

# UvA-DARE (Digital Academic Repository)

# **Technocratic Keynesianism**

A paradigm shift without legislative change

van 't Klooster, J.

DOI 10.1080/13563467.2021.2013791

Publication date 2022

Document Version Final published version

Published in New Political Economy

License CC BY-NC-ND

Link to publication

# Citation for published version (APA):

van 't Klooster, J. (2022). Technocratic Keynesianism: A paradigm shift without legislative change. *New Political Economy*, *27*(5), 771-787. https://doi.org/10.1080/13563467.2021.2013791

# **General rights**

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

# **Disclaimer/Complaints regulations**

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: https://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

UvA-DARE is a service provided by the library of the University of Amsterdam (https://dare.uva.nl)

OPEN ACCESS Check for updates

Routledge

Taylor & Francis Group

# Technocratic Keynesianism: a paradigm shift without legislative change

Jens van 't Klooster <sup>[]</sup>a,b

<sup>a</sup>Institute of Philosophy, KU Leuven, Leuven, Belgium; <sup>b</sup>Faculty of Social and Behavioural Sciences, University of Amsterdam, Amsterdam, Netherlands

#### ABSTRACT

Despite anticipated curtailment of their powers, the past decade saw technocratic actors take on an increasingly powerful role in economic governance. Focusing on the EU, I analyse these epochal shifts as a move away from the market liberal paradigm that informed the 1992 European Economic and Monetary Union (EMU). The 1992 EMU combines a highly restrictive attitude to public money creation with a permissive laissez-faire attitude to private credit money. In the face of the dual crises of COVID-19 and the climate emergency, EU technocrats have abandoned key tenets of the EMU. The European Central Bank provides targeted and large-scale support for pandemic-related fiscal expenditures. Banking regulators and supervisors actively guide the allocation of credit with an eye to its economic and environmental impact. However, constitutional structures lag ideational shifts and the new technocracy is haunted by issues of legality and legitimacy. To pursue the new policies within the old constitutional structures, policymakers engage in strategic ambiguity: the policies are justified in terms of both new economic policy priorities, as well as by reference to the instruments and goals of the earlier market liberal paradigm.

#### **KEYWORDS**

Technocracy; monetary policy; macroprudential policy; monetary financing; sustainability

# Introduction

The Great Financial Crisis and its aftermath were quickly identified by scholars as ending an era in which banks held the key levers of capitalist economies; immediately raising the question what (if anything) would replace it (Crouch 2009, Streeck 2014). Though some had hoped for a return to welfare state Keynesianism, austerity dominated the first years of the decade. The policy paradigm that informed the 1992 Economic and Monetary Union (EMU) remained the dominant framework through which the EU navigated the financial crisis of 2007–2008 and the eurozone Crisis. A broad consensus emerged that the crisis had not resulted in a paradigm change in macroeconomic policy (Blyth 2013, Helleiner 2014, Hooren *et al.* 2014, Kaya and Herrera 2015) and at best a modest change in financial policy (Mügge 2013, Helleiner 2014, Baker 2015, Thiemann 2019). Neither did a feared turn to authoritarian capitalism materialise (for now). The electoral shifts that did occur, the 2016 Brexit vote and the election of Donald Trump, did not change the economy's constitutional structures; in contrast to changes implemented under post-war reconstruction and the market liberal turn of the 1980s. Is it then true that nothing fundamentally changed?

© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (http:// creativecommons.org/licenses/by-nc-nd/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

**CONTACT** Jens van 't Klooster jens.vantklooster@kuleuven.be, j.m.vantklooster@uva.nl P Nieuwe Achtergracht 166, Amsterdam, 1001 NB, The Netherlands

#### 772 😓 J. VAN 'T KLOOSTER

As I argue, ideational changes, accelerated by the COVID-19 Pandemic, did lead to a clear shift in Europe's monetary arrangements. As the past decade of crises brought the EMU project to its existential limits (Tooze 2018), a new regime of Technocratic Keynesianism emerged. A pessimistic view of investors prone to fads and manias replaced earlier belief in efficient financial markets, leading instruments and objectives closely associated with twentieth century Keynesianism to re-emerge (Clift 2019, Levingston 2020, Gabor 2021). Policymakers took back the reigns over the financial system to subordinate private financial flows to broader economic objectives. The development marks a paradigm shift in the sense that it involves major changes to not just the instruments used by policymakers, but in fact to 'the very nature of the problems they are meant to be addressing' (Hall 1993, p. 279).

The new paradigm is a *technocratic* Keynesianism because it is driven by, and assigns more power to, technocratic actors at central banks and independent regulatory agencies. Their role between the private and the public sphere provides such monetary technocrats with considerable freedom from the traditional constraints of liberal constitutionalism (Bateman 2020a, Braun *et al.* 2021). Compared to mid-century Keynesians and the turn to market liberalism in the 1980s, democratic contestation and changing preferences of electorates play at best subordinate roles. Instead, technocratic actors enact this shift while seeking to avoid overt politicisation and minimising the need for legislative involvement.

The technocratic nature of the paradigm shift leads its agent to practice *strategic ambiguity*. Recent policies of monetary financing and credit guidance are not only justified in terms of the new paradigm, but also with reference to earlier market liberal dogmas. This strategic ambiguity allows monetary technocrats to suggest continuity and minimise legislative involvement, while also successfully addressing new problems. For researchers, it constitutes a methodological obstacle: strategic ambiguity involves intentionally ambiguous and conflicting evidence concerning the driving forces behind new policies. Until the relevant archives open, it may be all but impossible to divine what ideas and interests truly motivate the technocratic activism.

Bringing out the key political role of strategic ambiguity, the article seeks to establish that a paradigm shift did take place and explains how this was possible without legislative action. I analyse two major breaks with monetary taboos of the 1992 EMU. First, where it comes to public money, the past decade saw a dramatic transformation in attitudes towards monetary financing. Monetary financing is the issuance of money to facilitate government spending beyond levels that can be funded by borrowing from the private sector (Hemming 2013, Ryan-Collins and van Lerven 2018). The initial design of the EMU is geared towards constraining government debt and seeks to prohibit monetary financing, which had become associated with inflation in the 1970s. A recent ideological re-alignment sees policymakers again acknowledge that when it comes to public finance, governments cannot just spend too much, but also too little. As I show, the European Central Bank's asset purchase programmes are increasingly sensitive to the funding needs of governments. A profound taboo just a decade earlier, the 2020 Pandemic led the ECB to set up the Pandemic Emergency Purchase Programme (PEPP) to facilitate record fiscal deficits.

