Between Fichte and Marx: the limits to financial democratisation

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Max Krahé, Institute for Socio-Economics, University of Duisburg-Essen
maximilian.krahe@uni-due.de

A. Introduction

Finance is often described as the cerebral cortex of capitalist economies. Through capital allocation and capital modulation, finance determines who owns and controls which assets today, and what development paths the division of labour takes in the future. This makes establishing democratic control over finance an essential part of building a democratic social order.

Calls to and proposals for democratising finance have multiplied since 2008 (e.g. Malleson 2014; Block 2019a; Hockett 2019; Omarova 2020b). These are supplemented by detailed analyses, both technical and political, of particular tools to this end, such as credit guidance (Bezemer et al. 2021, Smolenska and van't Klooster 2022), public credit provision (Downey 2022), targeted central bank refinancing operations (van ’t Klooster and van Tilburg 2020) or democratic central bank planning (Braun 2021), or visions for overhauling the overall macro-financial regime (Kedward, Gabor, and Ryan-Collins, n.d.; Sahr 2022).

This paper seeks to complement the emerging literature around democratising finance by analysing some of the limits to democratic control over finance. A useful map includes roads and bridges, but it also points out rapids and swamps. It is knowledge of the latter that this paper seeks to add.

The paper begins by distinguishing democratisation-as-control, the paper’s subject, from democratisation-as-inclusion, which lies outside its scope. Next, I use a vignette on US housing finance reform during the New Deal to illustrate some of the basic mechanisms

involved in politically controlling financial flows, and to identify arbitrage as one important limit to establishing democratic control over finance. The severity of this limit can easily be over-estimated: moving from an ideal-typical to a more realistic image of financial markets shows how herding effects, uncertainty, information asymmetries and other features create multiple equilibria and thereby reduce the risks of arbitrage undermining democratically decided allocative priorities. In addition, drawing on Mehrling (2012) and Pistor (2013), I show how the hierarchical nature of money can be used for the creation of durable, arbitrage-resistant spreads.

The turn towards money's hierarchical nature closes the first half of the paper. In the second half, I turn towards a deeper, more binding limit on public control over finance: money- and debt-creation's nature as an ongoing, social, always partly de-centralised and therefore imperfectly controllable process. The nature of this process implies that, where attempts to influence the allocation or modulation of financial capital diverge significantly from the interests and intentions of powerful private actors, mechanisms like wildcat credit creation, the creation of alternative payments- or money systems, and at the limit an exit from the existing currency may erode the control that government can exercise over both the allocation and the modulation of finance (see also Murau and van 't Klooster 2022 on this). This limit creates a trade-off between control over finance and access to resources. The penultimate section of the paper uses a second vignette – on the liberalisation of French finance in the 1980s – to illustrate and explore that trade-off. A brief conclusion follows.

B. Democratising finance: two definitions

Broadly speaking, "democratising finance" can refer to two different clusters of ideas: on the one hand, a cluster revolving around the idea of "financial inclusion", i.e. *democratisation-as-inclusion*. On the other hand, a cluster revolving around the question of how to direct the creation and allocation of financial capital, i.e. *democratisation-as-control*.

This paper is concerned with the second set of ideas, democratisation-as-control. By "democratising finance", this paper refers to (proposals for) structures and mechanisms that attempt to bring flows of financial capital in accordance with democratically chosen goals, such as "reducing inequalities of income, wealth, and power" (Block 2019b, 484), achieving full employment (Konczal and Mason 2017), or decarbonising the economy (Omarova 2020a; Hockett 2020). It does not refer to microcredit schemes (Yunus 2004; Fernando 2004), "banking the unbanked" (Berre, Blickle, and Rajashri Chakrabarti 2021) or other forms of extending formal credit-, banking-, and investment services to segments of the population previously excluded from them.[1]

In recent years, a number of proposals for democratising finance have been made, in this sense of democratisation-as-control. Examples include the introduction of a National Investment Authority (Hockett and Omarova 2018); a blueprint for a financial system composed of a National Reconstruction and Development Council, a National Investment Corporation, and a more decentralised Federal Reserve (Hockett 2021); a system of decentralised, non-profit banking institutions, non-profit stock markets, and public investment banking (Malleson 2014, chaps 6–7; Block 2019a); credit guidance through central bank refinancing operations (van 't Klooster and van Tilburg 2020) and a range of other credit guidance policies (Bezemer et al. 2021; Tankus 2022; Desan 2022, section 5); or reforms intended to expand the toolkit of (Konczal and Mason 2017) and democratise central banking (Berman and McNamara 1999; Binder et al. 2020, pt. I) or money creation (Sahr 2022). It is to the debates around these and other proposals that this paper seeks to speak.

[1] Except insofar as these may form a sub-class of structures and mechanisms that attempt to bring flows of financial capital in accordance with democratically chosen goals, which Desan (Desan 2022, 26) for example foregrounds.

C. An illustrative vignette

How, then, is public control over financial flows established? And what limits does it run into? To make a discussion of these questions as accessible as possible, I use a vignette from American housing finance and its reform during the New Deal to illustrate a first set of basic mechanisms. This section gives the vignette; the next draws out arbitrage as a first, but only weakly binding, limit to establishing democratic control over finance.

