provides such credit, which gives it a special form of authority over the banking system.

In this section I explain how public and private authority are interrelated in the hybrid monetary constitution. I first explain what I mean by monetary authority (§4.2.1). I then explain the idea of a hierarchy between the settlement asset, which is issued by the central bank, and different forms of credit money, issued by private financial institutions (§4.2.2). In §4.2.3 I explain in what sense monetary authority is ordered in a hierarchy.

4.2.1 What is monetary authority?

Every economic agent has authority over money in the general sense that they can make payments. Firms and individuals provide money to others by spending it. They can also lend money or save via a financial intermediary, thereby creating an economic incentive for financial institutions to provide more credit. These abilities all constitute important sources of social power—the social power that results from the authority to decide over the use of money. When I talk about authority over money, however, I mean something more specific, namely the ability to issue money.

Although the authority over the use of money is diffuse, the same is not true for the ability to issue money. Every Dollar or Euro that is spent is created at some point by a financial institution, either the central bank, a private bank or what is known as a shadow bank. In existing capitalist societies, the conditions under which an institution is permitted to issue money are governed by strict rules.

In §1.1.2 I characterised the ability to issue money as having formal and effective aspects. The formal aspect concerns whether it is legally permissible to issue money, while effectiveness concerns whether the asset that an institution issues actually serves as money. The monetary constitution does not only govern formal monetary authority. It also has a crucial role in determining which institutions have effective monetary authority.

My definition of money follows that of John Hick, who focuses on its role in an economic transaction.¹⁵³ For an asset to function as money, economic agents must, for legal reasons or out of expediency, treat it as a means of payment for goods and services. I will now make this idea more precise. An asset functions as money if and only if economic agents satisfy the following two conditions. First, private economic agents denominate their economic contracts in the currency of the asset. Second, they accept the asset issued by the institution as a means of payment for debts denominated in that currency.¹⁵⁴

On the hicksian account, whether a given agent has the effective ability to issue money depends on what other economic agents use to make payments. This contradicts Hyman Minsky's oft-cited claim that 'everyone can create money, the problem is to get it accepted'.¹⁵⁵ Rather, it takes the opposite to be true. An asset functions as money, in so far as economic agents accept it to make payments. In other words, a failure to get other economic agents to use an asset as a means of payment simply means a failure to issue money. This, on Hick's account, is a conceptual truth about money.

Chartalists claim that the ability to issue money is dependent on the ability of the state to impose taxes. From an empirical perspective, it is indeed true that the ability to issue money is often closely intertwined with taxation.¹⁵⁶ But the Chartalist claim is false if it is taken to mean that there can be no money without public tax collection.¹⁵⁷ In a capitalist economy, whether a given asset functions as money is not entirely under the control of any single agent,

¹⁵³ Hicks 1987; §3.1.2. Also, Bell 2001.

¹⁵⁴ On the relation between money and trust, ECB 2010, p. 47f. I discuss the topic of trust in more detail in van 't Klooster forthcoming b.

¹⁵⁵ Minsky [1986] 2008, p. 228.

¹⁵⁶ E.g. Desan 2014.

¹⁵⁷ Mehrling 2000.

not even the state.¹⁵⁸ Rather, whether an asset is money depends on whether economic agents use it as a means of payment in economic transactions. States can force economic agents to pay their taxes with a certain asset, but for other transactions, it is largely up to economic agents to agree on the means of payment. Economic agents will generally only enter into economic contracts denominated in a given currency if they expect to (a) have that form of money available to meet future liabilities and (b) value receiving payments with that form of money in the future. Neither can be under complete control of the state.

In sum, the monetary constitution defines the legal rules that govern monetary authority, but it is only one of the factors that condition the effective ability of financial institutions to issue money. In §4.3 below I explore the constraints that banks face in more detail.

4.2.2 Central bank and credit money

Although the central bank and private banks both have a form of monetary authority, their roles in the financial system are very different.¹⁵⁹ In this section I characterize these differences in terms of the form of money that they issue. I also explain that, despite being issued by different institutions, both central bank money and private credit money are means of payment for liabilities denominated in the same currency.

By entering into economic and financial contracts, economic agents incur obligations to make payments. To meet these obligations, they need to transfer ownership of money. The transfer of ownership fulfils the obligation to pay. Within a currency, a wide range of assets is used as a means of payment. These assets are all money that can be used to meet at least some liabilities denominated in the relevant currency, but they can be very different in other respects. The most important distinction is that between central bank money, which serves as the settlement asset, and credit money, which does not.

¹⁵⁸ Knapp ([1905] 2003) is famous for the claim that money originates in the ability of the state to impose obligations to pay taxes on citizens. More recently, Wray 1998; Douglas 2016.

¹⁵⁹ On the relation between central bank and credit money: Minsky [1986] 2008; Moore 1988; Wray 1998; Bell 2001; Graziani 2003; Ingham 2004; Bank of England 2014; Lavoie 2014; Douglas 2016. I discuss financial intermediation and fractional reserve theories in §3.

Every currency has one institution that issues the settlement asset. The money that this institution creates determines which asset can serve as a means of payment for that currency. The money issued by other financial institutions can provide its owner with a means of payment that is to some extent functionally equivalent to the settlement asset, but is not itself the settlement asset. An asset is functionally equivalent if its owner can use it to make payments denominated in the currency. To successfully issue money in a currency, an institution must either issue the settlement asset or ensure that the money it issues remains functionally equivalent to the settlement asset.

In the hybrid monetary constitution, the central bank issues the settlement asset. Central bank money can take the form of cash or central bank deposits. Neither has a particularly prominent role in everyday economic transactions. To settle a payment in cash (coins and bank notes), individuals merely need to hand over the money physically. Although cash is the most tangible form of money, it is not the most important means of payment.¹⁶⁰ Indeed, it is controversial whether central banks should continue to issue cash at all.¹⁶¹

Although the central bank deposit is the defining asset for the currency, it is not often discussed and individuals cannot own it. Central banks provide the deposits they issue only to a limited number of counterparties. As a rule, the counterparties will be private banks and other financial institutions. There will be one or more government accounts operated by the Treasury, and, particularly for core currencies, accounts for foreign governments and international organisations. The provision of money to citizens, firms and other institutions is left largely to various private financial institutions.

In a well-functioning payment system, economic agents can use credit money to make payments.¹⁶² It does not matter whether they own cash issued by the central bank, or a bank deposit, issued by a private bank. Instead of direct settlement with the issuer of the settlement asset, a payment system coordinates settlement through interlocking payment intermediaries. In this way, a well-functioning payment system makes credit money functionally equivalent to central bank money.

¹⁶⁰ Bank of England 2014.

¹⁶¹ Recently, Rogoff 2014. Pope et al (2002) find pathogenic bacterial contamination on 94% of one-dollar bills.

¹⁶² On payment systems, BIS 2003 and ECB 2010.

To settle payments denominated in the currency, banks have deposits at the central bank. They use these deposits to settle payments between citizens, firms, and other payment intermediaries. Consider Amartya who buys a coffee at Lydia’s coffee bar for £3.10. Lydia has a bank account at Bank L and Amartya has a bank account at Bank A. Their banks process and settle the payment for them using their accounts with the central bank. Bank A deducts £3.10 from Amartya’s account, and pays £3.10 to Bank L. Bank L now has £3.10 in central bank money and credits Lydia with £3.10 (Figure 4.1).

Amartya		Lydia	
Deposit Bank A		Deposit Bank L	
£3.10		£3.10	
Coffee		Coffee	

Bank A		Bank L	
Central bank deposit	Deposit Amartya	Central bank deposit	Deposit Lydia
£3.10	£3.10	£3.10	£3.10

Central Bank	
	Deposit Bank A
	£3.10
	Deposit Bank L
	£3.10

Figure 4.1 – Bank payment

For retail customers like Lydia and Amartya, it does not matter that they do not have deposits at the central bank. Credit money issued by their banks is all they need to make payments. In this sense, their bank accounts are functionally equivalent to the settlement asset.

Real world payments are processed in a much more complex structure than the simple transaction described in Figure 4.1. Central bank deposits serve as a means of payment amongst banks and clearing houses in a more fine-grained tapestry of connected systems for processing and settling payments between financial institutions.¹⁶³ No bank will settle a payment of £3.10 at the central bank. Central bank real-time settlement systems such as TARGET2 in the Eurozone, CHIPS in the UK, and FEDWIRE in the US are expensive and are only used for urgent and large-value transactions. For small payments, a clearing house processes payments between different counterparties throughout the day and settlement takes place at the end of the day. Such designated-time net settlement is the norm for retail payments and international payments. These systems use one or a few daily transfers via a large-value payment system to settle net balances. Existing monetary constitutions feature both privately and publicly-owned payment systems. Privately owned payment systems operate within the context of a public large-value payment system. For payments between such private payment systems, however, settlement takes place with central bank deposits.¹⁶⁴

The crucial point is that in a well-functioning payment system, credit money is functionally equivalent to the central bank money. It is this functional equivalence that allows banks to create money.

4.2.3 The hierarchy of money

Monetary theorists describe the relationship between different forms of money as hierarchical.¹⁶⁵ The hierarchy at issue is not primarily a relation of commands from the central bank to the banking system. Rather, it is a hierarchy that arises out of financial contracts and market prices. I will first describe the hierarchy between the central bank and

¹⁶³ Idem.

¹⁶⁴ Idem.

¹⁶⁵ Foley 1987; Bell 2001; Mehrling 2013a; Pistor 2013; 2017.

private financial institutions with a banking license. I then extend the discussion to the shadow banking system and international monetary relations.

The payment system looks very different from the perspective of different parties. Lydia and Amartya treat their deposits as money because they are functionally equivalent to the settlement asset. They can use it to meet payments denominated in the currency and they do not need anything else to be able to do so. Because Amartya can assume that his bank has enough money in its deposit at the central bank to make payments, his own bank deposit is functionally equivalent to a deposit at the central bank. Amartya makes plans involving the money issued by Bank A because, as explained in §4.2.1, he can use its deposits to meet future liabilities and values receiving payments on that account. In this sense, Amartya uses his deposit as a means of payment because he trusts it.

From the perspective of Bank A, however, deposits are a form of credit. When Amartya decides to make a payment, the bank needs to repay the credit by using central bank deposits to settle the payment. It is for this reason that Amartya holds a bank account in the first place. If the bank cannot guarantee functional equivalence, customers will start to withdraw deposits from the bank. Banks can only issue money in so far as the assets they issue remain convertible into central bank deposits. By contrast, a central bank's ability to effectively issue money does not depend on convertibility into any form of credit money for the assets that it issues to serve as a means of payment.

Monetary theorists use the term 'hierarchy of money' to describe this asymmetry between different types of money-issuing institutions. The term is used in at least six ways. Where an institution fits into the hierarchy can depend on (i) the ability of institutions to access central bank credit;¹⁶⁶ (ii) the legal status of the money that institutions issue;¹⁶⁷ (iii) the legal obligations that issuers of money make to their customers;¹⁶⁸ (iv) the likelihood that institutions will receive an emergency loan during a crisis;¹⁶⁹ (v) the ability of that institution

¹⁶⁶ Pistor 2017, 188.

¹⁶⁷ Mehrling 2013a, p. 1.

¹⁶⁸ Foley 1987; Mehrling 2013a, p. 2.

¹⁶⁹ Pistor 2013a, p. 321; Pistor 2017, p. 187.

to decide whether other institutions receive an emergency loan during a crisis;¹⁷⁰ and lastly (vi) the likelihood that money issued by institutions will retain its nominal value during a crisis.¹⁷¹

I use the term ‘hierarchy of money’ to refer to the relation of dependency that holds between the effective ability of institutions to issue money.¹⁷² Central banks and private banks both have a formal right to issue a form of money that is denominated in the relevant currency. The central bank also has an almost unconstrained effective ability to issue money in the currency. Only in a situation of hyperinflation or extensive capital flight will economic agents stop accepting its money as a means of payment. The effective ability of private banks to issue money denominated in the same currency, by contrast, depends structurally on their ability to provide their customers with, and settle payments using, central bank money.

This effective ability of private banks to issue money can depend on access to central bank credit, as definition (i) claims, if this is the institution that provides it with the asset to which its money is to be functionally equivalent. Their effective ability also depends on the legal status of the institution and the legal obligations that it is allowed to make (as definition ii and iii claim). My account incorporates these conditions but is more general.

The provision of the settlement asset gives the central bank authority over the banking system. This authority does not derive primarily from the ability to impose legal obligations on its counterparties. Rather, by issuing credit money, banks impose on themselves legal obligations to conduct payments. In issuing money beyond their holdings of central bank deposits, private banks become dependent on the central bank for liquidity support. If customers decide to use their deposits for payments or withdraw their deposits in cash, private banks need central bank credit to meet their outstanding liabilities.

The central bank has monetary authority over the banking system in the sense that it decides the conditions under which it provides its money to private banks. Its monetary authority

¹⁷⁰ Pistor 2013a, p. 321

¹⁷¹ Pistor 2013a, p. 320.

¹⁷² My account of monetary hierarchy is similar to Bell (2001) but does not endorse the Chartalist assumption that informs it.

conditions the effective ability of private banks to create money. This type of dependence is what I refer to as a hierarchy of money.

The monetary authority of the central bank *qua* provider of the settlement asset has two importantly different dimensions. The first concerns the interest rates at which the banking system can acquire deposits. This interest rate is crucial to monetary policy since it has a pervasive influence on the price of credit in the currency. Second, the central bank decides on the collateral that banks need to put up to acquire deposits. As I will explain in §4.3, collateral requirements impose liquidity constraints on the banking system.

The way in which the central bank imposes interest rates and collateral requirements depends on its monetary policy framework. There are roughly two ways for banks to acquire deposits. First, banks can ask for credit from the central bank. Central bank credit is secured through low-risk assets that serve as collateral for the loan. If a counterparty goes bankrupt, the central bank acquires ownership of the asset that serves as collateral.

Second, banks can sell a low-risk asset to the central bank. In a sale and repurchase agreement (or ‘repo’), the bank sells a financial asset to the central bank with a contractual obligation of repurchasing it at an agreed-on price. For the duration of the contract, the financial institution owns a central bank deposit, while the central bank owns the asset. The difference between the purchase price and the repurchase price is the repo rate. In effect, the financial institution borrows money in this transaction and the repo rate functions as an interest rate.

Banks that issue credit money beyond their holdings of the settlement asset become dependent on liquidity support from the central bank. This makes their ability to issue money dependent on the central bank. How much money a bank can issue depends on central bank interest rates and the collateral requirements for deposits. The hierarchical nature of this relationship is most vivid during a banking crisis. A bank that loses access to central bank credit, as happened to Lehman Brothers in 2008, will default. But, against accounts of the hierarchy (iv), (v), and (vi), positions in the hierarchy of money are also crucial during stable financial conditions. Interest rates and collateral requirements always have pervasive impact on the ability of private banks to issue credit, which in turn impacts the lives of their borrowers.

So far, I have focused on the relation between the central bank and private banks, but there are at least two further hierarchies of money. Although these hierarchies are less important for §§5, 6 and 7, I include the following discussion as part of my aim in this chapter of outlining the subject matter of monetary authority in its entirety.

First, there is the hierarchical structure of the shadow banking system.¹⁷³ Shadow money is a money-like substitute for deposits issued by institutions outside the licensed banking system. Shadow money is distinctly money-like in that it is denominated in a currency and its issuer offers the service of converting it into other forms of credit money. The issuers of these assets also often offer payment services, thereby making shadow money functionally equivalent to the settlement asset.

In contrast to bank deposits, shadow money is issued by institutions that do not have a banking license and lack direct access to traditional forms of central bank credit. In a legal sense, they are not banks, although they fulfil a very similar economic function. They issue liquid deposit-like assets, which they fund with illiquid investments. For example, in 2010, large firms held \$3.5 trillion in cash, which if deposited in a bank, would not be subject to deposit insurance (which is capped at \$100,000 in the US and €100,000 in Europe). Instead, these funds are held in complex financial constructions that seek to replicate the combination of liquidity and safety offered by normal bank deposits.

Where they are dependent on credit from the licensed banking system, shadow banks occupy a position in the hierarchy of money that is subordinate to regular banks. The Global Financial Crisis of 2007 and 2008 led to a bank run on shadow banks. Since then, policy makers around the world have worked to integrate various forms of shadow banking into the more regulated banking system.¹⁷⁴ For example, after establishing the Overnight Reverse Repurchase Agreement Facility in 2014, the Federal Reserve now provides liquidity support to non-bank financial institutions.¹⁷⁵ The shadow banks thereby move up in the hierarchy of money to a position equal (or close to) the position of licensed banks. In the following, when I talk of private banks, I am referring only to regular licensed banks.

¹⁷³ Poszar et al 2010; McMillan 2014; Ricks 2016.

¹⁷⁴ Stafford 2017.

¹⁷⁵ Frost et al 2015.

The relation between different international currencies comprises the third hierarchy.¹⁷⁶ A central bank faces no budget constraint for its currency, as it can always simply print the money it needs to make payments denominated in that currency.¹⁷⁷ But, within international currency markets, central banks are to some extent dependent on the conditions under which other central banks provide their money. This is particularly the case for central banks of periphery currencies, which operate under tight limitations set by the international monetary system. As a rule, periphery central banks have an (implicit or explicit) exchange rate target, or ‘peg’, whereby they commit themselves to keeping the value of their currencies stable. If the central bank fails to maintain this peg, the currency appreciates, which disrupts trade, or devalues, which can bring about a balance of payment crisis and IMF surveillance. The periphery central banks, then, are in a position resembling that of a private bank, since their money functions as a means of payment in part through perceived functional equivalence to a form of money higher up the hierarchy. In other words, their effective ability to issue money depends on decisions made by core central banks. I will briefly touch on shadow money in my discussion of the Global Financial Crisis in the next chapter, but not say much about the global dimension of monetary justice.

4.3 Private money creation

The main claim of this chapter is that the monetary constitution of existing capitalist societies is a hybrid of both private and public monetary authority. While it is uncontroversial that central banks issue money, there is considerable debate about whether private financial institutions can do the same. Are private banks, unlike other private financial institutions, able to create money? I argue that they can, but that, in contrast to the central bank, their effective ability to issue money is subject to capitalist budget constraints imposed by the central bank and banking regulation. In the previous section, I have focused on the relation between private and public monetary authority. I now turn to describing the constraints that private banks face in issuing money in more detail. This more detailed account will prepare the ground for the normative discussion in §§5 and 6, where I ask to what extent banks should retain private authority over money.

¹⁷⁶ Mehrling 2013b; Cohen 2015.

¹⁷⁷ Schwarz et al 2016.

As I show, the hybrid monetary constitution assigns a crucial role to public officials in ensuring that banks remain subject to capitalist budget constraints, even if these constraints are applied with far more discretion than the application of insolvency law to other firms.¹⁷⁸ Rather than thinking of budget constraints as spelt out in a law that governs the banking sector, their role in the monetary constitution is one of a constitutional convention. The idea that banking must be made subject to budget constraints, just like other firms, is an ideal that informs the exercise of political authority over the hybrid monetary constitution. The failure of political institutions to impose budget constraints gives rise to criticism, which is not unlike the accusation of unconstitutional conduct used in other political contexts.

In §4.3.1 I explain that banks have monetary authority in the sense that they can issue money in the act of providing credit but face capitalist budget constraints in doing so. Even if they do not need to borrow before they can lend out, banks face liquidity constraints because of central bank settlement (§4.3.2), and solvency constraints because of capital requirements and other forms of banking regulation (§4.3.3).

4.3.1 Creating money

In this section I explain in more detail what it means to say that private banks create money in the act of granting loans. This means that they have monetary authority, in contrast to other financial institutions. I then discuss authors who have denied that banks are special because they create money.

Economic textbooks sometimes suggest that banks first need to collect deposits issued by the central bank from customers before being able to lend to others. In this view, banks do not create money themselves, but rather attract deposits prior to lending.¹⁷⁹ As I shall now explain, this account of banking is simply false.¹⁸⁰ Banks *create* money in the act of granting loans.

¹⁷⁸ Pistor argues that the application of the rule of law is flexible in the sense that there is a high ‘probability that ex ante legal commitments will be relaxed or suspended in the future’ (1993, p. 320). My point here is that budget constraints are subject to discretion as a matter of law.

¹⁷⁹ E.g., Samuelson 1948 and, according to Werner 2014b, all fifteen later editions of the same textbook.

¹⁸⁰ See Moore 1988; McLeay 2014; Werner 2014a.

If all goes well, bank deposits are functionally equivalent to the settlement asset. Banks can create money, since they can decide to provide their customers with deposits. Creating money requires nothing beyond merely going into debt with a customer. Credit money is created through financial transactions in the same way as central bank money. In theory, a customer could sell an asset to the bank, for example in a repo transaction. Alternatively, a money-creating transaction occurs when the bank provides a loan. By providing its customers with its own deposits, the bank can lend out money without borrowing funds. The bank creates the money it needs in the act of granting the loan.

Consider a bank loan to Lydia to open her coffee bar (Figure 4.2). To this end, Bank L enters into a financial contract with Lydia for £20,000. The contract imposes an obligation on Bank L to provide a deposit to Lydia, giving her an obligation to repay the loan with interest (*) at maturity. Bank L can meet its obligation to provide Lydia with £20,000 merely by creating a deposit. Bank L does not need to have any central bank money to fulfil this legal obligation.

Bank L		Lydia	
Loan to Lydia	Deposit Lydia	Deposit Bank L	Debt to Bank L
£20,000 *	£20,000	£20,000	£20,000 *

Figure 4.2 – Money creation by private bank

Whereas banks issue their own money, other financial institutions do not. Non-bank financial institutions need to borrow before they can lend. They lend out money held in a private deposit at a third party and need to collect funds before they can provide borrowers with money. They differ from banks in that they cannot create money in the act of providing credit. In this sense, they do not have monetary authority, in contrast to banks.