A second taboo concerns policies of active credit guidance. A new concern emerged in policy circles over the societal impact of the financial system (Borio 2011, Lombardi and Moschella 2017, Thiemann 2019, Baker 2018). Moving beyond the 1992 EMU's narrow focus on competition and efficiency, Basel III's market-shaping macroprudential rules seek to steer private debt levels, while efforts to green the financial system aim to align credit provision with the EU's environmental objectives. Behind the rhetoric of ensuring prudent risk-taking, supervisors have returned to earlier practices of credit guidance.

How are such dramatic shifts possible without much in the way of legislative change? I highlight two conditions that enable technocratic actors to enact a paradigm shift. The first is *legal permissibility*. Technocratic actors can only move forward where the applicable written law is flexible, either open to interpretation or set by technocrats. The second condition is *political feasibility*. Moving within their legal discretion, technocratic actors must successfully avoid politicisation and potential

veto players. To navigate these dual challenges, monetary technocrats rely extensively on strategic ambiguity. As the law lags ideational shifts, this profoundly shapes the ways in which monetary financing and credit guidance take place today.

The article is structured as follows. In the next section, I set out an account of technocrat-led paradigm shifts, which explains how their constitutional role allows monetary technocrats to enact paradigm shifts without much in the way of a role for the legislature. After that, the article analyses the contours of Technocratic Keynesianism, by considering first new practices of monetary financing and then shifts in the governance of private credit money towards credit guidance.

# Constitutions, policy paradigms and technocratic agency

How do changing ideas and policy experiments result in transformations of economic policy? Peter Hall's understanding of three orders of changes remains amongst the most prominent in the literature. On his account, paradigms shifts emerge when policymakers fail to address new problems within the existing paradigm. Initially, such policy 'experiments' take the form of first and second-order change within existing policy paradigms. First-order changes concern changing the settings of already available instruments, while second-order change introduces new instruments. If neither works, this gives rise to a process of third-order change, which results in a new paradigm. A paradigm shift involves changes to the 'framework of ideas and standards that specifies not only the goals of policy and the kind of instruments that can be used to attain them, but also the very nature of the problems they are meant to be addressing' (Hall 1993, p. 279).

The twentieth century has seen two major paradigm shifts in economic policy: the mid-century Keynesian turn and the market liberal turn in the 1980s. In the first, the work of John Maynard Keynes was at the centre of a dramatic move away from classical liberalism's faith in free markets (Mann 2017, Carter 2020). Unlike its socialist critics, however, the Keynesian project did not aim to overcome private ownership of the means of production. Instead, it sought to bolster the longevity of capitalism. Post-war welfare states were first and foremost designed with an eye to economic stability and societal legitimacy. To this end, they increased government spending, while exercising strict control over private credit money.

Political decisions made by politicians in the context of electoral competition play a decisive role in Hall's account; a paradigm shift is ultimately driven forward by electorates (Hall 1993, 2013). For the British turn to monetarism that Hall focuses on, the decisive event is the election of the first Thatcher government, which itself used monetarism as its ticket to electoral victory:

politicians rather than experts played a dominant role, and the process spilled well beyond the boundaries of the state to involve the media, outside interests, and contending political parties. Policy changed, not as a result of autonomous action by the state, but in response to an evolving societal debate that soon became bound up with electoral competition. (Hall 1993, p. 288)

The division of labour implicit in Hall's account reflects one of the major normative commitments of liberal constitutionalism, which is that the exercise of political power is based on popular sovereignty (Habermas 2011, Bourke and Skinner 2016, Urbinati 2017). Even if the technical design of new arrangements may rest with unelected bureaucrats, popular sovereignty requires that changes to the objectives of policymaking should stem from changing public opinion and legislative action.

Like the market liberal turn of the 1980s, the Keynesian turn of the mid-twentieth century was accompanied by major shifts in the legal framework enacted and ratified by elected parliaments. Although key technical decisions rested with unelected actors in central banks and treasuries (one of whom Keynes himself), their efforts resulted in legislative action. International treaties codified new ideas about the governance of money into the design of the Bretton Woods institutions. Following changes to the international structure, central bank and banking laws were redrafted and navigated through parliaments. In Europe, only Germany and Switzerland had independent central banks. Welfare state Keynesianism was, at least in that sense, not a project driven

forward by technocratic actors. It resulted from a paradigm shift in the broader public sphere that reverberated through the whole of the state apparatus.

A paradigm shift does not always require such a broad basis of societal support, nor does it need to lead to revisions of the underlying legal architecture. To the extent that the monetary constitution is codified, its rules allow for considerable discretion; law is flexible at the core of the financial system (Pistor 2013). This means that ideational shifts within the community of policymakers can result in third-order change. Although seemingly anomalous from a perspective of liberal constitutionalism, paradigm shifts have been enacted by monetary technocrats within otherwise very diverse political systems.

In broad outlines, the discretion that allows technocrats to enact paradigm shifts takes three distinct shapes. The most visible form of discretion results from the delegation of executive power, as when monetary policy is delegated to an independent central bank. Indeed, the monetarist turn of the US Federal Reserve did not result from changes to the Federal Reserve Act (Krippner 2011, Conti-Brown 2016). A second way for technocrats to shape the monetary order is through their formal roles in the legislative process itself. Consider the Basel Committee for Banking Supervision (BCBS), which serves as a guasi-legislative body for global banking regulation (Goodhart 2011, Lall 2012, Brummer 2015). Within the committee, central bankers and supervisors negotiate standards for banking governance to prevent competitive deregulation. The jurisdictions that are part of the BCBS are committed to implementing the Basel standards as part of their domestic banking regulation within a pre-determined timeframe (BCBS 2013). Other jurisdictions see themselves pushed to implement the rules for reputational considerations and to attract foreign investors (Jones 2020). Often technocratic discretion takes an intermediate form between lawmaking and exercising executive power. This is the case for the issuance of quidelines and other 'soft' law instruments, which although strictly speaking not legally binding, in practice have pervasive impact in shaping economic behaviour (Boey 2014, Brummer 2015). The Network for Greening the Financial System, formed in 2017, lacks any formal status but quickly turned into a major player in global economic policy. As I show below, the ECB's recent efforts to promote green lending rely extensively on soft law instruments and best practices developed within this epistemic community.