Prior to 1934, housing finance in the United States was a risky endeavour, involving expensive credit on uncertain terms. In the 1920s, most American mortgages ran for three to five years only, and were structured as interest-only payments during the life of the loan. When the mortgage term ended, a single, large "balloon" payment was due as repayment for the principal. This made mortgages risky, since borrowers either had to organise their finances so to accumulate the means for repayment—a demanding task, and one frequently impossible in light of low or volatile incomes—or had to secure refinancing at the end of the term, often relying on the bank to roll over the mortgage. The latter depended as much on the particular household's and bank's finances as on overall financial conditions and the business cycle. In virtue of their elevated risk, mortgages were generally expensive and usually rolled over rather than repaid when due (Prasad 2012, 201).

At the onset of the Great Depression, and following a spectacular bubble, this model of housing finance collapsed. With wages falling and unemployment rising, confidence in households' ability to repay mortgages declined. The banking panics of 1930, 1931 and 1933 deprived banks of their financing, as depositors withdrew money and interbank lending froze (Friedman and Schwartz 1963, chap. 7). As a result, banks refused to roll over expiring mortgages or to grant prospective buyers new ones. "By 1933 the mortgage market was effectively dead" (Hyman 2011, 48).

With the collapse of housing finance, housing construction itself fell off a cliff: "By 1934, the construction industry, as a whole, was one-tenth the size it had been in the late 1920s" (Hyman 2011, 48). "Residential building permits fell from a peak of 500,000 a year in 1925 to just over 25,000 in 1933" (Prasad 2012, 202). Given the centrality of construction to the economy as a whole,[2] both Congress and the Presidency looked for means to resuscitate credit, and with it the construction sector.

After initial experimentation, a powerful recipe was found to change both credit allocation and modulation. Through acting on mortgages' terms and conditions, their risk profiles and their liquidity, New Deal reforms made housing finance attractive to both borrowers and lenders again. For borrowers, the newly created Federal Housing Administration (FHA) introduced a standardised mortgage format, involving long-term loans (up to 20 years, later up to 30 years) that were cheap (5% or below), large (up to 80% loan-to-value) and fully amortized (i.e. regular payments covered both interest and principal on the loan) (Prasad 2012, 203–4). These offered an affordable and predictable path to home ownership, obviating the previously fatal balloon payments and the precarious refinancing they usually required.

In order to make these standardised mortgages attractive for lenders, the FHA both reduced the default risk and improved the liquidity of qualifying mortgages. The former was done through an insurance programme.[3] The latter through the creation of the Federal National Mortgage Association in 1938 (FNMA, widely known as "Fannie Mae"), which was tasked with buying FHA-conforming and -insured mortgages from lenders and selling them on to

[2] "Ten percent of American factories manufactured building materials for construction. Twenty percent of freight cars carried those materials across the country. Unskilled labor carried material. Skilled labor put it together. Metal and wood of all shapes and types were needed for almost any project. Muscle and machine were needed alike. Clearly, restoring the economy turned on restoring the construction industry" (Hyman 2011, 48–49).

[3] This programme repaid lenders their principal, in case a borrower defaulted. The insurance premium was 0.5% of the principal, which the lender paid into the insurance fund annually until the mortgage was paid off. If there were no defaults, the insurance payments were returned. Lenders could be reimbursed up to 100% of losses on individual loans as long as total insurance payouts were less than 20% of a lenders total lending volume (Hyman 2011, 54, 56, 306).

interested investors. With Fannie Mae operating as a market-maker, prepared to buy insured mortgages for cash at any time, mortgages became a liquid and therefore attractive investment. This brought private investors back into the market, who eventually acquired the vast majority of FHA-insured mortgages (Hyman 2011, 67–70).

Since FHA insurance and Fannie Mae market-making made FHA-conforming mortgages low-risk and attractive to lenders, they became cheap and widely available after WWII. This made them attractive to borrowers, too, so that the total volume of mortgage lending increased rapidly, from a low of around 6% of GDP in 1945 to around 25% of GDP in the 1960s, or around $100 billion in 1945 to $900 billion by 1970 (Jordà, Schularick, and Taylor 2017, author's calculations based on Release 5, both numbers in 1990 dollars). With credit booming, both home construction and homeownership flourished after WWII: New housing units started increased from 406,000 in 1938 to 1,466,000 in 1949 (Gotham 2000, 309). Home ownership rose from below 50% of all dwellings in the 1930s to more than 65% in the 1970s (White 2014, 153). The result was a form of capital modulation that Monica Prasad has aptly called "mortgage Keynesianism" (Prasad 2012, 93).

A capital allocation effect was achieved by restricting the liquidity-enhancing and risk-reducing features to mortgages that conformed to the FHA's *Underwriting Manual*. Only those were insurable and hence eligible for Fannie Mae market-making, hence only they could be counted on as desirable and liquid assets on the secondary market. This had a strong impact on the kinds of houses that were built: The FHA introduced quality standards "to avoid the shoddy, speculative construction that had been the norm in the 1920s" and verified compliance via its own corps of inspectors (Hyman 2011, 54).

Besides choking off capital flows towards shoddy construction projects, however, the FHA's *Underwriting Manual* also made a number of other, highly consequential, allocative decisions: it preferred new homes to existing homes, residential-only over mixed-use, low-

density over high-density, and racially- and class-wise homogeneous neighbourhoods over racially diverse and mixed-class ones. Central downtown cores were ineligible, suburbs greatly preferred.