The view that banks do not create money is therefore simply false. But, there is a more sophisticated objection to the claim that banks create money, which, even if false, monetary economists do not always adequately address.¹⁸¹ A famous exponent of this objection is

¹⁸¹ For some egregious cases of misrepresentation, see Werner 2014b. Also Keen 2012.

James Tobin.¹⁸² He holds that while private banks indeed do create money, this ability is only of peripheral interest to understanding their business model, which is not different from other financial institutions. Both engage in financial intermediation, that is, the activity of providing credit to one group of economic agents that is funded by the savings of other economic agents. Accordingly, both face the same budget constraints. Banks, like other firms, are subject to liquidity and solvency constraints. They must have assets that are valued more than their liabilities and they must be able to meet payment obligations when these come due.

Tobin does not deny banks have some important advantages. Deposit insurance and central bank credit make funding for banks cheaper than it would otherwise be. In return, banks are subject to stricter regulation. But, for Tobin, this does not fundamentally change the economic regularities that explain decisions made by both bank and non-bank financial institutions. In his argument, a customer does not take out a loan merely to hold it as a deposit at the same bank. Rather, customers borrow to make payments. Once they do this, the bank is in the same position as the investor. The bank too needs to fund the loans it grants through borrowing. Both need to find funds to make assets and liabilities match up over time in line with their liquidity constraints. The crucial point, for Tobin, is that an institution does not need to be a bank to provide credit and, in principle, being a bank does not make that more profitable.

In sum, Tobin does not strictly speaking deny that banks have monetary authority, only that this is not a significant fact. He claims, rather, that the constraints that banks face in issuing credit and providing deposits are broadly the same as those of any other financial institution. To explain why this view is at best partially correct, I now turn to a more detailed discussion of whether banks face budget constraints in the same way as other financial institutions.

4.3.2 Bank liquidity constraints

I will now explain in what sense private money creation is subject to liquidity constraints. This is a somewhat technical issue, but the moral is relatively simple: Depositors provide

¹⁸² Tobin 1954; Tobin & Brainard 1963. This is also (more or less) the view recently put forward by Krugman (2012) and Rowe (2012) against Keen (2012). For an overview of their debate, see *Unlearning Economics* 2012.

banks with a constant source of funds. If their deposits run out, a bank can also fund itself via money markets, but its effective ability to do so is determined by the central bank's collateral policy. Banks face liquidity constraints, but not the same constraints as their non-bank competitors.

Private banks certainly face formal liquidity constraints. They are subject to insolvency laws and therefore need to make sure that they can meet their liabilities when these come due. When banks issue credit money, they issue a deposit to their customers, which customers will most likely use to make expenditures or withdrawals in the form of cash. To process payments to customers of other banks, a bank needs sufficient central bank deposits to settle payments for its customers. Consequently, a bank that issues a loan will need to find someone to fund that loan. In this sense, it might seem that banks do not have a magic tree from which to fund their portfolios. But, in a different sense, they do.

In the act of granting loans, the banking system creates the funds it needs to meet liquidity constraints. Consider the loan granted to Lydia for her coffee bar. Although money flows out of Lydia's deposit, customers of Bank L will deposit cash and receive payments on their accounts. These inflows of money will in part offset the outflows of money resulting from customers like Lydia who withdraw cash or make payments. Bank J, for example, issues an educational credit of £20,000 to John. When John spends his deposit, some of that money will end up at Bank L, thereby offsetting the liquidity outflows resulting from the credit transfer to Lydia. The liquidity inflows of Bank J and Bank L are dependent on the rate at which the other bank issues credit. If Bank L issues a large volume of credit, money will flow out to Bank J and vice versa. If both banks create roughly the same amount of money, the expenditures of some of their customers will tend to be offset by payments received from customers of other banks. To keep their level of deposit stable, banks merely need to make sure that liquidity inflows and outflows match up over time. Or, as Keynes formulates this point:

[T]here is no limit to the amount of bank money, which banks can create provided that they move forward in step. [...] Every movement forward by an individual bank

weakens it, but every such step by one of its neighbour banks strengthens it; so that if all move forward together, no one is weakened on balance [...].¹⁸³

Liquidity constraints do not obtain at the aggregate level, since money creation provides the banking system with the means to meet its obligations to pay. In this sense, the banking system as a whole has a magic tree from which to fund its portfolio. The question is what this means for the constraints that individual banks face.

I will now explain that, much more so than in Keynes' day, individual banks do have access to that tree through wholesale money markets. While the need for central bank settlement imposes a liquidity constraint on banks, the central bank also acts to ensure that individual banks have the funds they need. On the payment day, some banks will receive net inflows on their central bank deposit, others will have net outflows, resulting in a central bank overdraft. The central bank ensures that a bank with net cash outflows can, as a rule, borrow deposits through either interbank or central bank credit.

To this end, the central bank oversees and participates in wholesale money markets. Wholesale money markets are markets where large financial institutions lend and borrow money for very short, mostly overnight, maturities.¹⁸⁴ Wholesale money markets involve private contracts between financial institutions, but the central bank tightly controls prices and volumes traded in those markets. When private parties do not provide credit, the central bank intervenes by providing its own credit.

As discussed in §4.2.3, banks can borrow deposits from the central bank, but as a rule only if no interbank credit is available. Instead, the central bank sets market conditions to incentivise banks with net inflows to lend their surplus deposits to banks with net outflows. Because central banks charge relatively high interest rates on their credit, banks with negative net inflows are incentivised to borrow deposits from banks with positive inflows. Because central banks pay only a very low (or even negative) interest on their deposits, banks with positive net inflows are incentivised to lend out deposits to banks with overdrafts. By setting the interest rates on central bank deposits low and interest on central bank credit somewhat

¹⁸³ Keynes [1930] 2012, p. 23.

¹⁸⁴ I explain the concept of maturity in §3.1.3.

higher, the central bank creates price incentives for banks to lend to each other at an interest rate determined by the central bank.¹⁸⁵ If interbank lending dries up, as it did after the 2007-8 crisis, the central bank acts as a ‘lender of last resort’ to provide more credit to banks directly.¹⁸⁶

Although banks can fund their loans in wholesale markets, the extent to which they can do so is determined by what securities they can put up as collateral.¹⁸⁷ Just like the central bank credit and repo transactions described in §4.2.3, interbank credit is today, as a rule, secured by collateral. To fund its portfolio in wholesale money markets, a bank needs to own financial assets that potential lenders deem sufficiently secure. As a rule, the amount that a bank will be able to borrow on any given asset is less than the market value of the asset at the time the loan is granted. How much less depends on the ‘haircut’ on the asset, which is the reduction of the market value of an asset that is pledged as collateral for the purposes of determining how much credit is extended against that collateral. To calculate how much any given bank can pledge as collateral, its assets need to be corrected for the average haircut on these assets.

Collateral eligibility determines what part of their portfolio banks can fund in wholesale markets. If the central bank and other counterparties only accept a very narrow set of assets, or haircuts are high, banks are forced to place strict limits on credit. Their access to the magic tree is limited. By contrast, if lenders were to accept every asset as collateral and impose no haircuts, banks would be entirely unconstrained in their provision of credit.

The following should give the reader a broad idea of the actual liquidity constraints that banks face. Banks individually decide the collateral that their counterparties need to acquire interbank loans and this information is not publicly available. But in the Eurozone, banks use their best assets to secure interbank lending and comparatively lower quality assets for central bank credit.¹⁸⁸ Thus the limits on central bank credit provide a good indicator of the limits

¹⁸⁵ On the history of monetary policy implementation, Bindseil 2004; 2014.

¹⁸⁶ Bagehot 1873; Bordo, 1990; Bindseil 2014. I explain the concept of a lender of last resort in more detail in §5.1.2.

¹⁸⁷ Chailloux et al 2008; BIS 2013; Bindseil 2014; Nyborg 2017.

¹⁸⁸ Nyborg 2017.

that banks face in acquiring interbank credit. In 2012, the total value of assets held by banks was €32 trillion, which banks could pledge for €5 trillion in central bank credit.¹⁸⁹

Accordingly, the average bank can fund less than 16% of its assets in wholesale money markets. If customers were to withdraw more than €5 trillion in cash, the banking system would not be able to pay out. The central bank would either need to expand its collateral requirements or banks would start to go bust.

In normal circumstances, then, banks have ample access to the deposits they need to meet their payment obligations. But individual banks must still monitor their liquidity, since the average bank can on average only fund 15% of its assets via interbank and central bank credit. The extent to which individual banks face liquidity constraints depends, then, on the collateral requirements set by the central bank.

4.3.3 Bank solvency constraints

I now explain in what sense banks face solvency constraints. I argue that it is very rare for governments to allow a bank to go insolvent, but that banking regulation, when effectively implemented, serves to constrain private money creation in line with capitalist budget constraints.

Tobin claims that banks are subject to solvency constraints like any other financial institution in that they need to make a profit to stay in business. Being able to create money does not allow banks to simply create their own profits. Banks issue money in the act of granting a loan, which, in competitive markets, is constrained by market conditions. I now explain how market competition and profits constrain the ability of banks to create money.

The volume of money that banks can create depends on the costs and revenues of the financial products that they offer. Banks face various costs for attracting and holding deposits. They must process and settle payments for their customers and pay interest into their accounts. Banks, either individually or collectively, cannot just decide their costs of funding. If banks offer deposits at interest rates markedly lower than other banks or non-bank competitors, customers will start shifting funds away. The same holds true for their revenues. Banks make revenues from their assets in the form of interest payments, but lose money

¹⁸⁹ Bindseil 2014, pp. 108-112.

when borrowers default. In competitive markets, banks cannot simply raise the prices of their products to make more profit, for two reasons. First, competition between banks keeps interest rates on similar financial products close to each other. Second, competition also causes profit rates for financial products to gravitate around the general rate of profit in the economy. If a product is particularly profitable, new competitors will move into the market.¹⁹⁰ In so far as financial markets are competitive in this way, banks must weigh the revenues they generate from interest against the potential costs of default. If they fail to make a profit from their operations, financial institutions will either limit credit provision or they will go out of business. Market competition imposes an economic constraint on the ability of banks to issue money.

Even if the volume of money that banks can create depends on costs and revenues, the financial crisis made it clear that governments are reluctant to let banks go bankrupt. Due to their critical role in the payment system, banks comprise a crucial part of the economic infrastructure. For this reason, governments rarely allow banks to go bankrupt, which suggests that in practice banks face no solvency constraint.

Yet, even if banks are unlikely to default, it does not follow that they face no solvency constraints. Although the large banks do not run a high risk of bankruptcy, they do face what I will call ‘pseudo-solvency constraints’ due to their regulatory framework. These constraints are not enforced through bankruptcy procedures, but they are similar to solvency constraints, since they are designed to ensure that banks’ assets are worth more than their liabilities.

The most traditional form of pseudo-solvency constraint is a required level of bank capital. The bank capital ratio is the percentage of funding that comes from the beneficiary owners of the bank (‘bank equity’). If the bank makes losses, its beneficiary owners lose their capital before the bank becomes insolvent. The Basel III regulation extends capital requirements to include the wider concept of Total Loss Absorbing Capacity (TLAC).¹⁹¹ As part of TLAC, for example, banks now fund part of their portfolios with convertible bonds (‘CoCos’), which are bonds that regulators can turn into bank capital. While TLAC involves more than just a

¹⁹⁰ Shaikh 2016.

¹⁹¹ BIS 2011; 2016.

bank capital ratio, its aim is similar in that it requires banks to meet certain solvency constraints.

The systemic importance of banks in a capitalist economy, then, not only affects the liquidity constraints that they face, but also their solvency constraints. Even if these constraints are not as hard as those faced by other firms, they are evidently present. Just as the central bank imposes liquidity constraints on banks through its collateral framework, the regulatory framework set by governments imposes solvency constraints on banks.

Because central bank deposits and bank capital are costly, banks have an incentive to go to the limits of their budget constraints, and sometimes beyond. To this end, new financial products and other ways of skirting regulations are invented. It is, therefore, far from obvious that the state is always able to adequately impose budget constraints. Rather, a banking system that is subject to budget constraints is a normative ideal that political institutions may realise to different degrees. The status of these constraints is that of a constitutional convention rather than being a strict legal rule.

4.4 Conclusion

In this chapter, I have argued that the monetary constitution of existing capitalist societies is a hybrid of public and private authority over the money supply. In the ideal-typical form outlined in this chapter, the hybrid constitution has five defining features: As a monetary constitution for a capitalist economy, (i) economic contracts involve an obligation to pay money and (ii) financial plans are subject to liquidity and solvency constraints. The hybrid monetary constitution is distinct from free banking, since (iii) obligations to pay should be settled with a public settlement asset, thereby creating a hierarchy of money. The hybrid monetary constitution does assign a crucial role to private authority over money in that (iv) most money is created by private banks, (v) which the state seeks to subject to budget constraints.

Neither a purely private nor a purely public monetary constitution would have an institution quite like a central bank. The central bank *is* the state as it is involved in the provision of a public form of money to the private sphere.

5 Financial instability

Before the Global Financial Crisis of 2007 and 2008, economists referred to their times as that of a ‘Great Moderation’, believing that the economy had entered a new era of financial and macroeconomic stability.¹⁹² Private financial institutions issued new financial assets in the context of increasingly loose regulation. In the words of one central banker, ‘everything was simple, tidy and cosy’, but, as he ominously continues, today ‘many certainties have gone’.¹⁹³ The 2007-8 Crisis transformed thinking about financial markets. In the ensuing decade, banking regulation saw its most substantial tightening since the 1946 Bretton Woods Agreement.

Effective reform requires an adequate diagnosis of the problem. In §3 I introduced a first objection to unregulated private money creation, which is that it privileges the wealthy. Banking reform has done little to address this problem. In this chapter, I turn to the objection that has been driving banking reform instead, which is that private money creation destabilises the financial system. I discuss how private money creation leads to financial instability and develop a new account of why it is objectionable from the perspective of distributive justice.

That financial instability is objectionable does not follow from the liberal egalitarian conception of justice. The liberal egalitarian leaves it to individuals to develop life plans assuming institutions as given. When taking out a mortgage for a house, a loan for a business venture or even by putting money in a bank, citizens make their life plans vulnerable to new threats. They may fail to repay their mortgages, thereby losing their homes. They might fail in their business ventures, thereby losing their firms. Even the bank could fail or cybercriminals run off with their deposit. Liberal egalitarians allow individual to take risks in the face of an uncertain future and reap the benefits, as well as suffer the consequence if things go wrong. In a capitalist society, such incentives also have a crucial role in realising efficient economic outcomes. Why, then, should capitalist societies treat the risks that materialise in a crisis as an issue of justice?

¹⁹² Stock & Watson 2002.

¹⁹³ Borio 2014, p. 191.

This chapter answers that question by outlining two objections. First, financial instability interferes with the ability of political institutions to realise a fair distribution of income, options for credit and options for saving. Second, financial instability compromises the epistemic positions from which individuals make their life plans. Although individuals are responsible for using the information that is available in making their life plans, just institutions should secure fair epistemic positions for each individual.

While the first objection is formulated by restating ideas that I have outlined in §§2 and 3, the second objection makes an independent contribution to my aim of theorising justice in a capitalist society. In thinking about the role of assumptions in life planning, I address a long-standing gap in theories that rely on resources, primary goods or other objective metrics in comparing distributive shares.¹⁹⁴ Such theories focus on the means that are available to individuals in making their life plans rather than the extent to which life plans can be pursued successfully. These metrics thereby omits any consideration of the epistemic conditions of life planning. Although Rawls recognises the issue, he addresses it in terms of legitimate expectations, which are expectations regarding rules that govern the basic structure. For Rawls, ‘there is no prior and independent idea of what we may legitimately expect, or of what we are entitled to, that the basic structure is designed to fulfil.’¹⁹⁵ But, as I explain here, this fails to consider distributive issues concerning the quality of expectations that individuals should be able to form in the context of the rules that govern the basic structure.¹⁹⁶ Luck egalitarians address the issue by distinguishing risk that individuals voluntarily choose to take from those that are involuntary.¹⁹⁷ I will argue in this chapter that such an approach is incompatible with the pervasive uncertainty that characterizes existing capitalist societies.

Relying on capitalist coordination for an economy, specifically where it concerns financial contracts, raises distributive issues that any adequate theory must address. I show that private monetary authority comes with benefits for some but can also undermine the epistemic

¹⁹⁴ I discuss this gap and the solution I propose here in more detail in my ‘Objective metrics and frustrated expectations’ (unpublished manuscript).

¹⁹⁵ Rawls 2001, p. 72.

¹⁹⁶ Buchanan 1974; Brown 2011; 2012 put forward an account of legitimate expectations that focuses on expectations raised by government policies. Expectations in capitalist economies are often not of this sort.

¹⁹⁷ Dworkin 1981b.

positions of others. A consideration of epistemic positions should therefore at least in some cases inform what distributions are just. A financial system that is prone to financial stability is one such case.

The chapter is structured as follows: In §5.1 I describe financial instability as a cyclical pattern of credit-driven booms and busts. Growing debt levels lead to a financial market panic, which the economy needs years to recover from. I also explain the features of a hybrid monetary constitution that contribute to financial instability.

In §5.2 I discuss the views of Anderson, who draws on Friedrich Hayek, and Aaron James. I show that these authors all fail to find the right balance between the private and the public sphere.

In §5.3 I draw on the discussion of distributive justice in the first three chapters to outline my account of why a liberal egalitarian should object to financial instability.

5.1 Hybridity and instability

Without strict regulation, the hybrid monetary constitution is geared towards excessive levels of debt and thereby to crises. Particularly grim examples of this tendency are the Global Financial Crisis of 2007-8 as well as the resulting Eurozone Crisis of 2010-12. These events unfolded according to a pattern that had repeatedly been observed and was well understood long before 2007.

I will first outline how a banking system determines the level of credit available in the economy (§5.1.1). I draw on the work of Charles Kindleberger and Hyman Minsky to discuss the dynamics of a banking crisis (§5.1.2).

5.1.1 Bank credit

The hybrid monetary constitution provides banks with a constant source of funding for the provision of credit. The deposits created in the act of lending provide the banking system with its own source of funding. Banks lose deposits when their customers spend money, but they also attract deposits when customers make payments. If more money goes out than comes in, banks can fund their loans in wholesale money markets provided they can put up sufficient collateral.

Banks decide what loans to grant based on what they expect to be profitable. As I explained in §4.3, banks fund themselves by holding the deposits of customers. They raise revenues from loans in the form of interest payments, but lose money when debtors default. Credit provision is only profitable for a bank if it generates more revenues than the cost of its operations and the interest it pays on funding. A bank that systematically loses money will start to come up against its (pseudo-)solvency constraints: Regulation will force the bank to raise more capital or go out of business. Credit provision is therefore fundamentally constrained by perceived profitability.

The volume of credit is not just in the hands of banks, however. It also depends on the willingness of bank customers to take out loans. Taking out a loan extends the financial plans that are available to individuals and firms, but also entails risks. For individuals, the choice to take out credit will be based primarily on their expected future income and the life plans which they pursue in light of their conception of the good. For firms, the choice to take out credit will be based primarily on what investments they consider profitable. After taking out a loan, an economic agent must service their debt by making interest payments and repaying the sum lent ('principal') when it matures. An agent's failure to meet liabilities will result in an insolvency procedure.

A capitalist economy gives individuals and firms extensive discretion over how to manage their debt levels. Hyman Minsky distinguishes different income-debt ratios for economic agents.¹⁹⁸ Hedge-financed agents can fulfil all their liabilities through the cash flow that their operations generate. Speculative-financed agents can pay the daily costs of operation and interest payments from their cash flow, but not the principal of their debts. When the principal of the debt is due, they need to renew the debt with the creditor (i.e. roll over the debt). Ponzi-financed agents can pay neither their daily costs nor the principal. Such agents need to sell assets or borrow more money to meet their liabilities.

Before entering into a financial contract, the borrower needs to decide what risks they are willing to take and the bank needs to assess risks and set interest rates accordingly. Creditors and debtors will disagree over what level of debt is sustainable. There are no clear rules for determining whether an economic agent can repay its debts in the future. An innovative small

¹⁹⁸ Minsky [1986] 2008, p. 201f.

firm can run for years on a negative cash flow, constantly needing to attract new equity before it can begin to make profits. By contrast, mortgages for the full value of a house can still place individuals at high financial risk. In the face of the overwhelming complexity of a capitalist economy, it is difficult to determine the future income of economic agents. The result is that neither the borrower nor the creditor knows what level of debt is sustainable.

As I explained in §§3 and 4, the profit-motive incentivizes individual banks to get risk assessment right.¹⁹⁹ If default risk is perceived to be high, interest rates go up and banks contract credit. If the risk of default is perceived to be low, more credit is extended and competition between banks serves to drive down interest rates. In theory, then, capitalist competition incentivizes banks to provide credit to economic agents in line with their budget constraints.²⁰⁰

5.1.2 Manias, panics, and crashes

Here I outline an account of financial instability, drawing on the work of Kindleberger and Minsky.²⁰¹ Left to its own dynamics, unregulated private money creation drives the economy from a mania of growing debt levels to a financial market panic and then ultimately to a crash in which all seek to pay down their debts.

Credit cycles result in part from the crucial role of expectations in a capitalist society. Because the coordination of the economy is left to countless private decisions, developments in a capitalist economy become impossible to predict. Economic agents have limited information concerning their future. Individuals are unable to know all possible outcomes of their actions and, even if they do, make a good estimate of how likely these outcomes are.²⁰² Their income of economic agents is also closely interdependent. Given these circumstances, the level of optimism about the future in a capitalist society is a driving force behind the level of economic activity. Optimism influences both the future plans that appear feasible to agents and the revenues they receive in pursuing these plans. Due to pervasive uncertainty, expectations are highly unstable and subject to sudden shifts when economic circumstances

¹⁹⁹ §3.1.2; §4.3.3.

²⁰⁰ Shaikh 2016, pp. 443-490.

²⁰¹ Kindleberger and Aliber 2005; Minsky [1986] 2008.

²⁰² Knight [1921] 2012; Keynes 1937; Fried 2003, 137f.

change. The hybrid monetary constitution enforces these tendencies through cyclical changes to the level of credit provision.