Under what conditions can technocratic discretion be used to enact third-order change? I highlight two conditions. The first condition is that discretion is so wide that this becomes *legally permissible*. The applicable law must either be written on a high level of generality or itself set by technocratic actors. As I show, the ECB's turn to monetary financing is possible because its mandate leaves not just the instruments but also the goals that they are used for open. Bank supervisors can act to green the financial system because of the extensive discretion awarded to them by the law. Although vague legal provisions can acquire determinacy through caselaw and judicial review, this rarely happens for central banks (Zilioli 2017, Goodhart and Lastra 2018, Bateman 2020a). In the US and UK, monetary policy is largely exempt from judicial review. The European Court of Justice grants 'broad discretion' to the ECB because its decisions involve 'choices of a technical nature' based on 'complex forecasts and assessments' (*Gauweiler et al. v. Deutscher Bundestag* 2015, paras 68, 74). In each of these jurisdictions, few rulings limit the available scope for interpretation of the law.

The second condition is political feasibility. Moving within their legal discretion, monetary technocrats must avoid politicisation and sidestep potential veto players. Policies that can be presented as legally permissible, may still face competing legal interpretations and opposition on other fronts. Technocrats face a constant risk that politicians and judges decide to weigh in on the interpretation of the law or, in the worst case, revisit their legal mandates. Central bankers also face financial market constituencies, whose attitudes affect the effectiveness of policy. Because the aims of financial market participants, technocrats and governments are deeply entangled, financial policy must be acceptable to each of these constituencies (Krippner 2011, Hockett and Omarova 2017, Braun 2020, Gabor 2020). How do technocratic actors navigate these two challenges? In the following, I highlight the crucial role of *strategic ambiguity*. To ensure both legal permissibility and political feasibility, policymakers strategically justify their policies in terms of the older market liberal paradigm, while also putting forward novel justifications. In this regard, these competing paradigms do not just steer the behaviour of policy makers, but also serve as strategic resources to achieve political objectives (Blyth 2002, Jabko 2006). By suggesting continuity while also successfully addressing new problems, monetary technocrats minimise legislative involvement and avoid politicisation. These strategic efforts, in turn, shape the design of policy instruments (Lombardi and Moschella 2017, Ronkainen and Sorsa 2018, van 't Klooster and Fontan 2020).

The study of strategic ambiguity raises difficult methodological challenges, because it makes establishing the genuine objectives of the new Technocratic Keynesians all but impossible. Their speech, as central bankers have long recognised, is subordinate to the strategic objectives of their institution (Schonhardt-Bailey 2013, Braun 2016, Moschella and Pinto 2019). Official communications are often cryptic and reflect internal compromises. When central bankers engage in strategic ambiguity, new policies superficially adhere to ideological standards of earlier policy-making, but also serve new priorities and solve problems specific to a new paradigm. These conflicting justifications, in turn, can be taken to support a wide range of interpretations as to what truly drives decisions.

Consider Bank of England's Governor Andrew Bailey's op-ed 'Bank of England is not doing "monetary financing"' in the Financial Times of 5 April 2020. In March that year, the Bank had initiated a £200 billion QE programme creating new money to buy gilts. As I document below, these operations and their justification constitute a return to earlier practices of monetary financing. Bailey frankly acknowledged the role of these purchases in ensuring stable demand for government debt in the face of unprecedented deficits. However, the Governor also stated that 'these reserves are not being created with the aim of paying for the government deficit, as under monetary financing.' (Bailey 2020) As he warned

using monetary financing would damage credibility on controlling inflation by eroding operational independence. It would also ultimately result in an unsustainable central bank balance sheet and is incompatible with the pursuit of an inflation target by an independent central bank. (Bailey 2020)

A few days later, the Bank of England announced that it would start transferring funds directly to the UK Treasury via its so-called Ways and Means Facility. In the following months, the Bank of England's gilt purchases closely track the volumes issued by the treasury (HoL 2021). But communications remained opaque: central bankers would typically concede that their interventions pursued the objective of stabilising government bond markets, but deny the implication that the purchases served to enable record fiscal deficits (Hauser 2021, HoL 2021, Vlieghe 2021). Exactly when technocrat-led paradigm shifts are successful, the motivations of key actors remain opaque.

In the following, I focus on the EU to document how a shift away from faith in efficient financial markets on the ideational level goes together with policies of monetary financing and credit guidance, which, however, also receive a justification within the earlier market liberal paradigm. Monetary financing is presented as a part of interest rates setting to achieve an inflation target. The turn to promote green lending in banking governance is justified as required by existing frameworks of microprudential supervision and self-regulation.

#### Public money

The drafting of the 1992 Maastricht Treaty was decisively informed by monetarist ideas, which hold that public spending, in particular when financed through public money creation, is first and foremost a threat to price stability. Over the past decades, however, monetary technocrats have become much more aware of the fragility of bond markets and the macroeconomic significance of public spending. Reflecting these ideational shifts, the ECB has progressively abandoned key principles of the 1992 EMU constitution that prohibit monetary financing. The central bank now pursues policies whose explicit purpose is to facilitate government borrowing, but does so while also presenting these policies as monetary policy in pursuit of the price stability objective.

#### The 1992 monetary constitution

Post-war welfare states were built relying on monetary-fiscal coordination involving pervasive monetary financing of government deficits. Central banks would sometimes finance spending directly but also, where markets developed, seek to ensure moderate and stable yields by backstopping auctions, their discount policies and through outright purchases in secondary markets (Lemoine 2016, Allen 2020, Garbade 2021). The question of how much public money should be issued to accommodate fiscal expenditure was a topic of political conflict. Governments would typically prefer lower interest rates than the central bank, but these skirmishes played out within a context of operational coordination. Even the German Bundesbank would act as a market maker of last resort to accommodate irregular and sometimes large issuances of government debt (BuBa 1996, pp. 60, 109).