Given this combination of both steering and amplifying capital flows, New Deal mortgage reform left a profound imprint on the structure of American real estate (Hyman 2011, 63-67). Beside raising the quality, quantity and owner-occupier rates of American homes, and pushing investment flows into the suburbs and out of America's inner cities, it deliberately channelled credit away from African Americans and other ethnic minorities.[4] This left a lasting imprint on the distribution of wealth in America (Baradaran 2017 esp. chap. 4), contributing to a massive wealth gap even between African Americans and white Americans of similar income and residential status (Hyman 2011, 137-45). The ownership structure of American housing was at once broadened and racialized (Hyman 2011, 46, 71; Prasad 2012, 204–5).

D. A first limit to democratising finance: arbitrage

How was this revolution of housing finance possible, against the backdrop of a profit-oriented financial system and an overall capitalist economy? If the business of mortgage finance could become immensely large and profitable *after* the New Deal financial reforms, why didn't private financial actors realise these opportunities beforehand?

At first glance, influencing capital flows in liquid, integrated financial markets appears near-impossible: In order to boost the flow of capital to a particular use, it must be made *less* expensive or otherwise more attractive for the user, to encourage the demand for funds. But if more lenders are to take the other side of these contracts, it must be made *more* lucrative to the suppliers of capital, too. Else, conditional on decentralised decision-making, little capital will

[4] This is a highly compressed account. For a more detailed, but still compact account, see Hyman (2011, chaps 137–45), for in-depth accounts see esp. Freund (2007) and Baradaran (2017). On racism in the New Deal generally, see Katznelson (2013), on redlining see Jackson (1985), Sugrue (2014) and Cohen (2003).

flow towards borrowers. In other words, conditional on preserving generally decentralised economic decision-making, interest rates must go down for borrowers, up for lenders, to encourage flows of capital into particular projects, i.e. to steer the allocative function of finance. Spreads (i.e. interest rate differentials) must be created or closed, both between what borrowers pay and what lenders get, and between favoured and disfavoured types of projects. Creating these kinds of spreads through financial policy, as opposed to fiscal policy, appears prima facie difficult: arbitrage should close them.

Two considerations explain how and why arbitrage-resistant spreads can be created or closed. First, arbitrage around credit guidance may appear natural when considered in the context of an ideal-typical, neoclassical portrayal of financial markets and the economy. In this view, financial markets are always efficient, reacting immediately and optimally to all new information (Fama 1965). The economy at large is claimed to have a single, supply-side determined, Pareto-efficient equilibrium (Mankiw 2016). Held up against this image, attempts to steer credit towards uses other than those emerging from competition in real and financial markets will inevitably create opportunities for profiting from arbitrage. Where these arbitrage opportunities are exploited, the final allocation of capital is the same as before credit guidance, but with additional transaction costs; where they are not exploited, e.g. because of vigorous regulatory enforcement, society suffers a deadweight loss to economic efficiency (Friedman 1970, 24–32).

However, research has shown that uncertainty (Keynes 1936), herding effects, information asymmetries (canonically: Stiglitz and Weiss 1981) and other features of financial (see e.g. Turner 2015, chap. 2, for an overview) and real (Cassidy 2009) markets create an abundance of market failures, path dependencies, and hence multiple equilibria. This implies that the scope for arbitrage is significantly lower in actual financial markets than in an ideal-typical portrayal of them: where credit guidance shifts capital allocation from one equilibrium

to another, or from one development path to another, instead of moving it away from a unique, supply-side defined equilibrium or development path, circumventing credit guidance may no longer be individually profitable. The overall structure of the economy may come to favour the projects that credit guidance prioritised in a first iteration,[5] or the economy as a whole may settle into a state where new and additional economic activity validates the newly created capital (Keynes 1936). Where circumvention is no longer individually profitable, or only at very high risk, arbitrage attempts dry up. The example of housing finance reform arguably demonstrates precisely this mechanism: Because construction is such a central sector of the economy, spurring significant amounts of capital creation here helped (in the context of significant spare capacities) to generate the additional income and production that then validated the created capital ex post.

Second, even where, despite the existence of frictions and multiple equilibria, the underlying "fundamentals" create a potential for profitable arbitrage, public control can be exercised via acting on the hierarchy of money (Mehrling 2012; Pistor 2013). As an empirical regularity, people are willing to pay for financial assets that are liquid, stable in value, and reliably convertible (at par or close to par) into cash (e.g. Greenwood, Hanson, and Stein 2015). This is called the "cash premium." Most of us, for example, are willing to hold the short-term liabilities of commercial banks (i.e. bank deposits), which return low or even negative interest rates, even though we could hold the same purchasing power in 10-year government bonds, which return significantly more interest, say between two and three percent more, than bank deposits.[6] In other words, we willingly incur an opportunity cost to hold bank deposits, because

[5] For an example of multiple equilibria, consider that following significant initial investments, the costs for solar PV and wind power declined to such an extent that credit guidance towards these technologies has become to a significant degree self-enforcing. For an example of high risk or uncertainty preventing arbitrage, consider that foreign exchange rates famously fail to equate the value of tradable goods and assets in different markets.

[6] At the time of writing, interest on checking accounts in major US banks was 0%, versus around 3% on 10-year US government bonds.

bank deposits rank highly in the hierarchy of money.[7] Absent major outages in banks' IT infrastructure or ATMs, they are highly liquid. And since the value of bank deposits is fixed in nominal terms, they are insulated from financial market movements.