Hyman Minsky proposes an account of the dynamic properties of a capitalist economy which is dependent on private credit provision. In such an economy, expectations are a crucial driver of the decision to borrow and lend. If the economic outlook is good, economic agents will be more willing to borrow and financial institutions will be more willing to lend. If the outlook turns sour, credit becomes scarce and economic agents try to pay down their debts.

Minsky's claim is that periods of stability, in which credit provision picks up, cause periods of economic depression in which credit is contracted. During periods of stability, economic agents take on more debt because both they and banks perceive higher debt levels to be sustainable. As debt increases, instability builds. For increasing numbers of firms and individuals, revenues will be insufficient to meet outstanding liabilities if economic circumstances deteriorate. During a Minsky moment, a panic crashes the economy, thereby uprooting economic activity far beyond the banking system. This leads to a longer period of credit contraction that lasts until the credit cycle starts anew.

Charles Kindleberger draws on Minsky's ideas to show that, going back to the 17th-century Dutch *Tulpenmanie* (tulip mania) at least, unconstrained private credit has driven economies through manias, panics, and crashes. I will now describe these three phases in more detail.

The credit cycle starts with a mania. A period of high economic growth and generally favourable economic circumstances precedes the crisis. The conditions create an optimistic atmosphere, which has two immediate consequences. First, the increased profitability of investments leads households and firms to take out more credit. Second, financial institutions become more optimistic about the creditworthiness of their customers. Risk-assessment becomes less thorough.²⁰³ More credit means increased consumption and investment, which increases the level of economic activity. Increased economic output, in turn, enforces optimism about future revenues and so more credit is provided. The mania picks up speed when a positive economic outlook leads firms to invest and hire more workers, and individuals take out more debt.

²⁰³ De Bruin 2014, pp. 152-183.

The banking system plays a central role in the development of a crisis, since the general optimistic atmosphere greatly expands credit provision.²⁰⁴ Most importantly, more credit is issued using existing forms of money. For private households, by far the largest source of credit comes from mortgages.²⁰⁵ In the run-up to the 2007-8 Crisis, for instance, houses and mortgages were seen as safe and profitable investments. Due to permissive central bank credit and capital requirements on mortgage portfolios, the banking system faced almost no liquidity or solvency constraints on its ability to issue mortgages. But when individual consumers are able to borrow more money, they can pay more for houses, thereby driving up prices. In the period between 1997 and 2006, house prices increased by 125% in the US, 175% in Spain and 260% in Ireland.²⁰⁶

A second way in which the banking system spurs on the mania is that new, riskier forms of money and money-like financial instruments appear.²⁰⁷ As I discussed in §4, the pre-2008 financial system saw the rapid expansion of a shadow banking sector.²⁰⁸ Outside the narrow circle of commercial banks with direct access to central bank credit, financial institutions offered various forms of purely private money such as private repos and shares in money market funds backed by private bills and other assets.²⁰⁹ The mania encourages economic agents to hold forms of money lower in the hierarchy.

Market competition puts pressure on individual financial institutions to take more risks. If the bank perceives risks to be too high, it will lose market share to competitors, while a bank that takes more risks can expand its market share. In the optimistic atmosphere of the mania, individual banks face market pressure to expand their credit provision.

Crucially, expectations do not adjust gradually, but do so in a sudden and difficult-to-control process. When this happens, the ‘Minsky moment’, the mania turns into panic. In the run-up to a panic, banks and other financial institutions slowly become more pessimistic. Suddenly, a single high-profile event, such as the Lehman Brother bankruptcy in October 2008 or the

²⁰⁴ Kindleberger & Aliber 2005, pp. 64-89.

²⁰⁵ Jorda, Schularick & Taylor 2014; Mian & Sufi 2015.

²⁰⁶ OECD Statistics. House price indices in real terms.

²⁰⁷ Murau 2017a; 2017b.

²⁰⁸ §4.2.3.

²⁰⁹ These concepts are explained in §4.2.3.

revelation of the Greek deficit in 2009, makes financial institutions much less willing to hold certain forms of debt. Because all try to sell their assets at the same time, a self-enforcing dynamic is set into motion. Sell-offs lead to lower asset prices, which in turn forces financial institutions to sell more assets. As a result, banks are no longer willing to lend to each other in wholesale markets.

The banking crisis infects the wider economy. Financial institutions review their loans and some firms, particularly those with speculative or Ponzi finance structures, go bankrupt. Economic agents seek to deleverage and shift their asset portfolios from risky long-term investment to more safe and liquid assets. As everyone tries to offload debt and move to safe, publicly guaranteed forms of money, the financial system enters a self-enforcing downward spiral.

The government and the central bank intervene to offset the worst impacts of a banking crisis. From the nineteenth century, central banks have intervened in financial markets as lenders of last resort to offset a panic.²¹⁰ While private financial institutions sell their assets and cut off credit, the central bank steps in to provide credit in exchange for collateral that would be considered safe in normal circumstances. In this way, the central bank uses its position in the hierarchy of money to loosen liquidity constraints. Governments loosen solvency constraints through bank bailouts and other forms of direct financial support.

Developments in the banking system, then, have a decisive role in enforcing the positive impact of a boom and spurring on the mania, as well as the panic and depression that result. While financial crises are possible in any capitalist economy, private money creation contributes significantly to unsustainable debt levels and to the violent collapse of financial activity during the panic.

5.2 Market risk

In the context of a capitalist basic structure, it is up to individuals to reflect on risks and make their own choices about which risks to take. Financial instability is just one of the many risks that individuals face in making life plans. Why, then, should the effects of financial instability, particularly those that result from voluntary choices, be singled out? To decide

²¹⁰ Bagehot 1873; Bordo, 1990; Bindseil 2014.

when the effects of financial instability are unfair, a theory of distributive justice must decide where private authority in financial markets should end and where public authority should start. I show that existing accounts draw the line in the wrong place.

I review three broadly liberal egalitarian accounts of financial instability. In §5.2.1 I discuss the works of Hayek and Anderson, who argue for an almost unconstrained role of personal responsibility in financial markets. I argue that their focus on legal consent and on income and wealth ignores crucial institutional conditions of life planning in a capitalist society. In §5.2.2 I discuss the ideas of James, who likens financial instability to a dangerous bio-agent. I argue that his account fails to adequately address the role of life choices in the financial risks that individuals face.

5.2.1 Laissez-faire

Hayek and Anderson argue that political institutions have no responsibility to ensure that financial markets create fair outcomes for individuals. Rather, a capitalist economy is one that incentivizes individuals to take risks in the face of an uncertain future. For private risk-taking to realise efficient outcomes, individuals must bear the consequences of the risks they take. I will now explain in what sense their views are liberal egalitarian and how this leads them to argue against regulation of financial markets.

Both authors present their accounts as broadly liberal egalitarian. Even if Hayek polemicizes against what he refers to as the ‘mirage of social justice’, he does not take his objections to apply to the Rawlsian conception.²¹¹ In fact, Hayek praised *A Theory of Justice*, as he understood it, claiming that

the differences between us seemed more verbal than substantial. Though the first impression of readers may be different, Rawls' statement which I quote later in this volume (p. 100) seems to me to show that we agree on what is to me the essential point. Indeed, as I indicate in a note to that passage, it appears to me that Rawls has been widely misunderstood on this central issue.²¹²

²¹¹ Lister 2013.

²¹² Hayek 1982, p. xvii.

This essential point, outlined in the passage that Hayek refers to, is the idea of imperfect procedural justice. As I explained in §1, liberal egalitarians demand that institutions treat individuals as equals. But as liberals, they also leave it to individuals to make their own plans assuming these institutions as given. Institutions ensure fair procedures and a fair distribution of outcomes, thereby realising imperfect procedural justice.²¹³

Hayek argues that political institutions should assign a particularly large role to private authority as this is crucial for realising an efficient coordination of exchange and production. Hayek is particularly sceptical that any moralized notion of voluntary choice can have a prominent role in evaluating the outcomes of the market process.²¹⁴ As explained in §2, capitalist coordination allows individuals to take risks in the face of an uncertain future and reap the benefits, as well as suffer the consequences if things go wrong.²¹⁵ It is thereby meant to incentivize economic agents to correctly anticipate the future. For a capitalist economy to prevent individuals from taking risks is to undermine its own functioning.

Hayek has a strikingly optimistic view of capitalist financial markets. This becomes clear when we turn to his proposal for a purely private monetary constitution.²¹⁶ For Hayek, the central bank as the issuer of the settlement asset should be replaced by a larger number of competing private financial institutions. The currencies that they issue are to be bought and sold in money markets. Just like a central bank that has an exchange rate target, financial institutions would need to make a credible commitment to the value of their currency expressed in other currencies and to its purchasing power. It is left to individual customers to weigh the risks of different banks and thereby force providers of credit and savings to use their best judgment in weighing risks and rewards. This entirely private financial system, so Hayek claims, will incentivize prudent risk-taking and efficient outcomes.

In December 2007, just as the financial crisis picks up steam, Anderson draws on the work of Hayek to extend her relational account of liberal egalitarianism to financial markets.²¹⁷ She

²¹³ §1.2.2.

²¹⁴ E.g., Hayek 1982, p.125.

²¹⁵ §2.1.

²¹⁶ Hayek 1982.

²¹⁷ Anderson 2007.

restates Hayek's worries about efficiency. She also adds two further objections to financial regulation. First, she invokes a consideration of liberal neutrality. Questions of personal responsibility have a role to play in criminal law, she argues, but are entirely out of place where distributive justice is concerned. Liberal freedom, she argues, requires allowing individuals to make their life plans based on what they perceive to be acceptable risks. What risks individuals want to take should be treated as part of their respective conceptions of the good. She also argues that to interfere in the choices that individuals make would be paternalistic. The state should not pass judgment on whether individual choices are sufficiently prudent. For better or worse, it should be up to individuals to make mistakes.

We share an interest in letting people act on their own judgments of how to use their knowledge and what risks to take. We do not share an interest in having individuals make market choices according to social judgments of the most prudent choice that can be reasonably expected of them. [...] Any attempt to set standards of deserving conduct for different individuals or groups would [...] attract moralizing busybodies to whatever agency was empowered to set such standards.²¹⁸

As already discussed in §1.1.3, Anderson invokes financial instability as a welcome means of redistribution.²¹⁹ As she argues:

While the most advantaged may find it distressing to be subject to market risks that threaten to reduce them to merely middling status, there is no public interest in securing them against such risks.²²⁰

For Anderson, justice requires an appropriate minimum level of income and wealth, a maximum at the top, and measures to ensure that most individuals tend to be somewhere in the middle.²²¹ Political institutions should not intervene in financial markets if income and wealth stay within these bounds. Political institutions should therefore only seek to prevent financial instability where this would help to ensure that these outcome constraints are met. But, it is difficult to see that regulating financial instability can be justified in this way.

²¹⁸ *Idem*, p. 249.

²¹⁹ §1.1.3.

²²⁰ *Idem*, p. 267.

²²¹ *Idem*, pp. 265f.

Financial markets determine what individuals can do with their levels of income and wealth, but it is entirely possible to realise a preferred allocation of income and wealth without securing financial stability.

Anderson and Hayek are correct when they argue that a capitalist economy cannot ensure that individual outcomes are based on moral desert. As I explained in §2.1, the ability of political institutions to ensure that outcomes of capitalist coordination are fair is limited. A capitalist economy leaves coordination of the economy to private authority. As a consequence, political institutions often cannot effectively control outcomes or even know everything that happens in the economy. Different individuals can do exactly the same thing, but one person might lose out while another benefits. This may be unfair from a moral perspective, but it does not necessarily make the outcomes unjust. Recognizing these limitations, the liberal egalitarian focus on institutions constrains public involvement in financial markets. It is up to individuals to make their life plans within the context of the rules that govern the private sphere.²²²

Still, Anderson and Hayek condone a harsh treatment of individuals in financial markets. For them, there is no objection of justice to a financial system that routinely wipes out the pension savings of the well-to-do. Those with middle-class incomes have no claims to protection unless they drop into poverty. Anderson and Hayek's considerations of economic justice, then, most prominently concern very low-wealth individuals, but their claims are more or less independent of conditions in financial markets.

Does this rejection of financial market regulation follow from the liberal egalitarian conception of justice? Not really. The liberal egalitarian recognizes a crucial role for demands of distributive justice in realising both fair outcomes and fair procedures. It is an open question how strict these demands should be. Whether the liberal egalitarian should endorse regulation of financial markets depends on the specifics of their principles of justice. Hayek and Anderson assign no role to financial markets, because they think about outcomes narrowly in terms of income and wealth. They also do not recognize any role for fair procedures in generating outcomes beyond a legal notion of consent. Their specific view

²²² §1.2.2.

precludes them from finding any objection to credit cycles, but such complacency does not follow from a foundational commitment to freedom and equality.

For a liberal egalitarian, the crucial question is whether financial institutions succeed in treating individuals as equals with regard to their ability to pursue a particular conception of the good. But life planning in a capitalist society generally involves more than Anderson and Hayek suppose, as §§2 and 3 have already shown. First, to pursue their conception of the good, individuals should not just be able to buy individual goods and services, they should also be able to make life plans in which revenues and expenditures line up in the right way over time. This requires making life plans and having the information to do so. The fairness of institutions should be evaluated taking this dimension into account. Second, the success of life plans depends on the quality of options for credit and saving that are available to individuals. In focusing on income and wealth, Anderson and Hayek fail to consider the issue of intertemporal fairness. Treating individuals as equals requires taking the institutional conditions of life planning seriously.

In §5.3 I will show that taking these dimensions into account allows us to see what is objectionable about financial instability. This will complete my argument for the claim that Anderson and Hayek have a much too narrow conception of the role of political institutions in financial markets.

5.2.2 Biohazards

James compares unregulated financial markets to a new, powerful but highly dangerous bio-agent.²²³ In good times, the bio-agent contributes to economic prosperity, but from time to time it breaks loose. When this happens, the bio-agent makes large parts of the population unemployed, it raises public debt, and the government reduces its expenditures, in some cases leading to a decade of lost economic growth. Its contagious effects reach across borders. While for decades the bio-agent was under control, deregulation has led to increased use and thereby increasingly common outbreaks. James concludes, I think correctly, that there would be good reasons to ban the new bio-agent.

²²³ James 2012, pp. 253f.

James is right to claim that unregulated financial markets are in at least some ways similar to a dangerous bio-agent. Consider the following overview of the direct and indirect social costs of the Global Financial Crisis of 2007 and 2008. The direct costs are those of the panic itself. The costs of the bailouts are subject to considerable debate.²²⁴ Between October 2008 and October 2012, EU member states provided a total of €1.6 trillion (12.8% of annual GDP) in state aid to the European banking sector.²²⁵ But, on reflection, the bailouts did not cost €1.6 trillion. The largest part of the costs went to state guarantees (€ 1.1 trillion), which were either spent on valuable financial assets or used for offering guarantees that went unused.²²⁶ Even if the costs for countries like Ireland (25% of GDP) and Greece (14% of GDP) were dramatic, recent estimates put the average cost of financial assistance measures in the EU at 4.8% and 5.1% of annual GDP.²²⁷ In the US, aid to the banking sector as part of the Troubled Assets Relief Program of \$700 billion is now estimated to be as low as \$34.5 billion (or, 0.2% of GDP).²²⁸

The direct costs of the 2007-8 Crisis were high and their distribution was particularly unfair. Governments were forced to act as they did because of the systemic consequences of the crisis. The shareholders and managements of the institutions that received support had benefited most from risks taken in the run-up to the crisis but walked away from the costs. This goes against the liberal demand that risks are born by those who take them. It is obviously unfair when this principle does not apply to some of the most lucrative firms in the capitalist private sphere.

The most sizable costs of a banking crisis, though, are not those of the panic, but of the resulting depression. Just as the increase of credit leads to an expansion of employment and output, the contraction of credit leads to a long and deep contraction of economic activity. Economic agents become pessimistic about the expected revenues from economic activities. Financial institutions are less willing to provide credit. Firms have difficulty rolling over existing financial obligations, leading them to lower investments and fire employees, and

²²⁴ Calomiris and Kahn 2015.

²²⁵ European Commission 2012.

²²⁶ Idem.

²²⁷ ECB 2015 Maurer & Grussenmeyer 2015.

²²⁸ US Treasury 2016.

firms that would have been fine otherwise go out of business. House prices may drop to levels far below the original purchasing price. As a consequence, households need to substantially lower their expenditures on consumption, thereby further depressing economic activity. For these reasons, recessions after a banking crisis are longer and more severe than recessions that are not triggered by a banking crisis. These recessions last an average of five years as opposed to two without a banking crisis, causing much more severe damage to the economy.²²⁹ Ten years after the panic, GDP remains fifteen percent below its previous trend.²³⁰ In the first four years post-panic, employment drops dramatically and can take a decade to recover.²³¹ In the three years after a banking crisis, government debt rises on average by 86%, mostly caused by the fiscal costs of the recession.²³²

Drawing on the bio-agent analogy, James argues for prohibiting international financial flows and returning to the strict regulation of the 1950s and 60s. By making regulation sufficiently tight, political institutions should ensure financial stability and thereby prevent the huge costs of financial crises. James' argument articulates an intuitive response to the phenomenon of financial crises. The costs are so severe that a society that regularly exposes itself to them must be doing something wrong. The simplicity of his account raises the question whether we really need yet another account of financial instability.

The reason why I think we do is that James' account does not tell us very much about what reforms are needed. He points to the Bretton Woods system of the 1950s and 60s as a blueprint but this is not a model that we can simply copy today. The system emerged in specific historical circumstances, at a time when gold was still the basis of the monetary system. It is also unclear whether its design could ever be made sufficiently robust. Indeed, it was subject to constant erosion from regulatory arbitrage.²³³ But even if Bretton Woods worked in the 1960s, the world economy, in particular the financial system, has changed dramatically since. Then, a small elite ran the banking sector and provided business credit to

²²⁹ Jorda, Schularick, & Taylor 2013.

²³⁰ Cerra & Saxena 2008.

²³¹ Idem.

²³² Reinhart and Rogoff 2009, p. 142.

²³³ Helleiner 1996.

a small circle of acquaintances, friends, and often, family members.²³⁴ Today, large universal banks span the globe and the focus of their business model is the provision of mortgages.²³⁵

To determine what reforms are needed, a liberal egalitarian needs to say more about the proper relationship between the public and the private spheres. In making their economic decisions, individuals make choices that expose them to risks, such as house prices going down, but also to benefits, such as when house prices go up. Whether individuals are vulnerable to financial instability depends crucially on their choices. Working as a civil servant with a long-term contract and saving money in the bank will make life plans more or less robust to financial circumstances. If the life plans of individuals are vulnerable to financial instability, this is at least in part due to their own choices. James' account does not come with a normative account of the relation between private and public authority. Nor does it have anything to say about the role of life choices in the financial risk that individuals face.

In deciding what financial contracts individuals are allowed access to, there are distributive choices to be made. Faced with the risks of financial instability, political institutions can either prevent individuals from entering into contracts, offset losses when these materialise, or decide to expose individuals to the risks they take. Following Hayek, opponents of regulation have argued that reform should aim to levy the costs of financial instability directly on those who voluntarily expose themselves to such risks. This is meant to incentivize economic agents to do better in deciding where to invest, thereby preventing future crises. There is a wide range of reforms that would reduce financial instability, but which to choose depends on what outcomes are fair to individuals. I now turn to outlining an account of financial instability that can meet these demands.

5.3 Fair risk

In this section I propose a new account of financial instability that focuses on its impact on individual life planning. I argue that financial instability is objectionable for two reasons. First, it hinders the ability of political institutions to realise a fair distribution of income,

²³⁴ Heemskerk & Fennema 2008 for the Dutch banking system and Chu & Davis 2016 for the US.

²³⁵ Jorda, Schularick, & Taylor 2013.

credit, and savings. Second, financial instability undermines the epistemic position of individuals in making life plans.

In §5.3.1 I explain in what sense financial instability undermines a fair distribution of income, credit, and savings. I then turn to the role of voluntary choice in life plans. In §5.3.2 I introduce the concept of an optimal life plan and show that whether or not individuals can adequately plan their lives is crucially determined by the design of institutions. In §5.3.3 I argue for treating epistemic positions as a matter of distributive justice. In §5.3.4 I explain why financial instability is objectionable in terms of its impact on the epistemic position of individuals. I end by contrasting my account with a luck egalitarian account put forward by John Linarelli.

5.3.1 Financial instability and a fair distribution

Financial instability has a wide range of consequences for individuals. To decide when such consequences raise an issue of distributive justice, consider again how Rawls understands the relation between private and public authority. In his account, the role of political institutions ends when the major social and political institutions meet demands of distributive justice. In this sense, the demands of justice determine a ‘social division of responsibility’.²³⁶ As Rawls formulates this idea,

society, the citizens as a collective body, accepts the responsibility for maintaining the equal basic liberties and fair equality of opportunity, and for providing a fair share of the other primary goods for everyone within this framework, while citizens (as individuals) and associations accept the responsibility for revising and adjusting their ends and aspirations in view of the all-purpose means they can expect, given their present and foreseeable situation.²³⁷

Collective responsibility entails organising the private sphere so that procedures and outcomes are fair. The question we should ask is whether a financial system which is prone to financial instability meets these standards.

²³⁶ Rawls [1982] 1999b, p. 371. For more detailed discussion, Scheffler 2003; Blake & Risse 2008.

²³⁷ Idem.

In this section I will focus on outcomes. The distributive effects of financial instability are often mediated by the design of various political and social institutions. It may therefore not always be clear that preventing financial instability is the best way to realise fair outcomes. In some cases, as Anderson is right to stress, losses in financial markets can contribute to realising a more equal distribution of wealth. Nevertheless, there are good reasons against complacency concerning financial instability. The panic and the crash that follows it undermine a fair distribution of income, credit, and savings.