The coordination of fiscal and monetary policy that characterised the post-war era came under sustained ideological attack towards the end of the 1970s by critics who argued that excessive public spending had led to economic stagnation and high levels of inflation (Hall 1993, Blyth 2002). Governments, the monetarist critics argued, had used public money creation to push the economy above its long-term potential (Friedman 1968, Emerson *et al.* 1992). That interpretation of the 1970s implied a hands-off approach to public finance: monetary policy should not be subordinated to ensuring stable funding costs for governments, but rather used to steer the economy towards a level of economic output compatible with long-term price stability. To that end, the issuance of public money should be controlled by independent central banks (Rogoff 1985, Bernanke *et al.* 2001, van 't Klooster 2020), while governments should turn to markets for funding (Lemoine 2016, Fastenrath *et al.* 2017).

These ideas would decisively shape the EMU as conceived in the late 1980s and early 1990s (Gill 1998, McNamara 1998, James 2013, Slobodian 2018). Rather than supporting government expenditure, the EMU's constitution designed at Maastricht envisaged a central bank free to counteract excessive fiscal deficits. For one, the Treaty delegates the authority to issue public money to an independent central bank, whose primary objective is the pursuit of price stability (Treaty on the Functioning of the European Union (TFEU) Articles 127 and 130). An explicit prohibition of monetary financing rules out buying bonds directly from member states and EU institutions, although the prohibition does allow purchasing such bonds indirectly from other investors (TFEU Article 123). The architects of the EMU also favoured strict fiscal rules to impose budgetary discipline on the member states 'to the extent to which this was necessary to prevent imbalances that might threaten monetary stability' (Delors Committee 1989, p. 36, Heipertz and Verdun 2011). The Treaty prohibits member states from lending to each other (TFEU Article 125). It also requires them to 'avoid excessive deficits' and empowers the European Commission to enforce these rules (TFEU 125 and 126). A protocol to the Treaty requires that member states keep budget deficits below 3 per cent and debt levels below 60 per cent of GDP. In 1997, the member states tightened the EMU fiscal rules with the introduction of the Stability and Growth Pact (SGP).

#### Keynesian monetary financing

Over the past years the attitudes of European monetary technocrats towards public debt shifted decisively, resulting in a much more permissive attitude to monetary financing. This shift reflects a new paradigm for the understanding of public debt and the objectives that policymakers should pursue.

One topic where ideas shifted concerns the understanding of financial markets, their ability to process information and the role of prices in steering government action. As a consequence, it

became widely accepted that market discipline by itself is not an adequate constraint on fiscal spending (Ojala 2020). As the 1988 Delors Report had already warned, '[t]he constraints imposed by market forces might either be too slow and weak or too sudden and disruptive' (Delors Committee 1989, p. 20). Before 2008, the European Commission and the ECB would endlessly, but in vain, insist that the rules of the SGP be upheld. That fight set the stage for the eurozone crisis, which was vastly exacerbated (if not caused) by ECB inaction and the Commission's push for austerity (Gabor and Ban 2016, Randall Henning 2017, Matthijs and Blyth 2018, Schmidt 2020). In 2005, the ECB committed itself to a strict market-based collateral policy for government bonds, making eligibility conditional on credit ratings issued by Moody's, S&P and Fitch. In the face of record deficits in 2009, sovereign bond markets quickly became swept up in self-enforcing negative spirals that brought the project of European integration itself in existential danger (Orphanides 2017, Fontan 2018, Tooze 2018). Since then, bond markets have lost their standing as arbiters of sound economic policy and have once again become seen to be in need of active management themselves (Ojala 2020).

A second ideational development is an increasingly favourable attitude towards government spending in macroeconomic policy, spurred on by the relative ineffectiveness of monetary policy. For earlier monetarists, macroeconomic theory served primarily to caution against excessive public spending. Building on these ideas, central banks used backward-looking estimates of the output gap to determine the level of short-term interest rates required to avoid inflation (Mudge and Vauchez 2018). For the European Commission, the output gap would determine the permissible limits of government spending (Heimberger and Kapeller 2017). The long decade of economic crises since 2008 led to a recognition inside the ECB and Commission that fiscal policy may equally well do too little to boost demand. Fiscal multipliers are now widely estimated to be much higher than the Commission had assumed (Brancaccio and Cristofaro 2020). This turn went together with a more pessimistic understanding of traditional monetary policy tools as a means of macroeconomic management. The problem of the so-called zero lower bound appeared as a technical limit to conventional operations, while unconventional operations came with increasingly visible side-effects (van 't Klooster and Fontan 2020, Van Doorslaer and Vermeiren 2021).

These two developments shifted the approaches of EU policymakers to delineating fiscal space. Today, the ECB actively facilitates government spending as a means to achieve macroeconomic objectives, while still presenting its policies as part of its monetary policy mandate.

The most striking development in this regard is the ECB's increasingly overt support for public borrowing (Bateman 2020b, Gabor 2021). As we saw, although the ECB mandate prohibits 'the purchase directly' of government bonds issued by the member states, it does not explicitly rule out purchasing government bonds in secondary markets. In the eurozone crisis, the ECB's Securities Market Programme (SMP) and Outright Monetary Transactions (OMT) involved purchasing government debt as a part of its crisis response, but the stated objective of these programmes was not to fund governments. Reflecting earlier ideas about proper central bank attitudes to government spending, the programmes were meant to bring down 'unjustified interest spreads' due to 'unfounded fears of investors' about a potential break-up of the Euro, which would hinder the ECB in achieving its price stability objective.<sup>1</sup> The 2014 Public Sector Purchase Programme (PSPP) saw the ECB again purchase public debt to pursue its price stability objective. Although by the end of 2019 the ECB had purchased  $\in$ 2.1 trillion of government debt, each programme came with specific design features to ensure that the 'fiscally disciplining effect of the interest rate mechanism is upheld'.<sup>2</sup>

With the introduction of the Pandemic Emergency Purchase Programme (PEPP), the ECB became much more explicit with regard to the objective of monetary financing. Announced in March 2020 as a  $\epsilon$ 750 billion asset purchase programme, its envelope had increased to  $\epsilon$ 1,850 billion by December 2020.<sup>3</sup> Where the earlier PSPP and OMT programmes both derived their rationale from facilitating bank lending, central bankers acknowledge that in dealing with the Pandemic additional private money creation can at best have a subordinated role. Instead, as ECB president Christine Lagarde

explained in announcing the programme, the PEPP ensures that financial markets do not exacerbate the economic shocks (Lagarde 2020). In this context, she places facilitating government borrowing on an equal footing with other beneficiaries of monetary policy. The objective of the PEPP is to ensure 'supportive financing conditions for all sectors in the economy. This applies equally to individuals, families, firms, banks *and governments.*' (Lagarde 2020) The new programme was designed to adapt purchases not just in response to what bonds are available in the market, but also in response to developments in individual member states. Accordingly the PEPP 'is tailored to manage the staggered progression of the virus and the uncertainty about when and where the fallout will be worst.' (Lagarde 2020).