This latter feature is particularly important: US government bonds, too, are highly liquid and, given the Federal Reserve's willingness to backstop markets for US government debt, convertible at near-par into cash. However, their value is not stable in nominal terms: the market value of long-term debt moves significantly with interest rate changes. Since most economic agents have payment obligations whose amount is fixed in nominal terms, the quality of maintaining a fixed value in those nominal terms makes an asset attractive (Minsky 1957). Meeting monetary payment obligations is essential to economic survival, and these assets allow for a predictable matching of assets to obligations.[8]

By acting on these features – liquidity, convertibility, stability of value in nominal terms – particular financial assets can be moved up or down the hierarchy of money. In the vignette, for example, FHA insurance and Fannie Mae market-making improved mortgages' stability of value and liquidity, and thereby moved FHA-conforming mortgages further up the monetary hierarchy. Doing so made lenders more willing to hold the asset, lowering the interest rate they required to hold or offer it. A lower interest rate in turn elicited more demand for borrowing from households. In combination, this both boosted capital modulation and steered flows of capital specifically into FHA-conforming mortgages.

Traditionally, the most powerful tool to shift an asset up in the hierarchy of money has been for states to accept it as payment for tax liabilities. Doing so creates a steady demand for

[7] Up to the value of deposit insurance, currently $250,000 in the US, 100,000€ in the EU, they are publicly guaranteed to be convertible into cash.

[8] By the same token, very short term debt, such as treasury bills (US government debt with maturities of less than one year), asset-backed commercial paper or money market fund shares are de facto a form of near money: they are liquid, have low default risk and, in virtue of the brief duration until pay-out, i.e. because they are *short-term* debt, they are far less exposed to valuation changes from interest rate movements (Ricks 2016, chap. 1).

the specific instrument, both because of the direct demand in order to make tax payments, and because of the indirect effect of knowing that most other *private* parties will accept them as payment, because they in turn have tax liabilities that need to be paid off. Once shifted up in the hierarchy of money, this particular asset attracts a significant cash premium. Those who can create the relevant asset out of nowhere, e.g. banks with bank deposits or states with cash today, have the ability to provide credit at rates cheaper than anyone else in the economy (Ricks 2016, chaps 2, 3) – i.e. the ability to create spreads that cannot be easily closed.

This explains a common feature of many proposals for democratising finance: restricting the creation of high- or highest-ranking money to a small and closely controlled subset of lenders, often only the central bank itself, and taking this power away from commercial banks and/or shadow banks.[9] This would reduce banks and shadow banks alike to "investment trusts" (Moutot 2018, 9), largely constrained to genuine financial intermediation. The production of top-of-the-pyramid money and near-top credit would be controlled by the public sector, allowing credit to be allocated in an arbitrage-resistant manner. Whether or not this appears an attractive proposition will depend on one's views about the public- vs. the private sector's ability to identify promising projects and to provide credit and capital at the macroeconomically appropriate prices and quantities.

Regardless of one's stance on the merits of full-reserve-banking, it represents a recognition that it is precisely money's hierarchical nature which allows for a significant degree of political and hence potentially democratic control over its allocative function, even in a world close to the neoclassical imaginary of frictionless markets.

E. Outside options: the deeper limit to democratic control

The previous section discussed a first limit to democratisation-as-control of finance: the

[9] See e.g. the Chicago Plan, Ricks (2016), Hockett (2019), Omarova (2020b), Desan (2022), Eich (Eich 2022).

possibility of arbitrage, which can close spreads and thereby negate desired capital-allocation and capital-modulation effects. But as the section also showed, the limits that arbitrage impose are wide: both the existence of frictions, imperfections and multiple equilibria and the hierarchical nature of money allow for a shaping of the allocation and modulation of finance in arbitrage-resistant ways.

The second half of this paper discusses a second, deeper limit on democratic control over finance: Money's socially constructed nature and the uneven share that different social groups and interests have in this process of social construction.

Hyman Minsky once quipped: 'everyone can create money; the problem is to get it accepted.' (Minsky 1986, 78–79). In Minsky's formulation, the emphasis was on 'problem' and in particular the problem that the would-be money-creator faces: most 'wildcat' attempts at making new money fail. Here, however, the emphasis is on 'everyone can create': *Some* 'wildcat' attempts at making new money succeed! And when they do, they have consequences for everyone else.

To see the manner in which this may impose limits on democratising finance, consider the following example. In 1988, the Basel Committee on Banking Supervision adopted the Basel I Accords. These were adopted "to ensure the stability of the global banking system, while also removing downward pressure on banking regulation due to international competition" (van 't Klooster 2021, 191).

The problem they meant to address is the following: banks, like all other limited liability corporations, have a limit on downside risks, which caps their losses at equity. At the same time, they reap potentially unlimited gains on the upside, with all post-tax profit accumulating to their own balance sheet (Ciepley 2013; Mayer 2013). Given this asymmetry, there is a perennial incentive to take on as much risk as possible: downside risk, after a certain point, will fall on others, while the potential upside is captured in its entirety, producing a

classic moral hazard problem (Ricks 2016, chaps 2, 3).[10] To counter-act this tendency, Basel I introduced a minimum capital requirement of 8% of risk-weighted assets.[11]

However, banks quickly discovered ways around these limits (Jones 2000). In particular, "securitization and other financial innovations … provided unprecedented opportunities for banks to reduce substantially their *regulatory* measures of risk, with little or no corresponding reduction in their overall *economic* risks." (Jones 2000, 36, highlights added).[12] As a result, overall economic leverage could increase significantly above the levels deemed safe by regulators, increasing the risk of socialised losses following a period of privatised gains.