First, concerning income. Even if political institutions have policy tools to offset unfair distributive outcomes, their ability to do so is limited. Because banking crises have a wide range of distributive effects, political institutions will not be able to offset all. Second, a banking crisis impacts the lives of some citizens more deeply than the lives of others. While households and firms try to pay down debt, demand in the economy is low, the effects of which are different between sectors.²³⁸ Third, a banking crisis can force governments to reduce expenditures or, at least, create the political circumstances for enacting such policies.²³⁹ Financial instability thereby undermines the ability of political institutions to secure just outcomes. The effects of cutbacks tend to fall disproportionately on those who are dependent on public provision of education, healthcare and other public services. These consequences are not in any obvious way related to prior choices of individuals. In fact, those who are vulnerable are often far removed from the financial sector where the crisis originates. The impact of banking crises in advanced economies is not limited to national borders, but also affects trading partners including those in developing countries.²⁴⁰

Second, options for credit and savings, which, as I have argued in §3, are a constitutive part of any fair distribution of money. It is unavoidable that financial instability impacts options for savings and credit. In a capitalist economy, money tends to flow towards the top of the wealth distribution and banking crises exacerbate these tendencies. First, the effects of a banking crisis on real estate prices impact those with middle incomes, who often keep an important part of their savings in real estate. Consider again the unlucky John who has paid down 15% of his

²³⁸ Mian and Sufi 2015.

²³⁹ Blyth 2013.

²⁴⁰ Massa, Keane and Kennan 2012.

mortgage of £200,000 on a house worth £200,000.²⁴¹ If the recession now reduces the value of his house by 15%, all his savings will be wiped out. Stocks and bonds, which are mostly owned by high-wealth individuals, recover relatively quickly. A banking crisis also leads to a reduced availability of options for credit. This contraction again disproportionately affects those with low income and limited collateral.²⁴²

Financial instability also strikes at those who are quite well-off. It is these effects that Anderson describes as contributing to rather than undermining justice. But such a perspective fails to articulate a sense in which even the rich will have reason to complain when they lose money through unforeseeable systemic events. An egalitarian should not simply disregard such objections. Even if the redistributions thereby enacted are valued for contributing to a more equal distribution of economic means, an adequate understanding of the moral issues requires recognizing that redistribution through financial crises is less fair than redistribution through a well-functioning tax system. Articulating the issues at stake requires consideration of how distributive outcomes come about. This is the topic to which I now turn.

5.3.2 Subjective and objective life plans

Financial instability undermines the epistemic position from which individuals make their life plans. To explain the idea of an epistemic position, I will now extend the conception of a rational life plan that I introduced in §3.

Liberal egalitarians hold that it is up to individuals to make their life plans while taking institutions as given. In §3.1.1 I briefly touched on the concept of a subjectively rational life plan, which is the plan that does best in realising an individual's conception of the good with the information that they have access to and their cognitive limitations in using that information. Subjectively rational life plans determine what individuals can reasonably be expected to achieve given societal institutions as they are. An objectively rational life plan, in contrast, is the plan that an individual would decide on under conditions of perfect information and in the absence of cognitive limitations. As Rawls, following Sidgwick, formulates this idea:

²⁴¹ Idem.

²⁴² Idem

It is the plan that would be decided upon as the outcome of careful reflection in which the agent reviewed, in the light of all the relevant facts, what it would be like to carry out these plans and thereby ascertained the course of action that would best realize his more fundamental desires.²⁴³

The objectively rational life plan is not a perfect life plan. A perfect life plan would not just involve knowing all the risks one faces before pursuing the plan (ex-ante). It would also involve knowing which risks will materialise (ex-post). The notion of an objectively rational life plan should be understood in terms of ex-ante risks. A job in the flower industry will be less risky than being an entrepreneur. If, ex-post, either life plan fails, it can still have been objectively rational to take that risk.

But even the Olympian standard of objective rationality is very difficult for anyone to meet. Therefore, I will focus on what I refer to as an optimal life plan. If particular plans approximate the ideal of objective rationality sufficiently, there will be no relevant difference between the subjectively and the objectively rational life plan. This is the case when the constitutive assumptions in a subjectively rational life plan are objectively rational.

To explain how a subjectively rational life plan can be optimal without being objectively rational, I will now introduce the idea of a constitutive assumption. Constitutive assumptions are expectations underlying a life plan such that if they turn out to be false, an individual perceives a life plan as having failed. Consider Lydia and her plan to open a coffee bar. She may have expectations regarding the type of coffee she will sell, the colour of the interior of her shop or even her take-home pay. If these expectations are not entirely met, she can still feel that her plan of opening a coffee bar is successful. But, other expectations, such as the minimum level of monthly revenues she will generate, are constitutive of her life plan. If her monthly revenues are much lower than she expects, her bar will go out of business. Taking that risk is up to her in making a subjectively rational life plan, but she cannot entirely control whether her life plan is optimal. If, given available information and her epistemic limitations in thinking about monthly revenues, Lydia would still have taken that risk, then her life plan

²⁴³ Rawls [1971] 1999a, p. 366.

is optimal. An optimal life plan is a subjectively rational life plan whose constitutive assumptions are objectively rational.

The idea of an optimal life plan is formulated at a high level of abstraction, but I believe it is also intuitive. The reader will be able to think of their own examples of plans they would not have made had they been given better information or had better skills to process available information. If these mistakes result directly from faulty institutional choices, this raises issues of distributive justice, or so I will now argue.

5.3.3 Epistemic positions and distribution

Epistemic positions should be thought of as a crucial component of fair procedures for two reasons.

The first reason is that an individual's epistemic position is to some extent involuntary. The subjectively rational life plan is a result of the information that individuals have access to and their cognitive abilities to process that information. Individuals can to some extent influence both. They can seek to ensure that they have enough information. They can also train themselves to be better at using that information. Where individuals can indeed be expected to do so, the consequences of choices are a matter of personal responsibility. But, once individuals have done all that can be expected, their life plans may still be far from optimal. In this case, their subjectively rational life plan is not optimal in that they would have made better plans given a different set of social and political institutions.

The second reason to include consideration of epistemic positions is an analogy. Distributive justice concerns the extent to which individuals are able to pursue their conception of the good. In §2 I have argued that money is an appropriate metric of justice, since it is an important means for (almost) any rational life plan in a capitalist society. The epistemic position of individuals can also be thought of as a means for pursuing a conception of the good. Just as individuals need money for realising their conception of the good, they also need to be able to make plans. A weak epistemic position hinders individuals from pursuing their conception of the good just as lack of money does. The epistemic position of individuals is part of the way in which the basic structure determines the options that are open to them, and how likely their life plans are to succeed given their cognitive capacities and reasonable

effort. Thus the epistemic position of individuals in the context of the basic structure stands in need of justification to citizens just as much as the distribution of money.

This second reason raises an important question. Is it possible to evaluate the epistemic positions generated by the basic structure in a way that fits the requirements of democratic justification outlined in §2?²⁴⁴ This question is particularly pressing because, as I have explained, in a capitalist economy the future is fundamentally uncertain. It is in part this very uncertainty that creates the need for capitalist coordination in the first place.²⁴⁵ How can democratic societies decide on what assumptions are well-founded if the future is unknown?

I will now argue, against Anderson, that even in a capitalist economy, intersubjective comparison of epistemic positions can be sufficiently neutral, objective and controllable. First, neutrality. In weighing risks, individuals evaluate the possible outcomes of pursuing a plan given their estimate of the likelihood of certain outcomes. To evaluate whether it makes sense for individuals to take certain risks given the information they have is to evaluate their life choices, which liberal neutrality precludes. This worry, however, assumes that political institutions need to evaluate whether it makes sense for someone to take a risk to evaluate their epistemic position. To compare epistemic positions, however, one need only assume that it is valuable for individuals to understand the risks they face given their life plans. To know the risks that come with one's assumptions is valuable for pursuing a conception of the good—irrespective of what that particular conception is. Up to the point where an individual is in an epistemic position to make an optimal life plan, a better epistemic position is something that makes every individual better off.

Second, objectivity. To be objective, there should be limited disagreement over the way in which outcomes are measured. Epistemic positions are not easily measured and this may explain in part why philosophers tend not to include them in their accounts of distributive justice. The concept of an optimal life plan is counterfactual: It depends on what individuals would have done in more favourable epistemic circumstances. Moreover, the notion of a subjectively rational life plan that informs it is moralised: What is subjectively rational depends on what individuals can be expected to know rather than what they actually know.

²⁴⁴ On the demand of democratic justification, §2.2.

²⁴⁵ §2.1.5.

Even if it will be highly debatable to what extent an epistemic position is optimal, a focus on the basic structure will offset at least some worries about objectivity. To defend the claim that institutions undermine the epistemic position of individuals, the evidence must be strong. The evidence, however, does not need to concern particular individuals and the choices that they would have made with more information. Rather, the evidence must merely show that the basic structure has properties that make non-optimal epistemic positions more likely. This, by itself, would raise an objection of justice. I will argue that this is indeed the case for financial instability.

Third, controllability. For epistemic positions to feature in the evaluation of the basic structure, they must be something that political institutions can effectively control. Again, the decentralised coordination of a capitalist economy limits direct control over the epistemic conditions in which individuals sign contracts. Political institutions themselves have only limited information about economic circumstances. Also, their information about what individuals know, let alone what they would have done with more information, will be even more limited. Again, moving the focus to the basic structure takes away some of these worries. The basic structure does not need to ensure that life plans are optimal. The liberal egalitarian leaves it to individuals to ensure that life plans are subjectively rational. The basic structure need merely be such that the relevant information about risks is available to individuals and can be drawn on when they make their plans. What matters is whether epistemic positions will be undermined by the design of social and political institutions, even if it is not clear where or when or whose. This is something that political institutions can at least sometimes do.

5.3.4 Epistemic position and financial instability

So, in what way does financial instability undermine the epistemic position of individuals and how does this raise an issue of distributive justice?

The institutional conditions that determine whether subjectively rational life plans are optimal are part of the basic structure. If a hybrid monetary constitution creates benefits for some while undermining the ability of others to make optimal life plans, this raises an objection of justice. The question is whether financial instability raises such an objection that can be formulated while meeting the demands of neutrality, objectivity and controllability. I now argue that this is the case.

The core of the Minsky hypothesis is that before banking crises, societal risk perceptions are too optimistic. The reason that individuals take on high debt levels is that they and the banking system perceive these debt levels to be sustainable given the economic environment. In the period preceding a banking crisis, there is a shift in what counts as a subjectively rational life plan. This makes it less likely that life plans are optimal.

Consider two ways in which what life plans individuals consider prudent shifts. First, the information on risks that is available to average individuals becomes less adequate. Risk builds up in new financial products and less regulated corners of the financial system. Although some hedge fund managers foresaw the crash of the subprime mortgage market, many in the financial sector (including regulators) did not.²⁴⁶ Where even finance professionals are not able to acquire the relevant information, it is difficult to see how ordinary citizens could. Second, individuals become too willing to rely on available information. Individuals face cognitive constraints in making their financial plans. Therefore, good life planning requires deciding what information to assume as given and what to question. In a period of financial stability, information regarding financial risks is increasingly perceived to be reliable. Stability takes away reasons for investing energy in gathering information before taking out financial products. The incentive to develop financial literacy and exercise vigilance where it concerns providers of financial services goes down. In sum, financial instability undermines epistemic positions by making the risks of financial events that invalidate constitutive assumptions appear smaller than they are.

Through its focus on the basic structure, my account meets the demands of neutrality, objectivity and controllability. Financial instability is unfair because it undermines epistemic positions, the value of which is not dependent on any particular conception of the good. It is possible to think about the effects of financial instability on a systemic level without considering individual cases on which there will be more room for disagreement. For the reasons that I have already outlined, the fact that financial instability undermines the epistemic position of at least some individuals is beyond reasonable doubt. Finally, financial instability is something that political institutions can control. The design of the basic structure

²⁴⁶ Lewis 2015.

impacts the likelihood of financial instability and these structures are under the control of political institutions.

Compare my account of financial instability to an alternative account put forward by John Linarelli, which also assigns an important role to choice. For Linarelli, financial instability produces unfair outcomes since individuals do not freely choose to take the risk of systematic financial shocks.²⁴⁷ In formulating his account, Linarelli draws on the work of Ronald Dworkin to make a distinction between two kinds of outcomes produced by financial contracts. Outcomes are cases of *option* luck if they result from

how deliberate and calculated gambles turn out—whether someone gains or loses through accepting an isolated risk he or she should have anticipated and might have declined.²⁴⁸

Dworkin contrasts option luck with *brute* luck, which is ‘a matter of how risks fall out that are not in that sense deliberate gambles’.²⁴⁹ According to the luck egalitarian principle, bad outcomes are just when they are a matter of option luck but not if they are a matter of brute luck. For Linarelli, the effects of financial instability are unfair because they are not freely chosen and therefore a matter of brute luck. Consider two objections to this account.

First, even under normal circumstances, financial markets will rarely generate cases of option luck. As explained in §5.1.2, rather than facing conscious gambles, individuals in financial markets face strong uncertainty. In opening coffee bars, taking out mortgages, saving for their pensions, individuals in a capitalist society lack a probability distribution for future outcomes.

Second, the luck egalitarian principle does not meet the demands of objectivity and controllability. If political institutions were to approximate the luck egalitarian principle, they would need to engage in the sort of impossible micromanaging of individual choices against which Anderson and Hayek warn. As I argued in §2.1, where such micromanagement is possible, political institutions can simply achieve efficient coordination through centralized coordination. But, a planned economy would not have financial instability to begin with. My

²⁴⁷ Linarelli 2017.

²⁴⁸ Dworkin 1981, p. 293.

²⁴⁹ *Idem*.

account fits the general conditions of a capitalist economy, while articulating the deficiency of one with insufficiently regulated private money creation.

5.4 Conclusion

I have explained why financial instability is objectionable from a perspective of distributive justice. Financial markets need regulation that prevents the cyclical patterns of manias, panics and crashes that are endemic to societies with unregulated private money creation. Capitalist societies need such regulation to realise a just distribution of money and to secure adequate epistemic positions for individuals to make their life plans. But how far should such regulation go and what does it imply for the future of the hybrid monetary constitution? To what extent should political institutions leave money creation to private authority? This is the question to which I now turn.

6 Incremental abolition

In his *The Public and its Problems*, John Dewey captures the problem of reforming the monetary constitution well. Dewey agrees in spirit with those socialists who are ‘justly impatient with the present economic regime’ and say that ‘industry should be taken out of private hands’. For Dewey, economic activity should serve the common good rather than the interest of ‘financiers and stockbrokers’. But he also adds a caveat, asking whether those who say this

have asked themselves into whose hands industry is to pass? Into those of the public? But, alas, the public has not hands except those of individual human beings. The essential problem is that of transforming the action of such hands so that it will be animated by regard for social ends. There is no magic by which this result can be accomplished.²⁵⁰

Political institutions, Dewey emphasizes, are fallible too. They do not have superhuman powers in gathering knowledge, nor are public officials free from private considerations. It cannot simply be assumed that the common good will be better served just because a decision is made by a political institution. In the final two chapters, I take up the question that Dewey raises in exploring the role of political institutions in governing the financial markets of a capitalist economy. In §7, I turn to the topic of delegation and the role of unelected officials at the central bank in financial market governance. In this chapter, I discuss the reform of existing financial markets and the uncertainty that political institutions face in pursuing such reforms. I consider a range of objections to the existing banking system. These objections lead me to ask whether money creation by private banks should be prohibited, as argued by proponents of so-called Full Reserve Banking, or whether it should merely be better regulated. Rather than endorsing either position, I explore how political institutions should deal with uncertainty regarding the potential benefits and costs of reform proposal. I do three things.

²⁵⁰ Dewey [1927] 1954, p. 82.

First, I conclude my argument for the claim that there are five distinct objections to unregulated private authority over money. In §3 I argued that capitalist coordination of credit and saving privileges the wealthy. In §5 I argued that by leaving money creation to the banking system, economies become vulnerable to Minskyan credit cycles of mania, panic and depression. I restate these objections and argue that unregulated private money creation also exacerbates business cycles, enforces the status quo of unsustainable levels of natural resource use, and leads to an undemocratic centralisation of political power.

Second, I explore what shape reform should take. I start with the first order question of what reform proposal does best in addressing the five objections that I have outlined. Existing Full Reserve Banking (FRB) proposals leave crucial questions unanswered and, in light of their radical nature, are difficult to evaluate. They promise to solve the problem of financial instability, but they raise their own objections and nobody knows whether these can be easily overcome. For now, political institutions should not yet decide for or against banking. I then turn to the second-order question of what political representation should consist in when there is uncertainty about the most effective path of reform. Invoking the spirit of Dewey, I argue that the solution will not be found through passive inquiry. Instead, political institutions, by which I mean national governments, central banks and international institutions like the Basel Committee and the Financial Stability Board, should embark on a project of experimental reform. Rather than aiming for one pre-determined conception of the optimal end-state, reform should itself create an epistemic basis for judging what direction reform should take.

Third, I propose a programme for incremental abolition of banking as the best way forward. Incremental abolition is a social experiment that involves a stepwise reduction of the private authority over money. In this way, the programme explores different ways of regulating the authority over money. By moving in incremental steps, the programme generates an adequate epistemic basis for decision-making while moving the existing financial system onto a fairer, and more stable, sustainable path.

The chapter is structured as follows. In §6.1 I state five objections to unregulated private money creation. In §6.2 I review existing FRB proposals and point out that there is no clear-cut case for or against abolition of private money creation. In §6.3 I argue that in responding to this, political representation requires experiments to create an epistemic basis for judging

what constitutes improvement. In §6.4 I outline my case for incremental abolition of private money creation.

6.1 The case against private money creation

I will now outline five major objections to unregulated private money creation.²⁵¹ By private, I mean that the decision to issue money is left in part to the private authority of individual financial institutions. By unregulated, I mean that their decisions are largely left to the discretion of profit-seeking financial institutions with further rules in place to ensure that money is created with an aim of realising socially beneficial outcomes. Without such further rules, I will now argue, private money increases business cycles (§6.1.1) and creates financial instability (§6.1.2). As I explain in §6.1.3, private money creation is also closely implicated in current unsustainable levels of natural resource use. It also contributes to an unfair distribution of income, options for credit and saving (§6.1.4). Finally, there is an objection from the perspective of political equality to the political power that is concentrated in a large banking sector (§6.1.5).

6.1.1 Macroeconomic stability

Business cycles are cyclical variations of economic output and employment. Under a hybrid monetary constitution, the banking system expands the volume of credit during economic upturns and contracts it during downturns, thereby greatly exacerbating business cycles. As explained in §5.1, the volume of credit issued by banks is itself sensitive to economic dynamics. During periods of economic growth, individuals and firms take out more credit, since they themselves and the banking system are more confident in their ability to repay. This increases expenditures, thereby further stimulating economic activity. Conversely, in a downturn, the banking sector will be more pessimistic in its assessment of the ability of borrowers to repay credit. Central banks are expected to offset these effects by setting interest rates, but in practice they have only limited control over private money creation.

²⁵¹ In Meyer & van 't Klooster (2015), we put forward a set of objections to existing banking sectors with the aim of putting the social purpose of finance on the agenda.

6.1.2 Financial stability

Where macroeconomic stability consists in fluctuations in real economic activity, financial instability is a matter of financial contracts and the ability of economic agents to repay them.

In §5 I described financial instability in terms of manias, panics and crashes.²⁵² According to the Minsky hypothesis, a period of stability gives rise to overly optimistic estimates of the debt levels that economic agents can sustain. As a consequence, an increasingly large group of individuals and firms take on debt levels that they cannot repay. During a Minsky moment, risk perceptions suddenly turn more pessimistic, thereby causing a financial panic, in which banks face bank runs and investors flee from financial markets. The banking sector plays a crucial role in all three phases of financial instability. It enforces the positive impact of a boom and thereby spurs on the mania and exacerbates the panic that results. In the crash, the contraction of credit makes the economic downturn that follows much more severe.

6.1.3 Ecological sustainability

The global economy is currently using an unsustainable level of natural resources. Hybrid monetary constitutions preserve that status quo. For this reason, calls for the abolition of private money creation are particularly prominent among ecological economists.²⁵³

To get a sense of the challenge ahead, consider CO₂ emissions.²⁵⁴ During the 10,000 years before the Industrial Revolution, atmospheric CO₂ concentrations hovered around 280 parts per million, but currently exceed 400 parts per million. To keep global warming below 2 degrees above pre-industrial levels, as agreed in the Paris climate agreement, CO₂ concentrations cannot exceed 450 parts per million.²⁵⁵ To achieve this, the world economy cannot emit more than 800 billion tons of CO₂, which will be reached in less than twenty years at current emission rates. A sustainable level of CO₂ emission would require emissions

²⁵² Idem.

²⁵³ Daly (2012); Farley et al 2013; Mellon 2010, 2016. For overviews, Dittmer 2015 and Roepke 2017.

²⁵⁴ CO₂ is by far the most important greenhouse gas, but not the only one. I focus here on the reductions of CO₂ required by the IPCC reported in Pachauri et al 2014.

²⁵⁵ Pachauri et al 2014, p. 20.

to drop to 4 billion tons CO₂ per annum around 2050.²⁵⁶ CO₂ emission would need to drop by 4.9% per year in the intervening period for that target to be met.²⁵⁷

To achieve a sustainable level of CO₂ emissions with a growing population and increasing income levels, the world economy has to reduce carbon intensity in production dramatically. In the period between 1990 and 2007, carbon intensity dropped by 0.7% per year. Still, CO₂ emissions grew 2% per year as the effects of this improvement were more than offset by the growth of the world economy. In the coming decades, carbon intensity should drop by 7% per year to meet the IPCC's emission targets, with population and economic output continuing to grow at their current pace.²⁵⁸

Projections of this sort have led ecological economists to champion a shift towards a low growth or even steady-state economy. Ecological economists disagree over whether a steady-state economy could be capitalist and whether it could involve private money creation at all. I cannot do justice to the complexity of these debates here. Nor can I discuss the role of money in either the move to a low growth economy or capitalist industrial transition. Rather, my claim here is that unregulated private money creation is a clear obstacle to both reducing output growth and implementing industrial transition.