The objective of facilitating government spending is also clear from the design of the programme. The ECB had previously made government debt purchases subject to strict requirements, but the PEPP programme comes with few such conditions. Instead, the ECB now describes limits hitherto applied to government bond purchases as 'self-imposed', and therefore open to revision in light of its objectives.<sup>4</sup> This is most striking for two types of restrictions that the ECB until now adhered to. First, the programme is designed to be almost without technical limits. The OMT and PSPP programmes came with limits to the volume of purchases from individual issuers to ensure that markets continued to limit the ability of member states to finance themselves. The PSPP purchases were also subject to a minimum credit rating requirement. With the PEPP, the issuer limits have disappeared, while Greece, despite lacking an adequate rating, is explicitly part of the programme. In 2020, the ECB bought €901 billion in government debt from the eurozone member states, which corresponds to 92 per cent of their expected deficit in that year (See Table 1).

Second, earlier programmes were designed to minimise the ECB's discretion over the allocation of purchases across the member states. For the OMT programme, selective purchases from individual member states were conditional on participation in an ESM-programme, which was controlled by the finance ministers of the eurozone. For the PSPP, the ECB purchased bonds in proportion to its capital key, which is determined by the population and GDP of individual member states. For the PEPP the authority over disbursing funds is in the hands of ECB's executive board, which is composed of Lagarde and other ECB central bankers but excludes the governors of the national central banks. The PEPP is also no longer strictly bound by the earlier capital key requirement. For now, the technical specification of the PEPP still specify that 'the benchmark allocation across jurisdictions of the

	Estimated net borrowing in 2020 in billions of Euros and as share of GDP (EC 2020)	PSPP and PEPP government debt purchases in 2020 in billions of Euros (ECB data)	Monetary financing of pandemic deficits
Austria	36	28	76%
Belgium	50	36	72%
Cyprus	1.3	2.9	227%
Germany	200	227	114%
Estonia	1.6	0.5	30%
Spain	134	117	87%
Finland	18	14	79%
France	236	186	79%
Greece	11	18	156%
Ireland	24	16	68%
Italy	176	175	99%
Lithuania	4.0	3.0	75%
Luxembourg	3.1	1.5	50%
Latvia	2.1	1.3	64%
Malta	1.1	0.3	30%
Netherlands	56	43	76%
Portugal	14	21	144%
Slovenia	3.9	4.3	109%
Slovakia	8.5	7.1	84%
Total	981	901	92%

Table 1. ECB monetary financing in 2020.

euro area will be guided by the key for subscription of the ECB's [capital key]'.<sup>5</sup> However, this provision leaves room for considerable divergence. As Table 2 shows, actual PEPP purchases in 2020 ranged from 11 per cent of the benchmark allocation (Estonia) to 113 per cent (Italy). ECB board members have in the months since repeatedly suggested that targeted purchases would serve to facilitate spending by specific member states (e.g. Schnabel 2020). This shift towards more targeted purchases again reflects a belief that financing government expenditures is not just a way to transmit monetary policy to the real economy, but rather itself a means for achieving the ECB's objectives.

How was this paradigm shift possible without involvement from the EU or member state legislatures? Although the legal basis for policies of monetary financing is tenuous, the ECB has ensured its permissibility by anchoring the PEPP to the price stability objective. The ECB concedes that PEPP support is meant to help member states deal with the economic impact of the Pandemic, which means that its objective is to facilitate government spending. However, the ECB also argues that the Pandemic is itself relevant to its price stability mandate, because it could 'jeopardise the objective of price stability and the proper functioning of the monetary policy transmission mechanism'.<sup>6</sup> Hence, monetary financing becomes possible by assigning to the PEPP programme a justification that also fits the earlier monetarist ideas. For now, this approach of strategic ambiguity has been successful in allowing the ECB to avoid legal challenge and politicisation of a kind that would obstruct its purchases (de Boer and van 't Klooster 2020). This is not to deny the precarity of the purchases, which remain controversial. In May 2020, the German Constitutional Court ruled that even the earlier PSPP government bond purchase programmes had been outside the central bank mandate and a German case against the PEPP is forthcoming. The ECB also strenuously avoids the term monetary financing. Even if its legal basis is shaky, the ECB has already succeeded in making a significant change to the EMU's monetary constitution.

#### Private credit money

The 1992 EMU constitution reflects an atmosphere of trust towards private finance. Since then, policymakers have become much more aware of the macroeconomic impact of credit provision and the fragility of banking systems left entirely to their own dynamics. Reflecting these ideational shifts, central bankers are much more willing to use their sway over banking regulation and supervision to guide the allocation of credit in line with broader economic policy objectives. Focusing on the efforts to decarbonise the European economy, I document the return of earlier policies of credit guidance. Again, these policies receive a dual justification; they serve the microprudential objective of preventing excessive risk-taking and bank defaults, but are also presented as contributing to greening of the European economy.

#### The 1992 monetary constitution

In the immediate post-war era, strict regulation of banks kept down private money creation and various strategies of credit guidance and capital controls served to mobilise domestic spending

Austria	99%	Italy	113%
Belgium	100%	Lithuania	83%
Cyprus	112%	Luxembourg	58%
Germany	100%	Latvia	23%
Estonia	11%	Malta	38%
Spain	106%	Netherlands	100%
Finland	100%	Portugal	104%
France	91%	Slovenia	106%
Greece	108%	Slovakia	67%
Ireland	100%		

Table 2. 2020 PEPP Government debt purchases relative to ECB capital key.

for investment (Bezemer *et al.* 2018, Monnet 2018). Policies of credit guidance, such as the French policy of *encadrement du credit*, involved specific targets enforced with quantitative controls but also more informal 'window guidance' to favour manufacturing and exports over services and imports. These policies often combined prudential and macroeconomic objectives in ways hard to disentangle.