This process is usually called "regulatory arbitrage" (Jones 2000; Ricks 2016, 17). But this designation underplays the importance of the mechanism in action here. As Ingham (2004) Desan (2014) and Spang (2015) have shown, money and credit are social creatures, a "governance project", continually created and contested in a complex game between the state and networks of private actors. This game is fickle: on the one hand, the functioning of money requires trust, confidence, or at least good collateral, all of which may be in short supply. For this reason, money can be structurally undersupplied, whether for specific groups, often the poor, or in general, as following the Great Recoinage of 1696 (Desan 2014, 364–67), in Britain's American colonies (Desan 2022, 16), during the Great Depression (Straumann 2019),

[10] This is also one of the classic drivers behind the endogenously destabilising nature of finance (Minsky 1986; Kindleberger 1978).

[11] Risk-weights were simple, with assets divided into four categories: Cash and OECD government bonds carried a zero weight. Highly-rated mortgage-backed securities carried a 20% risk weight, standard residential mortgages carried a 50% weight, and most corporate sector debt carried a weight of 100%.

[12] For example, a bank with a portfolio of $100 million in mortgage-backed securities might face a 20% capital requirement, i.e. would have to hold $20 million of capital in order to be permitted to create $100 million in mortgage-backed securities. But if the bank could pool these securities, create a first-loss tranche of, say, $5 million, and sell the remaining 95% as ultra-safe assets, it might cut its capital requirement to $5 million, despite carrying the same economic risk as before (assuming the remaining $95 million tranche is now essentially riskless). The remaining $15 million of capital could now be used to originate another $300 million of mortgage backed securities, using the same procedure.

or at many other times and places. On the other hand, because money creation, where it succeeds, is a highly profitable enterprise (Ricks 2016) and due to the risk-reward asymmetry identified above, there is also the perennial risk of oversupplying money, whether by the private or the public sector.

As a result, there is inherent macro-economic uncertainty about whether new credit- or money creation is good or bad.[13] Different parties will often disagree on this question; and its answer will depend as much on the overall macro-financial situation as on the specific uses to which any newly created funds will be put.

One response to this predicament, which won out in the post-Civil War debates about the future of the US monetary system, is to delegate most credit- and money creation to private parties, possibly supplemented by a limit on their activities in the form of gold convertibility (Desan 2022, 40; Menand and Ricks 2021).[14] As the example of English country banks and a general proliferation of new, private monies in 18th century England shows, this can be a highly successful approach, in terms of spurring additional productive activity (Desan 2014).

At the same time, there are powerful reasons speaking against a delegation- or franchise model (Hockett and Omarova 2017). Besides the allocative power it grants to the private sector, if private credit- and money creation becomes excessive, as it tends to do (Minsky 1986), then the eventual collapse of the extended credit can drag down the entire economy, putting governments before an unenviable choice between tolerating a balance sheet recession or bailing out some of the debtors or creditors. The former is economically painful (Fisher 1933;

[13] See also Downey (2022), who argues convincingly that the costs and benefits of public credit programmes cannot be calculated with traditional or more recent profit-oriented methods. This could be interpreted as an inherent micro-level uncertainty about particular credit creation decisions.

[14] "private banks, constrained by the need to redeem their promises for gold coin, would be more disciplined in money creation than legislators, who might overissue money if they controlled it." (Desan 2022, 40).

Jordà, Schularick, and Taylor 2015), the latter has obvious moral hazard problems as well as furthering inequality and injustice over time.

Examples of this pattern abound. A particularly colourful one is the Kuwaiti Souk Al-Manakh stock bubble and crash of the early 1980s. This was driven by sellers of shares accepting payment in the form of cheques that were dated weeks or months into the future (Darwiche 1986; Craig 2019). Although "[r]egulators had made a prudent effort to ensure that the banking sector was not too exposed to the risky financial innovation of the Souk al-Manakh exchange … by prohibiting banks from lending for the purpose of buying stock on it" (Craig 2019, 1), a bubble of epic proportions emerged.[15] After it burst, the "entire Gulf region [whose financial centre Kuwait was at the time] went into recession" (Craig 2019, 2). As this case shows, even protecting the core of a monetary system may not be enough: over-leveraging can always take place in the margins, with potentially devastating effects for the system as a whole.

There are good reasons, then, to prevent or at least control wildcat credit creation in large volumes. But it is here that the deeper limits to democratisation-as-control are encountered. Private parties with strong collateral and a reputation for honouring their promises can always issue private "promises to pay" or "IOUs". In order to integrate these "promises to pay" into the payments structure more widely, the private issuer would need to offer convertibility into higher-ranking money; large amounts of private wealth enable precisely this, as they can be pledged to lend credibility to promises of conversion on demand. Where the issuance of these private IOUs succeeds, and where they enter into general circulation, the money supply has been expanded. Of course, government can police precisely this mechanism, for example by banning all functional equivalents of fractional reserve banking by non-licensed

[15] The Souk al-Manakh, housed in an air-conditioned parking garage, briefly became the world's third largest stock exchange by market capitalisation, second only to Wall Street and the Tokyo Stock Exchange, ahead of the Paris Bourse and the London Stock Exchange (Craig 2019, 1).

entities,[16] but where the demand for money is significantly larger than what the core of the financial system is willing or able to provide, this would be a difficult provision to enforce (Moutot 2018).