First, growth. Although firms could in theory make profits without expanding production, low growth means that repaying loans with interest becomes increasingly difficult for individual firms. Since commercial banks create money to make profits, positive interest rates are a crucial feature of a hybrid monetary constitution. Ecological economists worry that for banks and firms to make profits while households save, economic output needs to increase.²⁵⁹

Second, transition to a low-carbon economy. If economic growth remains stable, making the economy sustainable requires a radical shift to production with a lower carbon-intensity. Meeting the IPCC targets requires an investment during the next 15 years of \$90 trillion in sustainable infrastructure assets such as transport systems, energy systems, water and

²⁵⁶ Pearce 2016.

²⁵⁷ Idem.

²⁵⁸ Jackson 2009.

²⁵⁹ Binswanger 2009; Johnson 2015. For objections, see Cahen-Fourot & Lavoie 2016.

sanitation, and telecommunications.²⁶⁰ Ecological economists argue that making the required shift in investment requires extensive investment.²⁶¹ But banks currently do not play a meaningful role in this transition.²⁶² A recent overview of lending by 37 major commercial banks shows that they provided \$290 billion in funding to fossil fuel companies over a three-year period.²⁶³ In 2012, emissions resulting from the Royal Bank of Scotland's loans to fossil fuel companies and projects were up to 1,200 times the emissions from its own operations (e.g. offices and business travel).²⁶⁴ If credit provision is guided solely by the profit motive, it only tracks ecological sustainability in so far as regulation reduces the profitability of carbon-intensive industrial sectors. In this way, private credit provision is geared at keeping unsustainable industries alive until regulation shifts. Any sudden shift away from these industries will also threaten the stability of the banking sector, thereby creating one more obstacle to an already very challenging transition.²⁶⁵ I conclude that unregulated private authority over money hinders the world economy in making the required ecological transition.

6.1.4 Economic equality

The growth of the financial sector is commonly regarded as a driver of economic inequality. I will now explain how the existing organisation of the financial system obstructs a more equitable distribution of income, options for credit and options for saving.

In §3.3 I argued that private provision of options for credit and saving systematically favours the wealthy. In using wealth as collateral, the wealthy are more likely to receive credit and the interest rates they pay will be lower. Because the costs of screening and diversification do not rise in proportion to the sum of money invested, the rich also have access to better options for credit. This is unfair, because it hinders the less wealthy in pursuing credit-dependent and savings-dependent life plans. Moreover, unequal access to credit and saving has undesirable

²⁶⁰ Bhattacharya, Oppenheim, & Stern 2015.

²⁶¹ Daly 2012; Mellor 2010; 2015; Farley et al 2013.

²⁶² Schücking 2015.

²⁶³ Fossil Fuel Finance Report Card 2017.

²⁶⁴ World Development Movement 2012.

²⁶⁵ Bank of England 2016.

negative effects on the quality of economic projects that are funded. It also exacerbates other economic inequalities generated by capitalist coordination.

I now extend these considerations by bringing in income. Private money creation made the dramatic growth of the financial sector after 1980 possible. Before the 1980s, the education levels and wages of financial sector employees were roughly comparable to those of employees in other industries. But since then the proportion of highly skilled employees in the financial sector has increased sharply. Moreover, financial firms now pay skilled employees significantly more than employees with similar profiles in other sectors.²⁶⁶ Expansion of the financial sector goes hand in hand with higher revenues for shareholders. Because wealth in stocks is concentrated in higher income households, associated dividends and capital gains go mostly to top income shares.²⁶⁷

For these reasons, countries with a larger financial sector tend to have a more unequal distribution of income. The income generated by employees of the financial sector does not ‘trickle down’, nor does a larger financial sector translate into more jobs or production per se. In high-income economies, a larger financial sector actually reduces technological innovation. Comparative studies of industries with different R&D levels suggest that an important cause is the shift of highly-skilled employees into finance: ‘Finance literally bids rocket scientists away from the satellite industry’.²⁶⁸

6.1.5 Political equality

The banking sector of existing capitalist societies tends to consist of a small number of powerful firms. This raises an objection from the perspective of political equality.

The previous objections focused on the relationship between private money creation and liberal freedom. But liberal egalitarians do not just object to economic inequalities. Treating citizens as free and equal also involves political freedom. In this section I am interested in the ideal of political equality. For a liberal egalitarian, political equality should go beyond a merely formal prohibition of laws that hinder certain groups of citizens from taking up

²⁶⁶ Philippon and Reshef 2012; Cournède, Denk & Hoeller 2015.

²⁶⁷ Denk & Cazenave-Lacroutz 2015.

²⁶⁸ Cecchetti and Kharroubi 2012, p. 1; 2015.

positions of power.²⁶⁹ Ideally, citizens should have roughly equal opportunities to influence political decisions.

Although, political and economic equality are distinct, economic inequality easily gives rise to political inequality. Consider first the connection between political equality and wealth. In his argument against welfare state capitalism, Rawls argues that it

permits very large inequalities in the ownership of real property (productive assets and natural resources) so that the control of the economy and much of political life rests in few hands.²⁷⁰

Instead of concentrating ownership of capital in the hands of a few citizens, a just capitalist society must have institutions to ensure wide dispersal of wealth:

[I]nstitutions must, from the outset, put in the hands of citizens generally, and not only of a few, sufficient productive means for them to be fully cooperating members of society on a footing of equality.²⁷¹

This argument against welfare state capitalism is not strong. Indeed, even sympathetic readers question whether welfare state capitalism is indeed incompatible with an equal opportunity to exercise political power.²⁷² As Martin O'Neill argues, it is unclear how political equality would be threatened in a version of welfare state capitalism with effective 'campaign finance reform, public funding of political parties, public provision of forums for political debate, and other measures'.²⁷³

There are, nonetheless, other ways in which economic power gives rise to political power. Existing capitalist societies do not only feature large wealth inequalities. They also have

²⁶⁹ Beitz 1989; Rawls [1971] 1999a. Political equality can be justified for intrinsic reasons (e.g., Christiano 1996) but also for instrumental reasons (Arneson 2003).

²⁷⁰ Rawls 2001, p. 137.

²⁷¹ *Idem*, p. 140.

²⁷² O'Neill 2012; Schweickart 2012; and Vallier 2014.

²⁷³ O'Neill 2012, p. 81.

ownership and control of firms concentrated in the hands of an economic elite within which the banking sector has a central role.²⁷⁴

Charles Lindblom distinguishes two sources of political power of private firms.²⁷⁵ The first is their ability to shape political opinion, which banks are hesitant to use. Instead, they can rely on their structural power in the economy. To achieve economic policy goals, governments need the cooperation of the private sector, which in turn provides the private sector with influence over politics. Banks have structural power as a result of their discretion over credit provision. Moreover, because they are dependent on banks for credit and underwriting of bonds, all large firms have a close relation to one or more banks. Not only does the banking sector of existing capitalist societies have pervasive structural power, it also tends to be dominated by a relatively small number of large banks. In the Eurozone, the five largest banks in a particular country on average make up 48% of the banking sector as measured by assets, while market concentration in the US is 45%.²⁷⁶ In countries such as Greece, the Netherlands, and Malta, the five largest banks make up over 80% of the domestic banking sector.²⁷⁷

6.2 Reform

I have outlined five distinct objections to unregulated private money creation. These objections have led a wide range of authors to argue for fundamental reform of the existing banking system. But saying that there are objections to the status quo is not the same as proposing a better alternative. In this section I discuss a radical reform proposal that has received wide support. Full Reserve Banking (FRB) involves the abolition of private money creation entirely. Like universal basic income, it is a radical reform proposal that has both left-wing and right-wing adherents. Classic FRB proposals leave credit provision entirely to private non-bank financial institutions. Public FRB proposals supplement private credit through public money creation. I will argue against Classic FRB but also show that there is

²⁷⁴ E.g., Heemskerk & Fennema 2008; Chu & Davis 2016.

²⁷⁵ Lindblom 1977.

²⁷⁶ European Central Bank 2016 on Europe; Van der Pool 2014 on the US.

²⁷⁷ European Central Bank 2016.

no clear-cut case either for or against reforming the monetary constitution in line with Public FRB proposals.

In §6.2.1 I explain the main characteristics of FRB. I then turn to a critical examination by discussing whether FRB proposals are feasible (§6.2.2). I also discuss potential advantages and disadvantages of Classic FRB (§6.2.3) and Public FRB (§6.2.4). In §6.2.5 I discuss what I take to be the weightiest objection against FRB, which is that merely regulating rather than entirely abolishing private money creation might also achieve the same goals.

6.2.1 An alternative to hybridity

As explained in §4, in the act of granting credit, banks create money, which is held in bank deposits until its owners use it to repay a loan. The deposits created in issuing credit allow the banking system to fund its loans. The bank represented in Figure 6.1 funds its portfolio of long-maturity illiquid credit almost entirely with debt. It owns some central bank deposits for transaction purposes, but will seek to minimize its holdings in favour of higher-yielding assets. It is up to banks to decide what volume of credit-provision will be profitable and issue deposits accordingly.

Bank	
Central bank deposit (2%)	Deposits and debt (99.2%)
Credit to households and firm (98%)	Equity (0.08%)

Figure 6.1 – Fractional Reserve Banking

Full reserve bankers believe that the business of issuing credit and that of providing means of payment are to be kept entirely separate.²⁷⁸ There are different ways in which this might be done. A classic proposal is the so-called Chicago Plan from the 1930s.²⁷⁹ This proposal,

²⁷⁸ More detailed overviews of alternative proposals: Dittmet 2014; Dixhoorn 2015; Laina 2015.

²⁷⁹ E.g. Fisher 1936. See Laina (2015) for a historical account of FRB proposals going back as far as David Ricardo and the debates over the 1844 Bank Act.

which was supported by prominent economists such as Irving Fisher, Milton Friedman and Frank Knight, would require banks to hold central bank deposits for the full value of their outstanding liabilities. From the perspective of liquidity constraints discussed in §4.3, this would mean that they face a 100% reserve requirement (See Figure 6.2). To issue credit, financial institutions must either hold central bank reserves or use their own capital. The position is known as Full Reserve Banking because banks would, figuratively speaking, have the money to back the credit money in their vaults. Rather than issuing new money, their economic role would be limited to providing payment services.²⁸⁰ Because there would be no banks as they exist today, Full Reserve Banking is something of a misnomer. No private financial institution would be allowed to give out credit by issuing money. In this sense, FRB abolishes banking.

Payment intermediary	
Central bank deposit (99.2%)	Deposits and debt (99.2%)
Illiquid assets (99.8%)	Equity (0.08%)

Figure 6.2 – Full Reserve Banking

FRB does not mean the end of private credit provision entirely. Rather, financial institutions can provide credit by borrowing money from others or putting up capital provided by its owners. Those who entrust their savings to such an institution take risks. In contrast to the existing banking system where customers of banks are protected by deposit insurance, customers lose their money when a credit-providing financial institution defaults. Proponents of FRB hope that the need for regulation of financial markets will be limited. The central bank circulates a very limited amount of money that is to serve as a means of payment. Otherwise, there is no direct political involvement in the form of deposits insurance, central

²⁸⁰ Alternatively, some proponents of FRB give up on private credit money entirely. In which case, payments are to be settled directly by public forms of money. The role of financial institutions is reduced to sending out orders to transact payments for their customers. These proposals have very similar consequences for the services that financial institutions can offer.

bank credit or prudential regulation. I now turn to a critical evaluation of the proposed advantages and disadvantages of FRB.

6.2.2 Implementing FRB

A somewhat technical but serious objection to the FRB proposal concerns its feasibility. The core of the proposal is a neat distinction between money, which is provided by payment intermediaries, and credit, which is not. There is no obvious way to draw the line and effectively enforce the boundary.²⁸¹

From an accounting perspective, the deposit issued by commercial banks is a very short-term loan of a customer to the bank. It is functionally equivalent to the settlement asset because it has a very short maturity. The customer can decide to discontinue the loan at any point in time and to ask either for payment in cash or for the bank to settle the payment. To abolish banking, laws must prohibit financial institutions from funding their asset portfolio by issuing deposits which are functionally equivalent in this sense.²⁸²

Realising FRB requires a lot more regulation than merely raising reserve requirements to 100%. The regulation should concern financial transactions, not types of institutions. If rules only apply to commercial banks, market competition will drive financial institutions to provide shadow banking services. History shows that these unregulated banking practices acquire systemic importance so that governments and central banks are reluctantly forced to intervene in the event of a crisis.²⁸³ Even if funding loans with credit is effectively prohibited, both equity and insurance contracts can be used to devise deposit-like financial contracts. Properly enforcing a 100% reserve requirement requires strict regulation of all these different types of financial transactions.

Therefore, even if FRB is possible, it is debatable whether such a policy would be the most desirable way to deal with financial instability. I will now distinguish two versions of the proposal.

²⁸¹ Goodhart & Jensen 2015, pp. 23-24; Fontana & Sawyer 2016, pp. 1341-1342.

²⁸² See §4.2.2.

²⁸³ See §5.1.

6.2.3 *Classic FRB*

Classic FRB proposals leave private credit provision entirely to those who decide to allocate some of their savings to riskier loans.²⁸⁴ Under both Classic and Public FRB, private financial institutions provide credit with funds that they borrow from creditors or that is put up by their owners. Classic FRB is distinct from Public FRB in that it does not supplement private credit with public credit. As a consequence, the level of credit is, even more than in the current system, dependent on private decisions to allocate savings to credit provision. If lenders make losses, only those who voluntarily decide to take risks will face losses in the event of a crisis.

Drawing on §6.1 of this chapter, I distinguish three arguments in favour of Classic FRB. First, macroeconomic stability. Under FRB, the financial system can no longer simply issue the money needed for extending more credit. Rather, financial institutions need to attract depositors prior to granting loans. Customers will also be more reluctant to provide that money, since risks are passed on to depositors. Therefore, at least in theory, financial institutions are more constrained in the volume of credit they can issue. This removes the peaks from business cycles.

Second, financial stability. Proponents of FRB argue that because individual savers will now have a real risk of losing money, credit provision will be more prudent. The mania will not get under way since behind every decision to provide credit stands someone taking risk with their own money. FRB also helps prevent and ameliorate panics. Financial institutions no longer risk a bank run, since they always have the required cash on hand. There can also be no contagious fire sales and other systemic consequences of individual defaults. In this way, FRB promises to ensure that a panic does not occur and, if it does, that it does not require public intervention.

Third, ecological sustainability. FRB reduces the overall level of credit available in the economy and removes the incentives for output growth that result from private money creation. Therefore, it is thought to be a particularly suitable model for banking in a sustainable steady-state economy.

²⁸⁴ Authors that fit this broad description are Fisher 1936; Kumhof & Benes 2012; McMillan 2015.

While Classic FRB protects societies against banking crises and other ills associated with unconstrained private money creation, there are four important objections to it. First, there is a concern regarding the conception of risk-taking. In Classic FRB, credit-providing institutions are to pass on all the risks to their customers. If individuals save more of their money in this way, they will face more risk. But, as I argued in §5, individuals should not be exposed to risks while in an inadequate epistemic position. High-risk credit should only be provided with considerable warning signs, if not actively discouraged.

Warning individuals against risky options for saving, however, will exacerbate the second problem. Even if some individuals are willing to take risks, the aggregate levels of credit available under Classic FRB may be much lower.²⁸⁵ In a hybrid monetary constitution, provision of credit is in the hands of a banking system that extends credit guided by the profit motive. Financial institutions fund credit through deposits held by customers for payment purposes. In Classic Full Reserve Banking, financial institutions can only fund credit from savings that individuals allocate to risk-taking. It is likely that less credit will be available, although it is difficult to say just how much. Low levels of credit may be desirable from the perspective of ecological sustainability, but this would also reduce overall demand in the economy, and thereby employment and economic output. In a pessimistic prognosis, the institution of FRB would cause a chronic state of economic depression.

A third objection to Classic FRB is that credit provision would not necessarily be more reliable or less cyclical. Rather than making private credit dependent on perceived profitability, FRB makes it dependent on the willingness of individuals to risk their private savings. That willingness, however, is also vulnerable to economic sentiment.

Finally, by leaving credit provision still largely in private hands, the ecological benefits of this Classic FRB are questionable. If it has any ecological benefits, these result from the overall reduction of economic output. Remaining economic activity need not have a lower carbon intensity.

²⁸⁵ Diamond & Rajan 2001; Kregel 2012; Fontana & Sawyer 2016; Dow et al 2016. Kumhof & Benes (2012, p. 5) point to lower private and public debt levels as a feature, rather than a bug of FRB.

6.2.4 Public FRB

Consider now Public FRB proposals. These proposals are distinct from Classic FRB in supplementing private credit provision with public credit.²⁸⁶ Like Classic FRB, Public FRB assigns authority to issue money entirely to public authority. In Classic FRB, this means that all credit comes from non-bank private financial institutions. The Public FRB proposal does not prohibit private provision of credit. Like Classic FRB, individuals are free to make risky investments as they see fit. But, in contrast to Classic FRB, the state steps in when private credit becomes too scarce.

In Public FRB, all money creation is subject to public authority. A public institution would decide on the purposes for which money is used. The British think-tank *Positive Money*, for example, proposes the institution of a public Money Creation Committee. This committee is to decide on money creation with an eye to maintaining macroeconomic stability. The newly created money would be used for government expenditures as well as for business credit.²⁸⁷

The crucial feature of Public FRB is that the profit motive would not guide the public provision of credit. Instead, credit provision would be public in the sense that it is (i) decided in the context of political institutions; (ii) where the goal is to ensure outcomes that are fair to all individuals concerned; and therefore (iii) decisions are to be justified in terms of a conception of justice.²⁸⁸ Credit provision would be a public decision, just as the provision of education and healthcare often is.

The Public FRB proposal seems to go some way in addressing the objections to Classic FRB. Public institutions can do more to realise fair options for credit and saving than both classic FRB and hybridity. Because public institutions do not face market competition, they would not be forced to lower credit standards during a mania. Public institutions are, of course, not entirely immune to fads and manias, but they would not have the specific incentives that

²⁸⁶ Authors that fit this broad description include Huber & Robertson 2000; Mellor 2010;2016; Jackson & Dyson 2012; Daly 2013; Farley et al 2013; Sigurjónsson 2015; Huber 2016.

²⁸⁷ Jackson & Dyson 2012, p. 125.

²⁸⁸ §1.2.4.

caused recent banking crises.²⁸⁹ Public credit provision can direct investment to more ecologically sustainable options and ensure more economic distributions.

Public provision of credit is, of course, feasible but it is currently an open question whether Public FRB would work well and what its economic costs would be. Competitive financial markets incentivise individual financial institutions to do risk assessment well.²⁹⁰ A system of public credit provision would potentially face the problems of central coordination already discussed in §2. Bureaucratic incentives and the inability to collect information may reduce economic efficiency. If credit is systematically misallocated, this will be unfair to individuals who are thereby denied possible life plans. Credit misallocation will also reduce the ability and willingness of entrepreneurs to use their situated knowledge to realise an efficient use of resources. Instead, they could be tempted to focus their energy on lobbying public credit providers. Moreover, a small public elite might centralise power, just like the 1950s banking elites of the Bretton Woods era. In Dewey's words cited in the introduction, there is no magic way to bring about that the hands of the public are animated by social ends.

My aim here is not to argue decisively against or in favour of Public FRB. The crucial observation to make is that at this point in time we do not know whether extensive public control over credit provision would work.

6.2.5 Regulated Hybridity

Even if there are no knock-down objections to either Classic or Public FRB, we should still ask whether less far-reaching measures can achieve the same goals. In this section I explore what I call Regulated Hybridity, which retains private credit provision, but uses banking regulation and other legislative means to secure the public interest.

Before the Global Financial Crisis, microprudential regulation and monetary policy were widely held to provide sufficient public control over the banking system. The Basel I and Basel II agreements assigned a crucial role to capital requirements for imposing solvency constraints on banks. If banks made losses, capital requirements were there to ensure that costs would go to their owners. Monetary policy served to influence the aggregate volume of

²⁸⁹ E.g., Friedman & Schwarz [1963] 2008.

²⁹⁰ §2.1; §3.1.2.

credit, as it does to this day. As explained in §4.3, the central bank sets interest rates in interbank markets and can thereby influence the volume of credit that banks can profitably extend. Through collateral eligibility, the central bank can loosen and tighten the liquidity constraints that banks face.

Today, few believe that microprudential regulation and monetary policy provide sufficient public control. Microprudential regulation has proven insufficient for economic stability. The crisis also showed that monetary policy is a comparatively crude tool for macroeconomic stabilisation. Its use in dampening credit causes unemployment and depressions.²⁹¹ Its use in stimulating the credit provision causes asset price inflation and increases wealth inequality.²⁹² The use of monetary policy as a means of macroeconomic stabilisation thereby contributes to economic inequality.²⁹³ Because monetary policy targets aggregate levels of employment and output, it is insensitive to considerations of ecological sustainability and the availability of options for credit and saving.

Though pre-crisis control of the banking sector has proven to be inadequate, there are considerable alternatives available to abolition of banking. Banking regulation has already been greatly expanded. Basel III enforces solvency constraints more strictly and also seeks to prevent systemic consequences of bank failures. Financial institutions, in particular those with systemic importance for the wider financial system, are now subject to extensive reporting requirements. The requirements of Basel III and national standards are meant to combine solvency constraints on banks with measures to limit systemic effects if an institution defaults. Systemically important financial institutions are required to develop detailed resolution plans, which are regularly reviewed by regulators.²⁹⁴ Finally, different measures have been taken to make counterparty exposure of financial institutions more transparent.

²⁹¹ Ball 1991; Romer & Romer 2004; Coibion 2012.

²⁹² Claveau, Dietsch & Fontan 2016.

²⁹³ Coibion et al 2012.

²⁹⁴ Dodd-Frank Wall Street Reform and Consumer Protection Act, Section 165(d) in the US; The Bank Recovery and Resolution Directive (2014/59/EU) in the EU.