The 1992 EMU came about in a period of financial deregulation, where the allocation of credit was increasingly left to the private sector. From the early 1980 onwards, central banks started to turn away from policies of credit guidance. Instead, monetarists favoured a market-based allocation, in which the profit motive guides credit to the most productive sectors (Monnet 2018). The ECB mandate sought to prohibit credit guidance through the requirement that it should act 'in accordance with the principle of an open market economy with free competition, favouring an efficient allocation of resources' (TFEU 127 (1)). As the 1991 draft statutes explain, the ECB is to 'regulate indirectly – and without recourse to administrative controls or restrictions – money and credit market conditions' using 'financial incentives, leaving it to market participants to respond voluntarily' (CoG 1991, p. 12). Instead of credit guidance, the ECB's monetary policy came to revolve around setting one interest rate for the entire eurozone (ECB 1998).

In a parallel development, banking regulation and supervision became focused on fostering competition between banks to incentivise an efficient allocation of credit (Tarullo 2008, Goodhart 2011). Capital requirements acquired a key role in banking regulation as regulators sought to balance the societal benefits of credit provision against the societal costs of excessive risk-taking and bank defaults. Instead of actively guiding credit, EMU policymakers sought to enable a competitive and integrated financial area in which banks allocate capital across the EU (Mügge 2010, Quaglia 2010).

The EU's prudential requirements for banks are largely set at the Basel Committee for Banking Supervision, to prevent competitive deregulation between different jurisdictions. Within the Basel II framework, regulators defer to banks to develop their own risk management methodologies and credit ratings (Porter 2010, Lockwood 2015). Bank risk management, rather than the risks themselves, constitutes the object of financial regulation and supervision.

Although market competition and transparency were meant to incentivise prudent risk-taking, this did not happen. Private debt levels as a share of GDP shot up, while bank lending increasingly revolved around mortgages and real estate funding (Jordà *et al.* 2016). In reference to earlier policies of active demand management, the role of credit in driving demand has been described as a form of privatised Keynesianism (Crouch 2009, Streeck 2014). However, the laissez-faire attitude that informed it is far removed from the Keynesian impetus to save capitalism from itself. In the EMU's opaque system of multi-level governance, national regulators were unwilling to set economic priorities in credit provision and international competition led banks to take on increasingly more risk (Bayoumi 2017, Thiemann 2018). Competitive dynamics incentivised financial institutions to use off-balance sheet transactions to game their regulatory capital requirements and fund investment with new money-like instruments (Gabor and Vestergaard 2016, Murau 2017, Thiemann 2018).

#### Keynesian credit guidance

The past decade, banking regulators and supervisors have become much more vigilant with regard to the macroeconomic effects of bank lending. This development has led to a return of earlier practices of credit guidance.

The experience of the 2007–8 banking crises led regulators to plug clear gaps in the Basel II architecture, focusing on prudential requirements and off-balance sheet money creation. Concerns about financial stability also led policymakers to expand their focus from individual institutions to systemic macroprudential policy. Rediscovering the work of Hyman Minsky and Charles Kindleberger, policymakers recognised that financial markets move suddenly and endogenously from a mania to a panic, and then an ensuing depression (Kindleberger and Aliber 2005, Minsky 2008). Where the mania leads investors to accept immense leverage, more risk-taking gives rise to a financial market panic in which all investors seek to liquidate their positions at the same time. As the private sector deleverages, a long and deep recession follows.

There is debate over their effectiveness in preventing future crises, but it is clear that the measures taken in response to the 2008 crash involved a much more hands-on approach to regulation and supervision (Busch and Ferrarini 2020, Smoleńska 2021). The initial Basel III Accord, subsequently incorporated into the EU's Capital Requirement Directive IV, reduces leverage and forces banks to hold more funds to cover losses.<sup>7</sup> The crisis also pushed forward the integration of banking governance by moving supervision of the largest EU banks from the individual member states to the ECB's newly created Single Supervisory Mechanism (SSM). Following a framework set out by the Financial Stability Board, EU banks were required to draft their own 'living will', which should allow a Single Resolution Board to initiate an orderly resolution in the event of a default.

The initial reforms of the Basel rules stayed close to the dual objectives of facilitating credit provision and preventing undue risk-taking (BCBS 2010). They remained guided by the assumption that where banks do not impose risk on the public sector, more credit is generally a good thing. Bank internal risk-modelling remained the primary object of banking supervision. In these regards, Basel III may be seen as a last attempt to return to the market liberal starting points of the EMU constitution (Helleiner 2014).

A gradual development, but potentially more important, is a shift in the proper objectives of bank regulators and supervisors towards actively shaping markets (Borio 2011, Lombardi and Moschella 2017, Baker 2018, Thiemann 2019). Basel III's macroprudential elements reflect an increased concern for the effects of the financial system on the real economy. Rather than assuming that financial markets tend towards an optimal allocation of credit over time, the new standards allow supervisors to impose countercyclical buffers. During the mania, supervisors are expected to raise capital requirements to constrain bank lending; a downturn is to trigger a reduction and, thereby, prevent bank deleveraging from crippling the economy. The most recent amendments to bank capital requirements also assign a lower risk-weighting to SME-credit and infrastructure projects, while raising risk-weights for mortgages (BCBS 2017).<sup>8</sup>

The new concerns for the effects of bank lending on the real economy are most pronounced where it comes to climate change. With Mark Carney's (2015) 'Tragedy of the Horizon' speech and the 2017 founding of the Network for Greening the Financial System (NGFS), central bankers are increasingly preoccupied with the environmental impact of the financial system (Carney 2015, NGFS 2019, 2020). Building on Carney, the justification for policy intervention does not turn on emissions per se, but rather the potential threat of environmental and climate-related risk for financial stability. Banks are currently exposed to large future losses as they continue to plough money into carbon-intensive infrastructure (ECB 2021). Extreme weather events also threaten coastal real estate and a changing climate will have a major impact on sectors like agriculture. Hence, as central bankers argue in increasingly voluminous publications, climate change is a source of financial risk, which financial policymakers must integrate into the regulatory approach as such (NGFS 2019, 2020).