The mirror version of this problem is where more money and credit are supplied from the monetary system than there is effective demand for them. This can happen because of generally more credit- and money creation than economic activity; or it can happen because of more targeted measures, such as high inheritance taxation, that make rich people want to leave the particular money (e.g. sell onshore dollars to obtain offshore dollars) or money of account (sell dollars to buy euros), reducing private money demand in that amount. Here, the problem is not wildcat credit creation, i.e. a lack of control *within* the monetary system defined by the unit of account; but exit from the currency, i.e. a lack of control over the relationship between the unit of account and other monies or real goods and services.

The deeper limit to democratisation-as-control, then, is that money is always and everywhere socially made. And because it is "[m]ade by engaging the same people who use it" (Desan 2014, 1), those who use it can always attempt to subvert majority control over the allocation or modulation of finance, whether through wildcat credit creation denominated in the same unit of account, or through withdrawal into alternative such units. Importantly, the capacity of wildcat credit creation and the consequences of withdrawal into alternative currencies are not evenly distributed throughout the population: it is specifically the rich and powerful whose exit from a currency matters most, for they can take real resources with them and demand of others who seek to trade with them to transact in a different unit. And it is the same group who is most capable of wildcat credit creation, for it possesses the collateral and, at least potentially, the commercial credibility required for it.

[16] This is the proposal developed by Ricks (2016).

F. "Trading control for resources": why states rarely seek full control over finance

Of course, as with the question of arbitrage, the tightness of this deeper limit is easily exaggerated. Wildcat credit creation carries risks. Transacting in strange currencies carries costs. The limits that arise from the possibilities of exit and wildcat credit creation rarely bind immediately or tightly on political control.

Nevertheless, they do eventually bind. A second vignette serves to illustrate how. Consider the liberalisation of the French financial system under François Mitterrand. As with the toleration of Euromarkets by the UK and the US (Helleiner 1994), the French path to financial deregulation was driven by the advantages it offered to state actors (Loriaux 1991; Abdelal 2007). In particular, deregulating the French financial sector allowed the French state as well as French industry and households to borrow cheaply and without causing additional inflation. Through making concessions to the purveyors of capital, lowering their risk perceptions, these could be induced to extend and hold new credit at cheaper rates, in a parallel mechanism to that visible in US New Deal housing finance reform. What rendered this instance of the same causal pattern so striking was that it was implemented by a socialist government that had been elected on a specifically anti-capitalist platform.[17]

During the post-war era, the *trente glorieuses*, public control over money and credit was tight in France (Lemoine 2016). French governments had regularly borrowed newly created funds from the *Banque de France*, depriving private banks of much of their structural power over government bond markets.[18] Credit to industry was dominated by state and quasi-

[17] The *Parti Socialiste's* policy programme for 1981, entitled *The Socialist Project for France in the 1980s*, for example stated "We wish to establish a method, as precise and concrete as possible, to move from one economic, social, cultural, and therefore political social order to a different one, from the capitalist system in France to socialist society" (Parti Socialiste 1980, 10).

[18] The process operated with commercial and public banks as intermediaries, in a system known as the "circuit du Trésor." Since both public and private banks were legally required to deposit a certain part of their resources with the treasury, but could in turn re-finance their loans at the *Banque de France*, this intermediate step was technical.

public financial institutions.[19] As long as they were offset by sufficient growth, increased taxation, higher interest rates for non-privileged borrowers, or other regulatory changes that reduced bank lending elsewhere and so freed up space to be filled by government spending and lending to prioritised sectors, these practices were non-inflationary.

However, as productivity growth fell below expectations in the 1970s and early 1980s, it became necessary to take demand out of the system in order to reduce inflation. This meant either reducing public and private borrowing, reducing wages (whether through taxes or pressure on trade unions for sub-inflation wage increases), increasing savings, or reducing profits.

Mitterrand was elected on the triple promise to break this impasse by reducing profits and generally distribute income and wealth downwards; nationalising large parts of French industry and the French banking system, making sure investment would continue apace despite lower profits; and ensuring full employment through classic Keynesian demand management, securing the full use of all productive capacities.

However, once President Mitterrand's government started implementing this programme, it became clear that downward redistribution, large-scale nationalisations, and full employment policies were not compatible with France's integration into global product and financial markets. From the day of his election, France was bleeding currency.[20] Full employment policies, downwards redistribution, and lower profit rates all contributed to a structural balance of payments deficit: investors earned lower rates of return on domestic

[19] "Three-quarters of all loans to business in 1979 came from state or semipublic financial institutions, including nationalized banks and subsidiaries. Some 43 percent of all loans were subsidized by the state" (Loriaux 1991, 226).

[20] Between 11th and 21st May the *Banque de France* spent a third of its foreign currency reserves buying francs to keep the exchange rate from falling below its minimum level in the European Monetary System (Fulla 2016, 393). This was despite three interest rate increases by the *Banque de France*, a 3.5% increase on 11th May 1981, a 2% hike on 15th May, and another 4% increase on 22nd of May, bringing the rate to an eye-watering 22% (INSEE 1982, 7).

investments, creating an incentive to prioritise investment abroad. French workers enjoyed high incomes, thus drawing in imports from abroad and purchasing French goods that could otherwise have been exported. Also due to higher wages, French businesses faced higher costs, making their exports less competitive abroad.