Still, critics argue that existing measures have not gone far enough.²⁹⁵ Within the wide range of views presented at the 2016 Bank of England conference ‘Financial Reform’, no presenter thought that existing regulation had gone far enough.²⁹⁶ The crucial question here, however, is not whether existing regulation is already enough, but whether regulation of private money creation is sufficient to meet the objections raised in §6.1.

To improve existing regulation, existing tools can be used more effectively and new tools can be added to the toolbox. Capital requirements can be increased substantially beyond their current level. Switzerland has imposed a capital requirement of 19% on its two largest banks.²⁹⁷ In the early twentieth century, capital requirements were often 25% or higher, while the early 19th century also saw 40% or 50% equity.²⁹⁸ Anat Admati and Martin Hellwig, for example, have argued for capital requirements of at least 20%.²⁹⁹ Under the header of macroprudential tools, central banks are currently experimenting with various new ways of steering bank credit.³⁰⁰ More ambitious regulation could simply prohibit the issuance of certain kinds of financial assets, irrespective of the capital held to secure it.³⁰¹

Ecological sustainability and economic equality can also be pursued through regulation and policy. Political institutions can steer credit directly as well as indirectly through subsidies and taxes. Central banks can place more detailed conditions on access to central bank credit. Political institutions can improve the ecological sustainability of investments and the quality of options for credit and saving through regulation and subsidies. A hybrid monetary constitution can even accept a modest role for public provision of credit. Where the market fails to provide a certain good or realise a fair distribution, fiscal policy can step in. All this does not require the abolition of the private banking system.

²⁹⁵ Admati and Helwig 2013; Kane 2013; Admati 2016.

²⁹⁶ Armstrong & Davis 2016.

²⁹⁷ Wolf 2015, p. 217. CoCos are explained in §4.3.3.

²⁹⁸ Admati & Hellwig 2013, p. 30.

²⁹⁹ *Idem*.

³⁰⁰ The ECB has imposed limits on the use of central bank credit for funding mortgages (Alvarez et al 2017). The Bank of England places limits on mortgage provision as part of its macroprudential policy (Prudential Regulatory Authority 2014). For a more ambitious proposal, see Palley 2014.

³⁰¹ But, see Shiller 2012 for an argument in favour of more, rather than less financial innovation.

Again, my aim here is not to argue for any particular proposal. Rather, I aim to highlight the wide range of tools in the public toolbox available within a hybrid monetary constitution that remain unused. For now, proponents of FRB have yet to make the case that Regulated Hybridity cannot address the objections to unregulated money creation. Equally, proponents of Regulated Hybridity have yet to make the case that it is an attractive alternative to Public FRB.

6.3 Social knowledge

It is time to take stock. So far, I have highlighted deficiencies of the hybrid constitution and outlined proposals for reform, but emphasised that no option is clearly superior. Both Regulated Hybridity and Public FRB promise to address the objections to unregulated money creation outlined in §6.1. Rather than arguing for any of these options, §6.4 will propose a political programme for social experiment in reform. I will refer to this programme as *incremental abolition*. Before this, I take a step back and ask what to make of lack of knowledge from a normative perspective. How can political institutions meet the demand of public justification in the face of pervasive uncertainty? A prominent theme in democratic theory is the epistemic role of democratic systems. Democratic institutions, so philosophers argue, are particularly effective in dealing with deliberation and decision-making on societal problems on which there is widespread disagreement.³⁰² In this section I extend these discussions by discussing inquiry and experimentation as forms of political representation that are adequate for dealing with uncertainty. In facing the task of regulating capitalist institutions, political institutions often lack evidence regarding the best policy proposal. I argue that in these circumstances a crucial role goes to political institutions in generating the evidence needed through policy experiments.

In §6.3.1 I review the existing gaps in social knowledge on the way in which banking regulation will impact economic outcomes. In §6.3.2 I discuss the potential for extending our knowledge through ensuring that a wide range of perspectives and historical information on the design of financial systems is available. In §6.3.3 I discuss the potential for political institutions to generate the evidence they need through experimentation.

³⁰² Estlund 2009; Peter 2016.

6.3.1 *The unknown*

The experience of the Global Financial Crisis has made it clear that significant reform of the banking sector is needed. As private money creation is at the core of the build-up of unsustainable credit levels, it is here that we should seek the solution. But it is fair to say that there is no agreement on how to go about this. Proponents of alternative proposals do not primarily disagree over the moral evaluation of alternative outcomes, but simply disagree on the facts. Both bad and good outcomes might result from all three proposals (see Figure 6.3 for an overview of §6.2).

	Bad outcomes	Good outcomes
Regulated Hybridity	Financial and macroeconomic instability; ecological collapse; pervasive economic inequality.	Efficient and fair credit provision, financial and macroeconomic stability, economic and political equality, meeting IPCC targets.
Classic FRB	Insufficient fair options for credit and saving; pervasive economic inequality.	Prudent credit and fair distribution of losses; financial and macroeconomic stability.
Public FRB	Pervasive unfair and inefficient credit provision.	Efficient and fair credit provision, financial and macroeconomic stability, economic and political equality, meeting IPCC targets.

Figure 6.3 – Good and bad outcomes of banking reform

An important obstacle to agreement is what I refer to as ‘wild’ counterfactuals. In response to empirical arguments that are based on the existing hybrid monetary constitution, proponents of reform can almost always argue that considerations would not hold in a thoroughly reformed system. Such counterfactual claims are wild because they assume that economic agents would make fundamentally different decisions in an imagined social order. It is difficult to see what sort of evidence an interlocutor can produce to counter such claims. Because no recent historical precedent exists, empirical evidence cannot settle the issue.

Accordingly, the debate gets stuck in speculation over the functioning of an entirely different social order.

There is a paucity of evidence and a wide range of proposals that one can reasonably favour. We do not know whether the profit motive is the best way to incentivise fair credit assessment. Nor can we say what fads and manias public institutions might be subject to. It is simply unclear whether a largely public provision of credit can effectively supplant the multifarious individual commercial decisions taken by the current banking system. Even if all were to agree on the relevant demands of distributive justice, there would still be pervasive disagreement over how to realise them.

6.3.2 Political representation

As explained in §1.2, the political institutions that currently govern the design of the monetary constitution do not recognisably fit the system of representative government. Instead, decisions are not only made by national governments but also by central banks and international institutions such as the Basel Committee and the Financial Stability Board.

Therefore, I use the general term ‘political institution’ to refer to institutions that represent citizens in designing the institutions and rules that govern the authority over money. It is up to political institutions to ensure that the monetary constitution meets the relevant demands of distributive justice. The question I now turn to is what this role entails when the epistemic basis for deciding what to do is inadequate. In these circumstances, so I argue, political representation requires creating a better epistemic basis for political justification.

The notion of ‘representation’ is often taken to suggest that to do political representation well is to reflect certain facts adequately. Most accounts of political representation indeed make such an assumption.³⁰³ On the conception of the representative as a trustee, to represent is to act in accordance with the view of the representative on what justice requires in light of the available evidence. On the conception of representation as delegation, the representative acts in accordance with what their constituents believe that justice requires in light of the available evidence. In either case, representation is reflective in that it takes the available evidence as

³⁰³ E.g., Pitkin 1967; Mansbridge 2009; Pettit 2012.

given. To fail to represent adequately is to be insufficiently open to information that is available in the wider democratic system in which governments are embedded.

Reflective conceptions of representation are inadequate for circumstances where evidence about what justice requires is inconclusive. There are two arguments for this, which track the two arguments for the demand of democratic justification defended in §2.2. The first derives directly from the collective responsibility of citizens to realise just institutions. As I argued, deliberation and justification are important means of political decision-making. If information regarding the effects of alternative policies is inadequate, neither the government itself nor those to whom it is accountable can evaluate to what extent the policies contribute to fair economic institutions.

A second argument derives from the ideal of political equality, which requires that citizens receive an adequate justification for political decisions. Citizens do not need to agree with a given decision, but the justification for it should explain why one option should be chosen over the alternatives. If the epistemic basis for deliberation is inadequate, however, reasonable doubts remain that the justification is not able to address.

If it is simply unclear what reform is required, the responsibility of political institutions cannot be limited to reflecting the available evidence in their decisions. They should also ensure that they are in an epistemic position to adequately design the major social and political institutions.

6.3.3 Inquiry and experimentation

Lack of evidence should not be accepted where substantial societal interests are at stake. If a society lacks the information to address a given problem adequately, political institutions must act to make that information available. I now turn to discussing two ways in which political institutions can improve the epistemic basis of deliberation over the monetary constitution: inquiry into and experimentation with alternative options.

One way of ensuring a better epistemic basis for political justification is inquiry, that is, the collection and systematisation of available evidence on alternative policy measures. Statistics agencies have a crucial role in this, as do various forms of deliberation in speech and writing. Inquiry is more than the passive reception of information. It also involves acting to ensure that available information is collected and debated. As a form of political representation,

inquiry should ensure that information reflects competing interests and conceptions of justice. Applied to the monetary constitution, inquiry requires ensuring that a wide range of perspectives and historical information on the design of financial systems is available.

Even if political institutions could do more to acquire information, there are limits to what can be discovered through collecting and debating available evidence. Although participants in financial markets can be influenced by regulation and market operations, the effects of such interventions are difficult to predict.³⁰⁴ Participants in financial markets do not just obey rules, they also adapt their behaviour so as to avoid their effects.³⁰⁵ Even if policies are known to work for some time, the circumstances in which they do can easily change. The post-crisis era has seen wide-ranging debates on the future of the financial system. It has perhaps been the defining political topic of the decade, so it is hard to argue that current lack of knowledge is a result of inadequate inquiry. If truly compelling evidence were available regarding the best way to reform the monetary constitution, surely someone would have found it by now.

To overcome the limits of inquiry and discover the best way of living together, experiments are needed. Experiments are trials in different ways of living, whose outcome is subject to critical examination. Experiments generate the evidence that is needed to decide on complex policy issues such as the design of the monetary constitution.

Only political institutions are in a position to experiment with alternative options for reform. Political authority allows for intervention in the financial systems with the aim of finding out what works. If there is knowledge that societies can only learn from social experiments, it is up to political institutions to generate that information.

6.4 Incremental abolition

I now turn to a positive proposal for reform of the monetary constitution. I argue that political institutions should move to a gradual extension of public authority over money creation. The hypothetical endpoint of this reform proposal is the end of banking, but the decision to

³⁰⁴ Knight [1921] 2012; Keynes [1936] 2007, Chapter 12.

³⁰⁵ Soros 2013.

abolish must be preceded by careful deliberation on the evidence generated while moving in that direction.

In this section I outline the programme for incremental abolition (§6.4.1), argue in its favour (§6.4.2), and address objections (§6.4.3).

6.4.1 The programme

In face of pervasive uncertainty concerning the design of the monetary constitution, a social experiment is needed. Incremental abolition is such an experiment. It is a social experiment of stepwise abolition of private authority over money. Its goal is to explore different ways of regulating the authority over money.

Incremental abolition is an experiment that will move the banking sector in consecutive steps towards a form of Public FRB. Once Public FRB is achieved, the hybrid monetary constitution will be replaced by a 100% reserve system for private money creation. In this sense, the target of incremental abolition is Public FRB.

But realising Public FRB is not the goal of the programme. Rather, its overarching goal is to reform the monetary constitution so as to address the objections outlined in §6.1 of this chapter. Because doing this well requires more information, the more immediate goal of incremental abolition is to generate that evidence. Through stepwise abolition, the experiment generates the evidence needed to decide between alternative proposals.

Because its goal is to generate evidence, Public FRB is not the first step in the programme nor is it necessarily the endpoint. Rather, incremental abolition moves to Public FRB via Classic FRB and Regulated Hybridity. The information gathered along the way is to inform decision-making on whether to progress toward full abolition.

First, the move via Classic FRB. The core of the Classic FRB proposal is to bar financial institutions from using bank deposits to fund risky forms of credit. Under classic FRB, institutions that issue credit money must meet a 100% reserve requirement. This means that financial institutions hold a deposit with the central bank for each deposit that they issue. Reserve requirements are currently close to 0% and can be increased incrementally. By requiring banks to hold reserves against deposits, which carry low interest rates, the central bank imposes an implicit tax on using deposits for bank funding. As it becomes increasingly

expensive for banks to fund risky assets through deposits, risk-taking will move to institutions that do not offer payment services and are exempt from reserve requirements. Customers have to choose between keeping their money in the bank, where they pay for payment services, or voluntarily taking more credit risk. As I argued in §6.1.3, the provision of risky options for saving should be accompanied with considerable warning signs, if not actively discouraged. Where credit provision under increasingly strict regulation leads to a reduction of private credit, public provision of credit can gradually step in.

Second, the move via Regulated Hybridity. Regulating hybridity increases public authority over money, while leaving the final decision to issue credit to private financial institutions. In §6.2.5 I reviewed a range of ways to regulate private money creation. Incremental abolition of banking takes the form of experimenting with gradual extension of the public control over money. The existing Basel III reforms can be seen in this light as the first, hesitant steps towards banking abolition. The post-crisis circumstances have seen an extension of public control over money in different directions. I will focus here on capital requirements. As explained in §4, the bank capital ratio is the percentage of funding that comes from the owners of the bank.³⁰⁶ By slowly increasing the capital requirements of banks, risks are gradually moved to their owners. Implicit subsidies for ‘too big to fail’ institutions disappear and the cost of capital goes up. This, according to opponents of capital requirements, will reduce the provision of credit. Again, if increased capital requirements lead to a reduction of private credit it can be replaced by public provision.

These two paths to banking abolition are compatible. Both reduce the attractiveness of funding risky assets through deposits. The Classic FRB path leads to the creation of pure payment intermediaries and it allows customers to face losses associated with risky credit-provision. Regulated Hybridity imposes risks on the owners of the bank. When these steps lead to a reduction of credit provision, credit provision under public control can gradually take over.

It is too soon to say what a world of extensive public control over the money supply will look like. Although Public FRB is the target of incremental abolition, it is like a wish to become a professional ballet dancer or rockstar. These outcomes may appear to be very desirable to

³⁰⁶ §4.3.3.

achieve, but pursuing them requires years of dedication, and many will be sceptical whether it is even possible. The path towards that target, however, is valuable in itself and brings one to new places where one would not otherwise have been. If at some point the prospects of fame become very grim and the costs of continuing rise, it is time to give up on the dream.

As an experimental process, incremental abolition should be pursued under the guidance of political institutions. New information gathered from attempted reforms can lead to a decision to go ahead along the same path, change direction or, if outcomes are particularly grim, reverse course. Like pursuing a dream career, incremental abolition should be pursued as long as its final target appears viable, but it is important to stop in time. Through gradual steps towards a society without banks, incremental abolition will create the epistemic basis for reforming the monetary constitution.

6.4.2 The case for incremental abolition

I will now argue that incremental abolition is preferable to either Public FRB or Regulated Hybridity. To this end, I will consider two criteria by which to evaluate social experiments: (i) What are the risks and what are the potential rewards? and (ii) How much information does the experiment generate about the good and bad outcomes?

First, risks and rewards. Like any experiment, a social experiment must meet ethical standards. The value of the evidence generated by the experiment must outweigh its risks. Given the available evidence, we cannot decide between Public FRB and Regulated Hybridity. The very reason to conduct an experiment like the one I have suggested is that it is unclear which outcomes will result. Incremental abolition will only be attractive to those who think it likely that future hybridity will give rise to financial crises and also recognize that Public FRB may negatively impact efficient and fair credit provision. I have argued for these assumptions in the previous section.

Although there are risks in every proposal, the recurrent financial crises of the existing system are particularly bad. Moreover, they are difficult to foresee. The build-up of unsustainable debt levels takes place in the private sphere and information about risks is not available. Therefore, to simply retain hybridity is a social experiment with potentially dramatic consequences. This is not to deny that experiments in FRB come with considerable risks, since they involve a fundamental reshaping of the existing financial system.

Incremental abolition, in contrast, allows for avoiding the negative outcomes associated with both Regulated Hybridity and Public FRB. In moving towards a 100% reserve system, the risk of financial instability is addressed at the root. The closer one moves to FRB, the less likely a new financial crisis will be. If, somewhere along the way, FRB leads to unfair and inefficient credit provision, these cases can be documented and debated. Those who support the continued existence of private banks will leave few opportunities unused to emphasize the social costs of reform. But, unlike the gradual build-up of risk associated with insufficiently Regulated Hybridity, these costs will be more visible and open to critical evaluation. If its critics are right, Public FRB will lead to flagrant cases of failure to evaluate risks. In response, political institutions can either reform public credit provision or return to more extensive private provision of credit.

Consider now the information that the different options generate. The decision to abolish or retain hybridity cannot be tried out and evaluated before it is implemented. Moreover, once made, that choice becomes a premise of future political deliberation. In this sense, the decision is an existential choice.³⁰⁷ It is a choice that can be made only once and once made changes the very way an agent understands itself.

The Basel III process seeks to regulate hybridity, but I have argued that the prospects of addressing all objections against the existing banking system are questionable. Because the target of policymaking is Regulated Hybridity, alternatives to hybridity are left unexplored. This illustrates the worry that once hybridity or FRB is decided upon, thinking will increasingly narrow its scope to finding ways to make that choice work. To choose one alternative over others is to risk their bad outcomes and to forego the good outcomes of alternatives. If executed well, however, incremental abolition avoids such an existential leap into the dark. Rather, it provides insight into a much wider range of available options.

6.4.3 Objections to incremental abolition

Although it is not uncommon for public institutions to be involved in credit provision for specific public policy purposes, it is difficult to evaluate the economic consequences of widespread public provision of credit. Because my proposal of incremental abolition is

³⁰⁷ Putnam 1989.

closely related to the Public FRB proposal, I will now discuss the two most important objections to FRB. I show that these objections do not hold for incremental abolition.

First, there is the objection that only capitalist coordination sets adequate incentives for efficient provision of credit. Although it is too early to say what system will ultimately prove more effective, mere public ownership certainly does not preclude more or less adequate credit assessment. Consider the historical record of rating agencies. Rating agencies do not make investments themselves but are still quite good at rating the most common forms of retail credit. Moody's corporate bond ratings, for instance, which assign bonds to 20 different risk-categories, ranging from least risky (Aaa) to riskiest (Ca-C), provide a typical example. In the period 1983-2009, Ca-C bonds had one-year default rates of 33.23%, but default rates were below 1% for the 10 safest ratings. Average default rates are consistently lower for each risk category.³⁰⁸ Risk ratings are also updated more or less effectively. Five years before default, the average company would still be in the 13th risk-category. One year before default, the average rating would be in the 17th risk category.³⁰⁹ If a small company like Moody's is able to effectively rate corporate bonds, it is difficult to see why public institutions could not do the same.³¹⁰ The only commercial incentive for Moody's in providing accurate ratings is their reputation, which is an incentive that is also important for bureaucratic institutions.³¹¹ In many ways, Moody's is like a privately-owned central planner. The only point I want to make here is that public institutions can weigh credit risk just like private institutions can.

Public credit provision, however, does not need to limit its evaluation of investment projects to credit risk assessment. The long history of development banks shows that public institutions can assess risk adequately, while also applying environmental and social criteria to individual projects. Consider the *Kreditanstalt für Wiederaufbau* (currently simply known as KfW), which was founded in 1948 to fund German reconstruction. In 2015, it provided €79.3 billion in credit.³¹² The KfW currently has an important role in the green transition of

³⁰⁸ Fridson 2010.

³⁰⁹ Idem.

³¹⁰ Benmelech and Dugosz 2010; McMillan 2015.

³¹¹ Alesina & Tabellini 2008.

³¹² KfW 2016.

the German economy, funding 90% of onshore wind and over 50% of solar power.³¹³ Brazil and China assign an even larger role to public development banks, which in part explains why they were the only major economies without banking failures in 2007 and 2008.³¹⁴

An entirely different worry is that public control over credit gives rise to a much more powerful, potentially ‘totalitarian’ state. The state would now have a tool to micromanage economic transactions and follow what individuals do much more closely. It is clear that public provision of credit does not need to constitute a form of public domination. Rather, the worry is that this reform and many like it would slowly erode the independence of the private sphere. In the words of Hayek, Public FRB would be one more step on the road to serfdom.³¹⁵

The first thing to note is that these arguments are, again, based on a very pessimistic view of public institutions. Clearly, democratic checks and balances can address the fear of state repression. These were missing in historically socialist states such that their experience cannot be simply extrapolated to all forms of public control of the economy.

Second, if public institutions want to register the payments made by individual citizens, they do not require the abolition of banking for this. Governments can always pass laws that allow for tracing and reporting all payments conducted with private credit money. Economic privacy depends most obviously on the availability of cash, which could be issued, or discontinued, under any monetary constitution. Without wanting to downplay the risks of a totalitarian state, I think it is fair to say that the role of private banking sectors in safeguarding democracy and the rule of law is limited.

6.5 Conclusion

In this chapter, I have argued for the incremental abolition of private money creation. To this end, I outlined five objections to unregulated private money creation. I then explored three proposals for reform: Classic FRB, Public FRB and Regulated Hybridity. I rejected Classic FRB, but argued that the latter both promise to addressing my objections to the existing monetary constitution. I argued that in these circumstances, political institutions have a

³¹³ Griffith-Jones 2016, p. 5.

³¹⁴ Dymski 2014.

³¹⁵ Hayek [1945] 2001, p. 123f.

crucial role in generating a better epistemic basis for public decision-making. Through a stepwise extension of public control, incremental abolition allows existing capitalist societies to find out what institution should govern the authority over money.

7 The ethics of delegating monetary authority

Where the authority over money is in private hands, there is no further question of whether it should be exercised democratically. But if, as I proposed in §6, money creation is to be brought under more extensive public control, the question becomes increasingly pressing to what extent public authority over money should be democratic. In this chapter, I explore this question by discussing the existing institutions of central bank independence. As I argue, there is no principled objection to delegating the authority over public money creation to unelected experts. But delegation of monetary policy is itself subject to a demand of democratic justification just like any other decision concerning the design of major societal institutions. I argue that the existing institutions of central bank independence lack an adequate justification and need to be reformed.