Working within the Basel framework, regulators and supervisors are engaged in a dazzling array of initiatives to ensure that private credit creation is more in line with the EU's environmental agenda.

For now, most EU-level prudential efforts take the form of expectations formulated in the context of the supervisory process. Anticipating changes to the prudential framework, the ECB currently uses its role as bank supervisor within the SSM to pursue its greening objectives. A recent *Guide on climate-related and environmental risks* issued by the SSM formulates expectations of the ECB towards banks. The ECB not only ask banks whether climate-related risks are part of their longterm firm-level strategy. They also ask whether the bank considers such risks in 'all relevant stages of the credit-granting process and credit processing' both for individual customers and 'changes in the risk profile of sectors and geographies' (ECB 2020, p. 31). By spelling out what should count as a risk to banks, the ECB puts forward a clear account of what project it wants banks to invest in and where to cut lending. However, the expectation have no legal basis in the regulatory framework and are not legally binding but rather serve as 'a basis for supervisory dialogue' (ECB 2020, p. 3). These efforts follow a report published by the Bank for International Settlements and the Banque de France, which suggests that central bankers and supervisors should use the 'relationship with their financial sectors' to 'proactively promote long-termism by supporting the *values* or *ideals* of sustainable finance' (Bolton *et al.* 2020, p. 48 emphasis in the original).

Going forward, incremental changes to EU-level banking governance will turn these non-binding expectations into binding requirements. Building on scenarios designed by the NGFS ranging from a fast transition to 3 degrees warming, a range of climate-focused stress test initiatives are currently under way (Baudino and Svoronos 2021, NGFS 2021). These stress tests analyse potential losses of banks that lend to carbon-intensive sectors of the economy and those exposed to physical changes. Used in a supervisory context, however, stress tests also impact bank capital requirements and thus put pressure on banks to align their lending with environmental objectives (Coombs 2020). The Basel Committee and the European Banking Authority are still investigating whether, and if so how, to incorporate climate-related risk directly into binding bank capital requirements (BCBS 2021, EBA 2021).

The reintroduction of credit guidance is part of a paradigm shift, which leaves behind key market liberal assumptions of the 1992 EMU. Regulators and supervisors have not just changed their instruments, but also their very understanding of what problems they should solve. How was this possible without much in the way of legislative action, let alone changing the constitutional provisions that govern their roles? Again, strategic ambiguity is key to understanding these developments. The greening initiatives can be justified within the terms of the market liberal paradigm to the extent that they are understood as merely spelling out 'the ECB's understanding of sound, effective and comprehensive management and disclosure of climate-related and environmental risks under the current prudential framework' (ECB 2020, p. 4). Similarly, current regulatory changes are meant to ensure that banks hold sufficient capital to offset potential losses and disclose risk they take to their investors.<sup>9</sup> However, it would be a mistake to take these assertions as proving that policies are merely continuing the 1992 status quo. The ECB is upfront about its ambitions of ensuring credit provision in line with the EU's environmental objectives. The Guide invokes the Paris Agreement and the EU's objective of 'making Europe the first climate-neutral continent by 2050', an effort in which '[t]he financial sector is expected to play a key role' (ECB 2020, p. 3). Within the same document, one set of justifications reflect the older market liberal paradigm in which banking governance merely serves to foster competition and prevent excessive risk-taking. A newer policy paradigm informs efforts to steer the allocation of credit itself with the aim of achieving the EU's environmental objectives.

The choice of pursuing the EU's greening efforts in accordance with earlier narrow prudential objectives provides these efforts with a shaky foundation. Rather than directly setting out an allocation of credit based on the EU's environmental objectives, the current approach relies heavily on financial sector innovation. The risk modelling approaches that form the core of the Basel approach are ineffective in the face of fundamental uncertainty and, therefore, ill-suited for climate-related risks (Bolton *et al.* 2020, Chenet et al. 2021, Smoleńska and van 't Klooster 2021). It is far from clear that the ECB's greening efforts will achieve much without more fundamental changes to the EU's legislative framework for banking governance.

# Conclusion

Despite anticipated curtailment of their powers, the past decade only saw an increasingly powerful role for technocratic actors in economic governance. A new anxiety over the stability and longevity of the economic order has created a new generation of Keynesians trying to save capitalism from itself. I have analysed these developments as a paradigm shift that plays out within the legal confines of the 1992 European Economic and Monetary Union. Contradicting key tenets of the

market liberal paradigm that informed the EMU, policymakers today engage in policies of monetary financing and active credit guidance. For now, however, the evolution of the EU's monetary constitution is driven by ideational shifts and the constrained agency of technocrats. The ideational changes driving it played minor roles in electoral competition. This democratic vacuum raises profound questions concerning the compatibility of Technocratic Keynesianism with the normative commitment of liberal constitutionalism to popular sovereignty. In the absence of more forceful legislative support, the technocratic project of stabilising the capitalist economic order looks shaky itself. More traditional government-led policies are available as an alternative to Technocratic Keynesianism; for example through a genuine Green New Deal (Aronoff *et al.* 2019, Pettifor 2019). For this to happen, changes in economic thinking must move from their current technocratic bastions to the democratic institutions of the member states. Although such a development would not necessitate a bottom up revision of the EU's foundations, it would require a properly democratic process to find new interpretations for the outdated fiscal rules (Heimberger and Kapeller 2017, Sigl-Glöckner *et al.* 2021) and political guidance concerning the objectives and instruments of monetary technocrats (van 't Klooster 2020, Downey 2021).

### Notes

- 1. BVerfG OMT reference, par 7.
- 2. BVerfG OMT reference, par 7. ECB data.
- 3. Decision (EU) 2020/440 of the European Central Bank of 24 March 2020 on a temporary pandemic emergency purchase programme (ECB/2020/17).
- 4. Decision (EU) 2020/440.
- 5. Idem, Article 5.
- 6. Decision (EU) 2020/440 of the European Central Bank of 24 March 2020 on a temporary pandemic emergency purchase programme (ECB/2020/17).
- 7. EU Directive 2013/36/EU and the EU Regulation 575/2013.
- 8. EU Regulation 2019/876, 501a.
- 9. EU Regulation 2019/876, Article 501c and 449a; EU Directive 2019/878, Article 98(8).