Of the traditional two solutions to reduce imports (and hence redress the balance of payments deficit), neither was attractive: tariffs would clash with European market integration; domestic austerity with the government's avowed policy priorities, in particular full employment. Initially, the government thus deployed a variety of non-conventional tools to bring the external deficit under control, including borrowing on international financial markets,[21] boosting nuclear energy production and energy efficiency to reduce oil imports, and deliberately using administrative procedures to create obstacles to imports.[22] However, since these tools did not suffice to close the balance of payments deficit, Mitterrand was forced to choose between either taking France out of the international division of labour, or re-structuring French society domestically to bring the balance of payments into a stable equilibrium.

Between June 1982 and March 1983, Mitterrand chose the latter option, in part because this required less austerity in the short term,[23] but also because de-coupling from European economic integration would have imperilled the larger project of European political integration. To ease the pain of domestic restructuring, similar to decision-makers in the US

[21] In 1982, France borrowed in the region of $20 billion on international markets, compared to $26.5 billion by the US, and around $12 billion and $9 billion for Japan and Canada respectively (Loriaux 1991, 234).

[22] Examples of this included the requirement to submit all customs documentation in French, or that all VCR recorders—a product that was almost exclusively imported from Japan—had to be cleared at a single customs office in Poitiers, a small town in Western France without port or major airport (Asselain 2001, 414).

[23] Elisabeth Guigou and François-Xavier Stasse, two of the president's closest economic advisors, estimated that closing the balance of payments deficit through domestic restructuring would require a reduction in domestic demand of 30 billion francs, while exiting from European monetary integration (which at this point was the EMS, or European Monetary System) would require a reduction of 50 billion. Note from F.-X. Stasse and E. Guigou to President Mitterrand from 8 March 1983 (French National Archives, Series AG/5(4)/4324, FXS.EG.PC 494), entitled "Objet : mise en oeuvre économique d'une sortie du S.M.E."

(Krippner 2011) or Sweden (Blyth 2005), Mitterrand opted to accompany austerity with the deregulation of finance.[24]

In an echo of the New Deal financial order, French financial markets had been compartmentalised in the wake of WWII. Competition between banks was limited through an instrument called the *encadrement du crédit*, fulfilling a similar function to Regulation Q in the US (Gilbert 1986), but in a more direct and periodic manner,[25] and capital controls had been introduced in the 1970s and early 1980s, to allow French interest rates to be pushed below global, and in particular US, interest rates, which had risen abruptly in 1980.[26] Deregulation therefore took the form of creating a money market (1984, with access extended beyond banks in 1985), which greatly reduced market compartmentalisation; abolishing capital controls (1984-6), which integrated French with international financial markets; and phasing out the *encadrement du credit* (1985-7), which exposed banks to harsher competition among each other (Loriaux 1991, 224–26).

The most important effect of financial deregulation was to allow for the real interest rate to increase—drawing purchasing power away from spending and into savings and so reducing inflation—without dampening credit growth, the usual consequence of an increase in interest rates. In particular, the real short-term interest rate increased from an average of around 0% during the 1970s to 4-5% in 1984-1987, its highest level since 1953.[27] Despite this increase,

[24] A comprehensive account of the history of financial deregulation in France is given by Lemoine (2016, in French, with an emphasis on public finances) or Loriaux (1991, in English, with an emphasis on international linkages, in particular to US policy).

[25] Unlike Regulation Q, which subdued competition through fixing maximum interest rates on deposits, the *encadrement du crédit* limited competition through placing direct limits on the amount of credit that individual banks could lend to households and firms. Introduced temporarily in 1957, 1963, and 1968, it became a permanent feature of French financial regulation after 1972 (Loriaux 1991, 39).

[26] This sudden increase, to a peak of 20%, is generally known as the Volcker Shock, after the Chair of the Federal Reserve who implemented it.

[27] In addition, while 1953 saw short term interest rates averaging 6%, this was a one-off spike in the context of high volatility: the average real short-term rate in the year before was -8% (1952), in the year after (1954) around 4%, falling to 2% in 1955. In the late 1980s, in contrast, the real interest rate exceeded 4% every year for a decade

real credit growth increased from 0% in 1981 and around 3% in 1982-1984 to around 5% in 1985-1990, with spikes of 9% and 8% respectively in 1988 and 1989. Real growth in loans to households increased from 2-3% per year prior to deregulation to more than 10% p.a. in 1986, 1987, and 1988.[28] In significant part driven by financial deregulation, the CAC40, France's equivalent of the Dow Jones, experienced an unprecedented boom, rising from an average of around 360 points in 1982 to a peak of more than 1620 points on 26th March 1987, an increase of 350% in less than five years. At the same time, inflation fell from an annual rate of thirteen per cent in 1981 to a rate of three per cent in 1986 (OECD 2017, CPI Inflation).

In contrast, prior to deregulation, attacks on inflation meant that the *encadrement du crédit* "had to be tightened rather than loosened, exceptional tax levies had to be multiplied" and "interest rate policy [had to be] more deflationary than before" (Loriaux 1991, 235). Attacking inflation meant curtailing credit, which in turn meant lower investment, lower consumption, and lower growth.

Deregulation temporarily dissolved this binary choice and allowed inflation to come down without restricting credit growth. This allowed households to maintain consumption and to invest in assets despite lower-than-expected wage growth, and hence served to soften the backlash against Mitterrand's turn towards austerity.