By creating an independent central bank, the government delegates authority over public money to unelected experts. Within the confines of their mandate, these experts routinely weigh the benefits of economic output against the long-term cost of inflation. Their decisions can be momentous. After the Brexit vote, for example, the value of the Pound fell and the Bank of England expected inflation to exceed the target assigned to it by the government. Governor Mark Carney and his Monetary Policy Committee faced a choice. They could either intervene by raising interest rates, or accept inflation and protect the real economy from a major economic shock. In the end, the Bank decided not to intervene, arguing that to do otherwise would raise unemployment by 250,000.³¹⁶ History is filled with such dramatic decisions.³¹⁷

Despite the political importance of the decisions they face, central banks have received much less attention from philosophers than the more familiar forms of executive, legislative and judiciary power.³¹⁸ Central bankers make their own kinds of distributive choices. Moreover, their position as unelected experts raises important questions of political authority and

³¹⁶ Carney 2016 p. 18.

³¹⁷ E.g., Marsh 1992; Marshall 1999; Stiglitz 2016.

³¹⁸ Recent discussions of central banking are Reddy (2003) on international monetary arrangement, Best (2016) on accountability, Douglas (2016) on money and public finance and Claveau, Dietsch & Fontan (2016) on distributive effects of unconventional monetary policy.

democratic legitimacy. These powers deserve investigation, and my aim here is to address this gap in the literature.

In contrast to those who reject central bank independence entirely, I argue that it is in principle permissible for governments to delegate political choices to unelected experts. From a democratic perspective, what matters is whether the act of delegation serves the government's ultimate economic policy aims. Although central bank independence limits the government's control over public money, it can also improve monetary policy and thereby help the government pursue its broader economic policies. In what follows, I will first outline a moral framework for balancing competing considerations for and against delegating and then make a detailed case for democratic reform of existing institutions.³¹⁹

In discussing these questions, I pay specific attention to the historical changes catalysed by the Global Financial Crisis of 2007 and 2008. Before the crisis, central bankers referred to their era as that of a 'Great Moderation'.³²⁰ They assumed that recent economic policies had created a new period without financial crises, weaker economic recessions and stable prices. Within the confines of their mandate, central bankers would do little more than control interest rates on short-term credit. This was considered sufficient for steering the domestic economy to its natural equilibrium. In the words of the central banker already cited in §5, 'everything was simple, tidy and cozy', but today 'many certainties have gone'.³²¹

The crisis not only led to a redesign of banking regulation, it also transformed monetary policy, forcing central bankers to move far beyond their narrow areas of expertise. Central banks now experiment with a wide range of new instruments commonly referred to as *unconventional* monetary policy. They have lent out trillions in cheap loans and extended their trading to a wide range of financial products. The European Central Bank lends directly to oil and gas companies, car manufacturers and low-cost airlines. The Bank of Japan is a big player in Japanese stock markets. Central bankers currently debate even more experimental

³¹⁹ Recent critiques of existing practices do not formulate their case in terms of democratic values. See, e.g., Buitert 2014; Borio 2014; Claveau, Dietsch & Fontan 2016; Stiglitz 2016. An exception is Best 2016, who focuses on the issue of accountability.

³²⁰ Stock & Watson 2002.

³²¹ Borio 2014, p. 191.

policies, such as giving money to citizens directly. The crisis has also provoked heated debates on the goals of monetary policy, with stable prices pitted against financial stability and economic equality. Despite facing different, and much more complex, political choices, central banks have retained their pre-crisis independence, and their monetary policy mandates remain virtually unchanged. I will argue that this situation is untenable and that reform is overdue.

In §7.1 I show that their discretion over both the goals and the instruments of monetary policy places central bankers among the most powerful policymakers. Against the claim that central bankers merely follow a legal mandate, I argue that these mandates are often vague and leave crucial questions open. Long before 2008, central bankers had surprising discretion in putting forward their own interpretation of their mandate, and acting on it.

In §7.2 I outline a framework for evaluating the delegation of monetary policy to an independent central bank. I argue that it cannot be assumed that simply because central bankers are unelected, their power is illegitimate. Delegating monetary policy can stop governments from achieving their economic policy goals, which is a worry that I describe as one concerning domestic economic sovereignty. But, if central banks make good use of their powerful tools, delegation may be an effective means for achieving economic policy goals. I describe these benefits in terms of the quality of monetary policy. Any justification of central bank independence must balance loss of economic sovereignty against improvements to the quality of monetary policy.

In §7.3 I draw on the framework of §7.2 to argue that central bank independence in its present form is no longer justifiable and needs to be reformed. I do this by outlining the arguments for central bank independence that were prevalent before the crisis. Focusing on the case of the European Central Bank, I then show that new instruments used by central banks, and new goals that they pursue create considerable loss of economic sovereignty. With regard to the quality of monetary policy, I argue that central bankers lack special competencies for carrying out their new tasks well. Delegation stands in need of justification, which can only be successful if the governance of central banking is reformed.

7.1 The powers of the central bank

I will now describe the use of public money creation as a macroeconomic policy tool (§7.1.1). I then argue that within the confines of their mandate, independent central banks have considerable scope for political choices (§7.1.2).

7.1.1 Monetary policy

Monetary policy is the use of central bank credit and deposit facilities to pursue macroeconomic policy aims. Under the gold standard, the most important asset traded by central banks was gold, but today monetary policy is implemented by trading in low-risk financial assets such as sovereign bonds. Conventional monetary policy uses such trades to control short-term interest rates in financial markets. By introducing money into the financial system, the central bank lowers interest rates. By selling assets it has previously purchased, the central bank removes money from the market and increases rates.

These trades do not involve legal sanctions or coercive force. Still, monetary policy can have far-reaching consequences for individuals. When interest rates go down, more credit will be available, and will be offered on more favourable terms. Conversely, higher interest rates incentivize saving at the expense of debtors. Interest rates directly influence the options for saving and borrowing available to citizens and firms. For ordinary citizens, most of the impact of monetary policy is indirect and mediated by macroeconomic conditions. When interest rates go down, consumption and investment pick up and employment increases. As this process plays out, prices eventually rise. Conversely, an increase in interest rates causes economic output to contract and the rate of inflation to decline. To give an idea of the size of the effect of such changes, it is estimated that a decision to increase the Federal Reserve's target interest rates by 1% reduces industrial production by 4.3% over a two-year period.³²² It leaves prices unchanged for the first two years, after which they gradually fall to 6% below where they would have been otherwise.³²³ In the years after the central bank raises rates, companies will go bankrupt, workers will lose jobs and wages will be lower. Epidemiological studies suggest that life expectancy goes down as a result and suicide rates go up.³²⁴

³²² Romer & Romer 2004.

³²³ Ibid.

³²⁴ Chang et al. 2013; Karanikolos et al. 2013.

Monetary policy also impacts public finances through its effect on tax revenues and sovereign bond markets. High interest rates can easily preclude expansion of government expenditures.

It is notoriously difficult to use monetary policy to achieve desired macroeconomic outcomes. Economists refer to the causal pathways that connect operations of the central bank to the macroeconomic outcomes as the *transmission mechanism*. This mechanism consists of different routes via which interest rates influence consumption, investment, and finally prices. The complexities of this mechanism, however, are profound. For one thing, the effects of a single change in monetary policy can pull in opposite directions. For another, some of these effects will materialise only after a few years. Due to the wide range of direct and indirect effects, monetary policy lacks any clear distributional pattern.³²⁵ The effects also extend far beyond national borders.³²⁶ Because of the time lags and the wide range of possible causal pathways, debates about monetary policy take place against a background of empirical disagreement and uncertainty.³²⁷ For these reasons, monetary policy is perhaps the most difficult economic policy decision that a capitalist state faces.

The complexity of decisions concerning monetary policy makes some form of political representation unavoidable. Many citizens are not properly aware of the existence of monetary policy, let alone sufficiently familiar with the complexities of the transmission mechanism. Understanding and reflecting on monetary policy requires expertise and time rarely available to those outside a narrow circle of economic policymakers and finance professionals. In the absence of such knowledge, it is not possible to make an informed choice on how to use monetary policy. But, although this complexity makes governments reliant on experts, they can draw on this expertise in many ways. The need for some form of technocratic judgment does not preclude democratic accountability.

When the central bank is independent, final authority over monetary policy is delegated to a committee of officials within the bank.³²⁸ These officials are appointed rather than elected,

³²⁵ Coibion et al. 2012.

³²⁶ Reddy 2003.

³²⁷ Williams 2014; Haldane et al. 2016.

³²⁸ For detailed discussions see, e.g., Cukierman 1992; McNamara 2002; Conti-Brown 2016.

and they are often appointed on the recommendation of the bank itself. Furthermore, positions on central bank boards and committees come with long, fixed terms, and once a committee member is appointed, only serious acts of misconduct are cause for dismissal. Parliamentary control of expenditures is limited or non-existent. An independent central bank is typically created once and for all by a legal mandate, which its officials are largely free to interpret themselves. In this system, accountability takes the form of providing a legal justification for policies and elected officials have hardly any formal means to object. Indeed, central bankers are even expected to obstruct government policies where their mandate requires this. The guiding question of this chapter is whether this status quo should be retained. A crucial assumption underlying that question is that central bankers make important decisions on political issues, but this is itself controversial.

7.1.2 *Political choices*

I now turn to a more detailed account of central bank mandates to argue that central bankers have considerable discretion in putting forward their own interpretation of their mandate. By political choices, I mean moral choices on important and contested issues in public policy. Central bankers typically argue that where such choices arise, the correct policy is determined by their mandate.³²⁹ In this sense, central bankers often describe themselves as merely *instrument*-independent in that they are free to decide how to set monetary policy, but not *goal*-independent in that central banks are strictly bound by the goals set out in the mandate.³³⁰ The goal of stable prices is given to them, and central banks merely decide on how to use the instruments of monetary policy to realise it.

In practice, however, their mandates leave central bankers with wide discretion over not only the instruments they use, but also the goals that they pursue. Some mandates leave a minor role to governments in deciding what the central bank should do. The Bank of England's mandate requires that the government communicate its (non-binding) understanding of price stability annually.³³¹ In New Zealand, the central bank negotiates the ultimate target with the

³²⁹ See, e.g., Issing 2002, p. 27. This is also described by Claveau, Dietsch & Fontan (2016, p. 14f).

³³⁰ These terms were introduced by Debelle & Fischer (1994).

³³¹ Bank of England Act 1997, section 12.

government at the start of a new governor's term.³³² Most other central banks, however, interpret their mandate themselves. The most austere mandates simply state that the central banks should pursue a price stability objective. For example, the Bank of Japan Act states that monetary policy should be 'aimed at achieving price stability, thereby contributing to the sound development of the national economy.'³³³ Although there are differences in formulation across mandates ('currency purchasing power'³³⁴, 'stability of the currency'³³⁵, 'achieve and maintain price stability'³³⁶), the goals set out in mandates are vague and only derive their operational meaning from interpretation. The vagueness is compounded by the fact that mandates often contain multiple goals. The European Central Bank has a primary objective of maintaining price stability and a secondary objective of supporting 'the general economic policies in the Union with a view to contributing to the achievement of the objectives of the Union'. In theory, these objectives include 'cultural and linguistic diversity' and 'peace, security, the sustainable development of the Earth'.³³⁷ Similarly, the United States Federal Reserve is mandated to 'promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates'³³⁸, but the mandate itself provides no guidance on how to deal with conflicts between these various goals.

Despite considerable difference between their mandates, major central banks such as the European Central Bank and the Federal Reserve interpret their mandates in ways that are strikingly similar. The way they understand the goal of monetary policy is known as 'flexible inflation targeting'.³³⁹ Central banks pursue the goal of *inflation targeting*, in the sense that they see it as their primary objective to keep the average growth of prices for consumption goods between one to three percentage points annually. Central bankers are hesitant to pursue economic policy aims that are incompatible with this inflation target. The inflation target is *flexible*, however, in that the central bank does not respond to every potential deviation.

³³² The Reserve Bank of New Zealand Act, section 9(1).

³³³ Bank of Japan Act No. 89 of 1997, Article 2.

³³⁴ Colombian Constitution of 1991, article 31.

³³⁵ Reserve Bank Act of 1959, section 10(2).

³³⁶ Act on the Magyar Nemzeti Bank, article 3(1).

³³⁷ Treaty of the European Union, article 3(3) and 3(5).

³³⁸ Federal Reserve Act 13, as amended 1977.

³³⁹ Bernanke et al. 2001.

Because raising or lowering interest rates is a blunt tool that has far-reaching and unpredictable consequences, central banks are reluctant to use it. Rather, the central bank seeks to realise the annual average over a longer time horizon. In doing this, it weighs the benefits of policy interventions against their cost in terms of other aims such as employment and growth. By occasionally deviating from strict priority of price stability, a central bank creates a better trade-off between inflation, employment and economic output than if it would seek to offset any deviation from the target immediately.

In making these kinds of decisions, independent central banks are responsible for momentous decisions in economic policy. The introduction of this chapter discussed a dramatic example in the Bank of England's decision to allow inflation to rise above its target after Brexit. In contrast, the German Bundesbank did not allow inflation to rise in response to reunification, thereby causing a deep recession.³⁴⁰ In pursuing a policy of flexible inflation targeting, central bankers have always made political choices. Still, I will argue that the Global Financial Crisis marks an important shift in how we should think about central bank independence. Central bankers now pursue their policy aims with a much wider range of instruments and juggle a wider set of goals in interpreting their mandate. Before discussing these new challenges in §7.3, I will develop a moral framework for reflecting on the permissibility of central bank independence.

7.2 The permissibility of independence

Independent central banks are created by governments. If their operations are legitimate, they are so because governments have delegated their authority over monetary policy. In this section I ask under what conditions it is permissible for democratic governments to delegate monetary policy to an independent central bank. In §7.2.1 I criticise the view that political choices should never be left to unelected officials. In §7.2.2 I argue that governments must decide where delegation is required. They should do this by weighing competing considerations of economic sovereignty and the quality of monetary policy.

³⁴⁰ Marsh 1993, p. 196f; Marshall 1999, p. 140f.

7.2.1 Principled objections

As far back as 1964, economist Paul Samuelson testified to the US Congress that the independence of the Federal Reserve was incompatible with the ideals of democratic government:³⁴¹

there can never be a place in American life for a central bank that is like a Supreme Court, or 1831 House of Lords—truly independent, dedicated to the public weal but answerable for its decisions and conduct only to its own discretion [...].³⁴²

Because experts are unelected, Samuelson thinks, their decisions should in the final instance be accountable to, and reversible by, democratic governments. I call this idea ‘Samuelson’s principle’.

A long tradition of critics has sided with Samuelson in emphasising the conflict between democracy and central bank independence. In the same congressional hearings, Milton Friedman argued that the Federal Reserve should be made subject to a strict rule that would commit it to increasing the volume of money by a fixed annual rate.³⁴³ More recently, US lawmakers Rand Paul and Bernie Sanders have proposed tight congressional oversight of monetary policy which is meant to ‘Audit the Fed’.³⁴⁴ Progressive critics, in particular, have often objected to central bank independence on the grounds that it limits the power of democratically elected governments to pursue fiscal policy.³⁴⁵

These critics all combine substantive complaints about the goals and instruments of monetary policy with objections premised on the ideal of democratic government. Whereas substantive complaints are generally technical and based on empirical data, democratic objections tend to be vague, and the exact nature of the democratic ideal at issue is often unclear. My framework seeks to clarify the moral issues at stake in such democratic objections.

³⁴¹ I discuss these historical debates in more detail in my ‘Central Banking in Rawls’ Property-Owning Democracy’ (unpublished manuscript).

³⁴² US Congress 1964, p. 1105.

³⁴³ *Ibid.*, p. 1133-1178.

³⁴⁴ See, e.g., the Federal Reserve Transparency Act (H.R. 24 and S. 2232).

³⁴⁵ See, e.g., McNamara 2002; Pixley, Whimster & Wilson 2013 and Stiglitz 2016, p. 59f.

Before turning to this framework, however, I want to explain why objections to central bank independence should not invoke Samuelson's principle. From the perspective of political equality, citizens should ideally have roughly equal opportunities to influence political decisions.³⁴⁶ Political equality may at first seem to speak in favour of Samuelson's principle, but I will argue here that it does not. Samuelson's principle is implausible for three reasons: delegation of political choices to unelected officials is virtually unavoidable, often desirable, and by itself not undemocratic.

Delegation of at least some political choices is unavoidable, since because there are simply not enough elected officials. It is true, of course, that the number of elected officials could (and probably should) be extended, but there are limits to how many officials can be effectively elected. In particular, there are limits to how many of those elected will have the expertise required to set monetary policy. It is of course possible to elect central bankers, but this kind of solution does not work across the board. Rigorously applied, Samuelson's principle would not only prohibit central bank independence, but also a wide range of other independent regulatory agencies such as competition and antitrust authorities, financial market supervisors, and environmental commissions. It would also prohibit the delegation of war to the military. I believe that electing individuals for all these positions would diminish rather than increase the ability of citizens to influence political decisions.

Delegation is for similar reasons often desirable. In cases where elected officials recognise that they lack the expertise and time to make good decisions, they rightly desire to delegate powers to officials who have the relevant expertise and time. There will often be no good reason for citizens to reject such delegation in favour of more direct control.

Finally, Samuelson's principle bars governments from making the decision to delegate, thereby limiting rather than strengthening democratic politics. Governments decide on delegation based on a wide range of practical and moral considerations. In deciding what delegation serves the interests of citizens and reflects their views, they realise democratic decision-making. Samuelson's principle hinders governments from making this kind of decision in that it settles the issue in terms of a principle that is itself supposed to precede any democratic deliberation. In this way, adhering to the principle removes contested political

³⁴⁶ On political equality, §1.2.1; §6.1.5.

issues from democratic decision-making. Rather than contributing to democratic deliberation, Samuelson's principle hinders citizens who support delegation from being able to have their voice heard in the political process.

The ideal of political equality, then, should not be taken to prohibit delegating monetary policy to an independent central bank entirely. On the other hand, it should not be assumed that delegation is always permissible. At the very least, as a part of democratic politics, delegation is subject to the minimal procedural demand that governments justify their decisions. This justification must be adequate in that it is based on plausible empirical premises and reasonable moral beliefs. In this sense, the decision to delegate monetary policy is not qualitatively different from many other decisions concerning bureaucratic delegation. The institutions of central bank independence are unique, however, in the particularly stringent limitations that they place on the ability of governments to influence monetary policy. But monetary policy is also unique in its complexity and its impact on the lives of individual citizens. It should be up to elected governments, drawing on supporting democratic institutions, to weigh competing benefits, costs and risk of delegation. It is up to critics of central bank independence to object to that justification. The final judgment is to be made in the legislative arena.

7.2.2 Democratic justification

So, what form should a successful justification take? What matters is whether delegation weakens or strengthens elected governments. Delegation is paradoxical in that, by ceding the direct exercise of power, those who delegate are potentially better able to achieve their own goals.³⁴⁷ When considering whether to delegate, the government must decide whether an independent central bank is the right means for achieving its goals.

Delegation to an independent central bank is only permissible when the government pursues permissible economic policy aims and justifies delegation as a means for achieving those aims. There could very well be other motives for delegating monetary policy, but many of these motives are not suitable for justifying delegation. For example, critics have argued that central bank independence is meant to surreptitiously privilege the financial industry's

³⁴⁷ Pitkin (1967) discusses this paradox in more detail.

interest in low inflation over wider societal interests in economic growth and low unemployment.³⁴⁸ Justifications of central bank independence tend not to invoke such motives, for obvious reasons, and focus instead on the contribution that it makes to economic policy. I will do the same here.

With Richard Musgrave, I distinguish three kinds of economic policy aims: allocation, distribution and stabilisation.³⁴⁹ Allocation policies aim to regulate markets and guarantee the production of goods and services where private supply is insufficient. This concerns matters like education, health services and security. Government policies also aim to distribute economic resources over citizens. Finally, stabilisation policies aim to offset the effects of business cycles on aggregate economic output, employment, and price levels. The government must explain why an independent central bank is best at setting monetary policy for achieving the government's economic policy aims. This raises the question why and under which conditions democratic governments are best placed to make economic policy for citizens.

My framework assumes that governments are as a rule best placed to represent citizens in matters of economic policy. This means that the executive and the legislature are the political institutions that are most likely to realise just outcomes. There is no single feature of democracy that makes this the case. Crucial conditions for political representation are that governments receive adequate information about the views and interests of citizens, and are able and motivated to act on these considerations. Democratic governments do well in this regard because they are embedded in larger systems of public deliberation and decision-making. Elections play an important role in ensuring that governments remain reliable representatives of citizens. Through elections, citizens provide governments with a mandate to act in the face of conflicting moral beliefs while respecting the views of all, even if elections alone cannot ensure that governments represent citizens adequately.

The assumption that government are democratic and therefore generally best placed to represent citizens is, admittedly, optimistic. If one believes that democratic governments currently do not adequately represent citizens, that could be taken to justify central bank

³⁴⁸ McNamara 2002; Stiglitz 2016, p. 145f.

³⁴⁹ Musgrave 1959.

independence as a second-best solution. The thought here might be that though there are good objections to delegation, governments simply make use of their powers. This, however, would first of all mean that reform of democratic institutions is required over and above reform of central banks. I will therefore assume here that governments are indeed best placed to represent citizens.

Even if we make this assumption, that does not mean a government is always best placed to represent citizens in making every economic policy decision. For the narrow task of setting monetary policy, central banks may sometimes simply do better than elected governments in representing citizens. Once a government has been elected, the ability of citizens to influence its policy is limited.³⁵⁰ If central banks have more technical competencies and the right motivation, it is possible that they are all things considered better representatives. This, I argue, is the sort of case that defenders of central bank independence need to make.