Yet deregulation was not costless. The consequences for the distribution of economic decision-making power were clear. Prior to reforms, the vast majority of credit had been allocated by state or semi-public financial institutions (see footnote 19 above). Through the tool of credit allocation, choices about which sectors to prioritise, what kinds of firms to support, or which regions to foster had been in public hands. After the reforms, it was "large banks" who "assumed an active role in industrial investment decisions by virtue of their

(between 1984 and 1995), rising above 5% in 1986 and between 1989 to 1995.

[28] All figures author's calculations, based on Jordà, Schularick and Taylor (2017).

strategic position between the [newly created] financial market on the one hand and indebted industrial borrowers on the other" (Loriaux 1991, 227).

By taking the bulk of capital allocation- and investment decisions out of public hands, not only was control ceded over the future structure of the division of labour, but—through making private lending and investment decisions the pivot of macroeconomic adjustment—investors and financial firms were turned into the judges of (macro)economic policy.

The basic structure was a trade-off of control for resources. In part, these were genuine, "hard" resources, such as the additional oil- and other imports that France could afford in virtue of a stronger currency and cheaper international borrowing. In part, they were the more subjective, but nonetheless real, benefits of a greater willingness by financial firms and rich individuals to extend credit themselves and to accept and hold the credit created (now increasingly on their terms) by others (for other instances of this mechanism, see North and Weingast 1989; Rona-Tas and Guseva 2013; Bartel 2022, esp. chap. 4).

Zooming out again, it is important to note that the terms of this trade-off are not constant. Confronting rather than accommodating competing views on capital allocation and modulation has higher costs vis-à-vis very powerful rather than less powerful actors, and higher costs in "brittle times" than in normal times.[29] The more resources the rich control, the more resources can be obtained through ceding control to them. The more hierarchical a social structure and the more centralised control over a division of labour, the greater the influence over monetary and financial choices that accrues to the central actors. In a more egalitarian, decentralised society, in contrast, the temptation to trade control for resources will be weaker, for the resources that could be obtained in this manner will be fewer. An important implication is therefore that democratised finance, in order to be durable and meaningful, will benefit from

[29] This is one explanation why the legal rules that constitute finance become more elastic at the apex of finance, and in particular during crises (Pistor 2013), or why wildcat credit and money creation gets accommodated and validated in times of crisis (Murau 2017).

being embedded into a democratised society, involving both an egalitarian distribution of resources *and* a widespread belief in the legitimacy of a democratised financial system. The project of democratising finance cannot and should not be dissociated from the project of democratising society at large.

G. Conclusion:

The constitution of the financial system reaches deep. As an abundance of financial reform proposals in recent years indicates, the status quo is problematic, change is needed. However, while "Societies engineer money" (Desan 2017, 112), they do not make it as they please. In particular, the possibility of arbitrage and, at a deeper level, the socially constructed nature of money impose certain limits. Those who hold collateral or socially central positions can contest public control over capital allocation and modulation. Besides engaging in wildcat credit- and sometimes money-creation, they can withdraw the resources, as well as potentially the production- and consumption processes that they have effective control over, from the monetary space that society may be seeking to democratise. This may show up in the form of inflation, an erosion of trust in the unit of account, or a decline of money incomes.

These limits are flexible. They do not prevent a meaningful amount of influence or control over the allocation and modulation of finance. Arbitrage can easily appear more threatening in (neoclassical) theory than it turns out to be in practice: multiple equilibria and development paths abound, and where financial policy drives a shift from one to another, profitable arbitrage opportunities may not arise. Even where the structure of the supply side creates profitable opportunities for closing spreads, spreads can be maintained, up to a certain degree, by acting on the hierarchy of money, restricting the ability to create high-ranking monies and debt to public or publicly-licensed actors. Concerning wildcat credit creation and exit from the unit of account, these actions are costly and risky. Only a small number of private

actors will have the resources and social power to attempt them; and given their costs, even these parties will not attempt them until and unless they are significantly aggrieved.

Nevertheless, the existence of these limits implies that democratising finance will be a more successful endeavour when it is coupled with an understanding of the exit- and wildcat credit-creation options for rich and those who hold influence over processes of production and consumption. If these options are well understood, precaution can be taken to push the limits further out, increasing the scope and space for democratic contestation. Moreover, the most effective means of pushing these limits back may well consists in removing the main preconditions for financial wildcatting, and in dampening the consequences of individual financial exit. This implies a reduction of wealth inequality, to avoid the large fortunes that constitute potential pools of collateral, and thus the raw material for credit creation, as well as the *masse de manoeuvre* that would make financial exit consequential; and a structure of production in which no one small group commands entire production chains, through which demands for alternative, unlicensed monies could be generated. In other words, a democratisation of both wealth and production. Where this is achieved, the goal of a society in which "credit would flow irrespectively of the profit calculations of banks" (Eich 2022) becomes more attainable.

The possibilities of democratising finance can be therefore summarised as "between Fichte and Marx" (Eich 2022, chaps 3, 4): With Marx, we may observe that the distribution of underlying material power and social relations places limits on what can be achieved via reforms to the financial system; but these limits are considerably wider than what Marx may have envisioned. With Fichte, we may observe that a political community can exercise meaningful control over money and credit; but this control is not, and never can be, absolute.

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