My moral framework is meant to structure intuitions where competing considerations are at stake. It evaluates central bank independence in conditions where economic policy is made by well-functioning democratic governments and monetary policy is delegated as a means towards achieving the government's economic policy aims. To justify central bank independence in these conditions, the legislature must balance two competing considerations.

The first is a consideration of (domestic) economic sovereignty. Economic sovereignty is the power of elected governments to realise their economic policy aims.³⁵¹ The government should limit loss of economic sovereignty.

When the government creates an independent central bank, it limits its powers in two ways. First, the government gives up one of its most powerful economic policy tools. Through monetary policy, governments can potentially influence conditions in financial markets and thereby realise its economic policy aims directly. Second, monetary policy can support expenditures by increasing tax revenues and lowering public borrowing costs in financial markets. These are costs that a government should take into account.

³⁵⁰ Manin 1997.

³⁵¹ Krasner (1997) on domestic sovereignty and other notions of sovereignty. For an application to economic policy, see Dietsch (2011).

It is far from clear, however, how valuable the authority over monetary policy is to a government. A central bank that follows a mandate may pursue policies that are not very different from the preferred policies of the government. If the central bank merely executes the will of the government, the loss of economic sovereignty is minimal. The questions to ask concerning economic sovereignty are: (i) What policies are made unavailable to the government after central bank independence? And (ii) which of these policies would the government have preferred to pursue had the central bank not been independent?

The second consideration to be balanced by the legislature is the quality of monetary policy. Governments should design central banks so as to achieve their economic policy aims. The claim that central bank independence is needed for this reason stands in need of further argument. In formulating these arguments, there will be no uncontested criterion for ‘good’ monetary policy but it is this kind of decision that governments are elected for. Government must explain both what good monetary policy consists in and why central bankers can be expected to pursue such a policy more effectively than the government itself. Historically, government control of the money supply has had disastrous consequences on the daily lives of citizens, but so have bad policies of independent central banks. Margaret Thatcher’s monetarist policies, pursued in opposition to the Bank of England, wiped out 15% of British industry and led to largely avoidable job loss for 1.5 million workers.³⁵² The Weimar Republic’s at times independent Reichsbank is infamous for its contribution to German hyperinflation.³⁵³ It is an issue of considerable debate whether Helmut Kohl was right to leave monetary policy to the independent Bundesbank during reunification.³⁵⁴ In attempting to draw lessons from historical experience, the key questions concerning quality of monetary policy are: (i) What does good policy consist in? And (ii) what features of an independent central bank make it likely that this policy will be pursued?

A satisfactory justification of central bank independence should show that any loss of economic sovereignty will be justified by an independent bank’s contribution to the quality of monetary policy. There is no simple rule for weighing these competing considerations. My

³⁵² Needham 2014.

³⁵³ Marsh 1992, p. 91f.

³⁵⁴ Idem., p. 196f; Marshall 1999, pp. 141-168.

claim here is that this type of decision should in the end be made and justified by governments themselves.

7.3 Central banking before and after the crisis

Governments should only delegate monetary policy if they have a justification that meets the demands outlined in §7.2. When existing practices can no longer be justified, they need to be reformed. In this section I argue that traditional arguments no longer justify existing practices and also that justifications along the same lines will not be successful. From this I conclude that existing practices are in need of fundamental democratic reform. Drawing on the framework from §7.2, I first outline the arguments for central bank independence that are prominent in the literature (§7.3.1). These arguments aim to establish that central bank independence does not lead to loss of economic sovereignty and improves the quality of monetary policy. The rest of the section will show that these arguments have been undermined by changes in central bank practice and the wider context of economic policy since the financial crisis. Focusing on the case of the European Central Bank, I show that both the development of new instruments and the increasingly broad range of goals that central banks pursue creates considerable loss of economic sovereignty (§7.3.2 and 7.3.3). These changes also undermine the reasons for thinking that delegation improves the quality of monetary policy (§7.3.4).

7.3.1 Central banking before the crisis

An extensive literature on the justification of central bank independence features in textbooks, policy debates and academic research. My aim here is to show that the main arguments from this literature fit the framework outlined in §7.2.

Regarding economic sovereignty, arguments justifying independence begin from the monetarist premise that monetary policy should aim for price stability.³⁵⁵ It is then argued that, because there can be little debate over what monetary policy should ultimately aim for, loss of economic sovereignty will be minimal. A first argument for the monetarist premise is that, as I showed in §7.1, conventional monetary policy is difficult to predict and lacks a clear distributional pattern. This makes it an ineffective tool for the purposes of allocation and

³⁵⁵ For detailed arguments in favour of this premise see Friedman 1968 and Bernanke et al. 2001.

distribution outlined in §7.2. If monetary policy has any use, then, it is for stabilising the level of economic activity, such as, for example, maintaining price stability. Second, there are reasons to specifically aim for price stability. Stable nominal prices facilitate long-term economic planning and make the outcomes of contracts, understood in real terms, fairer. Price stability also contributes to economic efficiency. Third, targeting stable prices does not preclude stabilising other aspects of the business cycle. Deflation results from high unemployment and underutilization of economic capacity. High inflation, conversely, follows periods of low unemployment and overutilization of economic capacity. A central bank that follows a strategy of flexible inflation targeting will also pursue the general economic policy aim of macroeconomic stabilisation. Finally, invoking Friedman's expectation-augmented Phillips-curve, it is argued that ignoring inflation is unsustainable. If the central bank does not take price levels into account, it may achieve short-term gains in employment and output, but changing inflation expectations will ultimately undermine the efficacy of monetary policy. In sum, according to the traditional arguments, pursuing price stability is simply a sensible part of economic policy, and an inflation-targeting independent central bank does not, therefore, reduce economic sovereignty.

Defenders of central bank independence also argue that it improves the quality of monetary policy. They draw on three important lines of argument to support this claim.

One line of argument focuses on *accountability* and *transparency*.³⁵⁶ Accountability means being held to a clear standard in setting monetary policy. Transparency means providing a clear justification for policies. A government that controls the central bank can use monetary policy for a wide range of purposes. But due to its technical complexity, accountability and transparency of government monetary policy will be limited. In contrast, an independent central bank operating on a legal mandate has a clear policy priority and needs to justify its operations in light of that priority. In this way, keeping central banks independent makes monetary policy more accountable and transparent than if left to governments.

Second, there is an argument from *motivational competency*. In the context of flexible inflation targeting, to have motivational competency is to be motivated in the right way to

³⁵⁶ Cukierman 1992; Bernanke et al. 2001. I discuss the topic of accountability and democratic legitimacy in more detailed in van 't Klooster forthcoming a. See also Best 2016.

achieve price stability and other goals of monetary policy. Governments, so the argument goes, lack patience and the ability to consider long time horizons. Central bankers, in contrast, will be more adequately motivated to set monetary policy for the long-term.³⁵⁷ Perceived lack of motivational competency also gives rise to a problem of *time-inconsistency*.³⁵⁸ Governments will prefer low inflation in the long run, but find it difficult to make a credible commitment to price stability. In response, private economic agents anticipate, and thereby create, high inflation. Delegating monetary policy to a central bank with a clear price stability mandate allows the government to commit credibly to price stability.

The third line of argument focuses on *technical competency*. To have technical competency is to know how to achieve price stability and other goals. Deciding on monetary policy requires an understanding of the transmission mechanism. In point of fact, most elected officials lack these technical competencies, which limits their ability to judge the monetary issues. Although elected officials could in theory rely on empirical advice from central bankers, the more recent literature on inductive risk shows that it is often difficult to communicate inconclusive empirical evidence in a value-neutral way.³⁵⁹ Central bank independence secures that technical competencies are effectively used in deliberation.

Central bank independence has always had its critics,³⁶⁰ but taken together these arguments have been widely accepted. I will now argue that times have changed: Economic policy and the practices of monetary policy have evolved to undermine the force of the traditional arguments.

7.3.2 *The instruments of central banking*

To begin, consider the instruments of monetary policy. Before the crisis, monetary policy was largely implemented by setting short-term interest rates. The European Central Bank, on which I will focus here, fulfilled its mandate by providing a relatively fixed amount of credit,

³⁵⁷ Blinder 1999; Issing 2002, p. 27.

³⁵⁸ Kydland & Prescott 1977.

³⁵⁹ Douglas 2009; John 2015.

³⁶⁰ Forder 2000; McNamara 2002.

which was secured by low-risk collateral, to a small group of banks. Now, however, the ECB chooses from a far wider range of tools.

In the direct aftermath of the Lehman Brothers bankruptcy, the short-term credit markets in which the ECB normally set interest rates were severely disrupted.³⁶¹ In response, the ECB started providing short-term credit against collateral in any amount requested by banks.³⁶² Even more strikingly, the ECB also loosened its collateral requirements on these loans to provide funding to troubled banks, thereby accepting greater credit risk.³⁶³ Through so-called ‘currency swaplines’, the ECB borrowed from the Federal Reserve to provide European banks with emergency loans in dollars.³⁶⁴ With hundreds of billions in cheap credit, the ECB sought to improve the profitability of the banking sector and thereby boost credit provision.

The ECB also became an important creditor for Eurozone governments. In response to dramatic spikes in the borrowing costs of member states, the ECB reluctantly took up a role as lender of last resort in stabilising sovereign bond markets. The ECB bought €185 billion in Greek, Irish, Italian, Portuguese, and Spanish bonds. The ECB also sent letters to individual heads of state to push for labour market reforms and other contentious economic policy choices. These measures were controversial in part because article 123 of the European Treaty explicitly prohibits lending to individual Eurozone governments. In a high-profile court case, the ECB defended its operations as falling under its price stability mandate.³⁶⁵

The ECB has also expanded its monetary policy with so-called quantitative easing (or QE).³⁶⁶ In QE operations, the central bank buys financial assets to lower long-term interest rates. When the current QE programme ends in December 2017, the ECB will have spent a projected €2,252 billion on mostly public but also private sector bonds. QE is contested because it works in part by increasing the value of financial assets, ownership of which is concentrated in the top 5% of households. It is also feared to lead to asset price bubbles.

³⁶¹ In van ‘t Klooster forthcoming a, I discuss these events in more detail and explore how to evaluate the use of such emergency powers.

³⁶² Giannone et al. 2012.

³⁶³ Ibid.

³⁶⁴ Allen 2013.

³⁶⁵ German constitutional court in Karlsruhe (BvR 2728/13) and European Court of Justice (C-62/14).

³⁶⁶ Williams 2014; Demertzis & Wolf 2016; Haldane 2016.

More recently, attention has turned to the Corporate Securities Purchase Programme as a part of which national central banks purchased bonds in non-financial firms. These purchases are contested because they potentially increase the profitability of individual firms. National branches of the ECB have focused purchases on gas and oil companies (in Spain and Italy), and car manufacturers (in Germany). Bond purchases also feature the controversial Austrian gambling company Novomatic, the French luxury firm LVMH and the Irish low-cost airline Ryanair. Sustainable energy sources are entirely absent from the Corporate Securities Purchase Programme.³⁶⁷

The ECB is not the only central bank to have dramatically extended its range of monetary policy tools. At the height of the crisis, the emergency credits of the Federal Reserve totalled \$7.7 trillion. All major central banks take part in swap lines and many have built up large investment portfolios as part of their policies. The size of the ECB's quantitative easing is comparable to similar programmes in the US and UK. Its operations are much smaller than those of the Bank of Japan, which currently buys 90% of newly issued government bonds and is set to be the largest owner of 55 of the NIKKEI 225 firms by the end of 2017.³⁶⁸

Debate is now picking up on the use of even more powerful unconventional tools. In theory, the central bank can increase private spending by printing money and transferring it directly to individual citizens.³⁶⁹ Others argue that central banks should buy bonds from the domestic development banks to fund public infrastructure and thereby encourage economic activity.³⁷⁰

To what extent do these changes undermine economic sovereignty? While the immediate crisis measures were consequential, it is not clear that governments would have made different choices. This is much less obvious for the use of new instruments in the following years. Most of these tools are far less blunt. They can target individual states, firms and even citizens. By leaving these powerful instruments to central banks, governments lose economic sovereignty. A government with more control over the instruments of monetary policy will be better placed to achieve its economic policy aims.

³⁶⁷ Corporate Europe Observatory 2016.

³⁶⁸ Bloomberg 2016.

³⁶⁹ Turner 2015.

³⁷⁰ This was for example proposed by Jeremy Corbyn under the label 'People's QE'.

7.3.3 *The goals of central banking*

Now consider the goals of monetary policy. In interpreting its mandate, the central bank operationalises the aims of monetary policy and determines how to deal with trade-offs between different goals. The traditional arguments assume that monetary policy pursues a strategy of inflation targeting while at most occasionally considering economic output and employment. As discussed in §7.1.2, the mandate of the European Central Bank is general and vague where it concerns the goals of monetary policy. Before the crisis, price stability provided monetary policy with a relatively uncontested ultimate target. In 1998, the Governing Council of the ECB issued a press release specifying the ultimate target as a medium-term inflation rate below 2%. A 2003 press release modified this aim to an inflation rate below, but close to, 2%. This decision, which the Treaty does not explicitly assign to the ECB, raised few eyebrows.

The crisis has cast doubt on the importance of price stability and led the ECB to juggle a much wider range of goals. First, the ECB currently operates at the very limits of what can still be described as flexible inflation-targeting. Despite its non-conventional monetary policies, the ECB has had great difficulties maintaining its target. From mid-2013 till November 2016, Eurozone inflation has been below 1% and, despite months of negative rates and asset purchases, was at 1.4% in October 2017.³⁷¹ Every month it becomes more difficult to describe ECB policy as pursuing the avowed target of 2% inflation over the medium term.

Second, there is now much more disagreement on the costs of inflation and the measures that are justified to maintain price stability. Economists disagree over whether current low inflation is acceptable, or whether the ECB should in fact do more, or as the German government believes, even less. They also debate whether 2% is indeed the right target, or whether a higher or lower target might be preferable.³⁷²

Third, the distributive consequences of monetary policy now feature much more prominently in economic policy debates. The mandate of the ECB was developed at a time when economic inequalities were considered transient or even desirable aspects of economic

³⁷¹ Eurostat HICP, monthly data (annual rate of change).

³⁷² Williams 2014.

growth. This is no longer the case and the question of the distributive effects of monetary policy is currently at the centre of economic policy debates. As already noted, quantitative easing operations increase the value of financial assets, and it is far from clear that these effects are transient.³⁷³ Given the nature of the monetary policy instruments currently in use, a central bank that does not take economic inequalities into account hinders governments that pursue progressive distributional ideals.

Fourth, in the wake of the crisis, central banks have acquired a wide range of new roles that can conflict with the goal of price stability. In the case of the ECB, I already discussed (i) lending to banks that lose access to market funding; (ii) lending to Eurozone governments that lose access to market funding; (iii) adjusting collateral policy to support banks, and (iv) implementing quantitative easing operations. Other roles that I have not yet discussed are (v) designing, approving and monitoring financial assistance to member states; (vi) micro-prudential supervision; (vii) comprehensive balance-sheet assessment of banks (so-called ‘stress tests’); (viii) macro-prudential supervision; and (ix) surveillance of member states in line with new EU fiscal rules (x) agent for EU crisis prevention funds ESFS and ESM.³⁷⁴ The ECB’s stated monetary policy goals would require it to privilege price stability over other roles at all times, but it is not clear that this is now happening, nor whether this is in line with the economic policy of Eurozone governments.

Finally, there is a close interaction between decisions on instruments and goals. It can make sense to pursue the goal of price stability with one instrument, but not with another. For example, a government may prefer lending targeted at green investments to loans that merely increase the provision of mortgages. If only the latter option is available, that government may oppose pursuing price stability.

In sum, even if the monetary policy goals that were agreed before the crisis were relatively uncontroversial then, this is no longer the case now. As a consequence, the existing narrow mandate and its interpretation by the ECB has been and will often be at odds with the economic policies of Eurozone governments. Other central banks, which face similar circumstances and also balance a wide range of new competencies, have been forced to

³⁷³ Montecino and Epstein 2015; Haldane et al. 2016.

³⁷⁴ Zsolt & Merler 2013.

confront similar questions. In the new era heralded by the financial crisis, existing institutions of central bank independence remove these decisions from governments and therefore entail a considerable loss of economic sovereignty.

Central banking practices are unlikely to return to the pre-2008 status quo. The past decade has seen a turn away from deregulation and market-based policies towards more active economic management and government intervention. Economic inequality and financial stability are now firmly rooted in the political agenda, and for good reasons. Moreover, even for the narrow goal of price stability, it has become clear that setting short term interest rates is not a sufficient means for achieving it. Once interest rates are at 0, policymakers need to make difficult decisions on what instrument to use and what goals to pursue. A government that can influence the goals of monetary policy will be in a much better position to achieve its economic policy aims.

7.3.4 The poverty of central bank deliberation

There is no reason to assume that central banking will return to its pre-2008 state. I have shown that this makes central bank independence into a considerable impediment to economic sovereignty. Following the framework outlined in §7.2, we must now ask whether this can be justified by considering benefits of central bank independence for the quality of monetary policy. If it turns out that central banks are simply much better at dealing with their new challenges, then it would be permissible, maybe even mandatory, for governments to delegate monetary policy and refrain from interfering.

The plausibility of that assumption depends on both how one defines good monetary policy and what reasons one has to think that central bankers are best placed to make it. Evaluating this claim raises many tricky issues, for example, whether closed-group, depoliticized deliberation is to be preferred over public debate where complex issues such as monetary policy are concerned. To develop a decisive case for democratic legislation over expert rule will require a much more in-depth investigation than is possible here.³⁷⁵ Instead, I will argue

³⁷⁵ Chambers (2004) and Pettit (2004) argue in different ways for removing deliberation from wide public participation. Dahl (1989, 65f) and Urbinati (2010) argue against.

in this section that none of the three main lines of argument for thinking that central bank independence improves the quality of monetary policy continue to hold true.

Before 2008, central banks had clearly defined goals that they could pursue by means of one instrument. As we have seen, central banks now have many more instruments to use in pursuit of a much less clearly defined set of goals. In addition to undermining economic sovereignty, these developments also cast doubt on the three lines of argument in favour of delegating authority to central banks.

In pursuing a narrow mandate of price stability, central bankers needed a narrow set of moral and technical competencies. The crucial motivational competency was to value low inflation. The crucial technical competency was to understand the transmission mechanism. To pursue a wider range of goals, central bankers need more diverse moral and technical competencies and it is far from clear that they currently possess them. Positions on central bank boards are mainly taken up by civil servants and finance professionals. Data on twenty developed country central banks shows that between 1950 and 2000, 95% of board members were men and 47% had never had a job outside finance or bureaucracy.³⁷⁶ Central bank positions often explicitly require such a professional background. For example, the European Treaty prescribes that ‘members of the Executive Board shall be appointed [...] from among persons of recognised standing and professional experience in monetary or banking matters’.³⁷⁷ Central bankers will, therefore, have career incentives closely tied to bureaucratic and finance positions. Because inflation reduces the real value of financial assets, price stability is of particular importance to the financial industry.³⁷⁸ It is then not surprising that central bankers with a finance background prefer higher interest rates than those with a government background.³⁷⁹ Finance-related career incentives may perhaps be compatible with realising a narrow price stability mandate, but they raise conflicts where wider public interests are at stake.³⁸⁰ Moreover, contemporary career trajectories make it the case that central bankers are generally trained in a narrow set of economic policy competencies. Their technical expertise

³⁷⁶ Adolph 2013, p. 70f.

³⁷⁷ TFEU 283(2).

³⁷⁸ See footnote 348.

³⁷⁹ Adolph 2013, p. 116f.

³⁸⁰ Stiglitz 2016, p. 153f.

will be drawn predominantly from the discipline of economics, and, more specifically, from the fields of monetary and financial economics. Such competencies are relevant, but adequate deliberation on monetary policy in the 21st century will require a wider range of professional backgrounds.

The current situation also raises important questions of accountability and transparency. Under the status quo, central banks have extensive freedom to deliberate on the goal, strategy, and instruments of monetary policy. Such deliberation, which occurs in part through creative interpretation of central bank mandates, takes place in a closed committee and with limited democratic accountability. In the absence of a clear mandate for new policies, justifications provided for policy choices often aim at legal permissibility rather than explaining the rationale behind the choice itself.

In the absence of a clear mandate and procedure that facilitates deliberation, reasoning about monetary policy is impoverished. Consider again its distributive effects. From the perspective of existing mandates, any consideration of these effects is subordinated to the pursuit of price stability. As Claveau, Dietsch and Fontan (2016) show, central bankers rarely discuss the topic of economic equality, downplay its significance, and tend to focus on its role in relation to price stability. Adequate deliberation on distributive effects would require weighing the costs of increased inequality against the importance of matters like price stability and low unemployment. Today, however, if central bankers want to consider the distributive effects of their policies, they are forced to cloak their arguments in terms of their price stability mandate. Conversely, if central bankers ignore distributive effects entirely, they unduly impoverish their deliberations. The interpretation of a price stability mandate is not the appropriate medium for settling this type of complex distributive issues, but ignoring these issues is not appropriate either.

From this, I conclude that central banks are currently not well-placed to meet the challenges raised by their new instruments and goals.

7.4 Conclusion

Existing structures of central bank independence take the state's most powerful policy tool from governments and place it in the hands of unelected experts. Before the crisis, central banking involved the use of one instrument to achieve the relatively uncontested goal of price

stability. In these circumstances, governments could justify the delegation of monetary policy by relying on controversial, but reasonable and widely accepted premises. After 2008, the operations of central banks have changed and the traditional arguments are no longer valid. While nothing I have said precludes that central banks should retain some degree of independence, existing institutions are no longer tenable. The status quo can be reformed to introduce more democratic decision-making in at least three ways. First, amendments to existing mandates can extend the goals of monetary policy and explain how they should be weighed against each other. Second, mandates can assign a more prominent role to governments in deciding on the instruments and goals of monetary policy. Third, central bank deliberation should be improved by extending the available expertise and modifying existing career incentives. Most likely, a combination of all is needed. There is no simple rule to determine how political institutions should govern public money creation.

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