# Acknowledgements

For their comments on earlier drafts of this article, I would like to thank Will Bateman, Nik de Boer, Clément Fontan, Daniela Gabor, Peter Hall, Max Krahé, Geoff Mann, Eric Monnet, Steffen Murau, David van Overbeek and Agnieszka Smoleńska.

# **Disclosure statement**

No potential conflict of interest was reported by the author(s).

# Funding

This work was supported by Dutch Research Council (NWO) [grant number 406.18.FT.014]; Research Foundation Flanders [grant number 1227920N].

# ORCID

Jens van 't Klooster 🝺 http://orcid.org/0000-0002-0796-9311

# References

Allen, W.A., 2020. Moving back towards market-based government finance. NIESR Policy Paper No. 18. Aronoff, K., et al., 2019. A planet to win: why we need a green new deal. London: Verso Books. Bailey, A., 2020. Bank of England is not doing 'monetary financing'. *Financial Times*, 5 April.

- Baker, A., 2015. Varieties of economic crisis, varieties of ideational change: how and why financial regulation and macroeconomic policy differ. *New political economy*, 20 (3), 342–366.
- Baker, A., 2018. Macroprudential regimes and the politics of social purpose. *Review of international political economy*, 25 (3), 293–316.
- Bateman, W., 2020a. Public finance and parliamentary constitutionalism. Cambridge: Cambridge University Press.
- Bateman, W., 2020b. Quantitative easing, Quasi-Fiscal power and constitutionalism. Just Money Roundtable: Monetary Policy in the EU, 28 December 2020.
- Baudino, P. and Svoronos, J.-P., 2021. Stress-testing banks for climate change a comparison of practices. Basel: Bank for International Settlements, FSI Insights on policy implementation.
- Bayoumi, T., 2017. Unfinished business: the unexplored causes of the financial crisis and the lessons yet to be learned. New Haven: Yale University Press.
- BCBS, 2010. An assessment of the long-term economic impact of stronger capital and liquidity requirements. Basel: Bank for International Settlements, Basel Committee on Banking Supervision.
- BCBS, 2013. Charter. Basel: Bank for International Settlements, Basel Committee on Banking Supervision.
- BCBS, 2017. Basel III: finalising post-crisis reforms. Basel: Bank for International Settlements, Basel Committee on Banking Supervision.
- BCBS, 2021. Climate-related financial risks: a survey on current initiatives. Basel: Bank for International Settlements.
- Bernanke, B., et al., 2001. Inflation targeting: lessons from the international experience. Princeton, NJ: Princeton Univ. Press.
  Bezemer, D., et al. 2018. Credit where it's due: a historical, theoretical and empirical review of credit guidance policies in the 20th century. UCL Institute for Innovation and Public Purpose Working Paper Series No. 2018–11.
- Blyth, M., 2002. *Great transformations: economic ideas and institutional change in the twentieth century.* Cambridge: Cambridge University Press.
- Blyth, M., 2013. Paradigms and paradox: the politics of economic ideas in two moments of crisis. *Governance*, 26 (2), 197–215.
- de Boer, N. and van 't Klooster, J., 2020. The ECB, the courts and the issue of democratic legitimacy after Weiss. *Common market law review*, 57 (6), 1689–1724.
- Boey, M., 2014. Regulating bankerspace: challenging the legitimacy of the Basel accords as soft law. Southern California law review postscript, 87, 74–119.
- Bolton, P., et al., 2020. The Green swan: central banking and financial stability in the age of climate change. Basel: Bank for International Settlements.
- Borio, C., 2011. Implementing a macroprudential framework: blending boldness and realism. *Capitalism and society*, 6 (1), 1–25.
- Bourke, R. and Skinner, Q., eds. 2016. *Popular sovereignty in historical perspective*. Cambridge: Cambridge University Press.
- Brancaccio, E. and Cristofaro, F.D., 2020. Inside the IMF "mea culpa": a panel analysis on growth forecast errors and Keynesian multipliers in Europe. *PSL quarterly review*, 73 (294), 225–239.
- Braun, B., 2016. Speaking to the people? Money, trust, and central bank legitimacy in the age of quantitative easing. *Review of international political economy*, 23 (6), 1064–1092.
- Braun, B., 2020. Central banking and the infrastructural power of finance: the case of ECB support for repo and securitization markets. *Socio-economic review*, 18 (2), 395–418.
- Braun, B., Krampf, A., and Murau, S., 2021. Financial globalization as positive integration: monetary technocrats and the Eurodollar market in the 1970s. *Review of international political economy*, 28 (4), 794–819.
- Brummer, C., 2015. Soft law and the global financial system. Cambridge: Cambridge University Press.
- BuBa, 1996. The monetary policy of the Bundesbank. Frankfurt: Deutsche Bundesbank.
- Busch, D. and Ferrarini, G., eds. 2020. European Banking union. 2nd ed. Oxford: Oxford University Press.
- Carney, M., 2015. Breaking the tragedy of the horizon.
- Carter, Z.D., 2020. The price of peace: money, democracy, and the life of John Maynard Keynes. New York, NY: Random House Publishing Group.
- Chenet, H., Ryan-Collins, J., and van Lerven, F., 2021. Finance, climate-change and radical uncertainty: towards a precautionary approach to financial policy. *Ecological economics*, 183, 106957.
- Clift, B., 2019. Contingent Keynesianism: the IMF's model answer to the post-crash fiscal policy efficacy question in advanced economies. *Review of international political economy*, 26 (6), 1211–1237.
- CoG, 1991. Draft statutes of the European system of central banks and the European Central Bank (commentary). Cambridge: Committee of Governors of the Central Banks of the Member States of the European Economic Community.
- Conti-Brown, P., 2016. The power and independence of the federal reserve. Princeton, NJ: Princeton University Press.
- Coombs, N., 2020. What do stress tests test? Experimentation, demonstration, and the sociotechnical performance of regulatory science. *The British journal of sociology*, 71 (3), 520–536.
- Crouch, C., 2009. What will follow the demise of privatised Keynesianism? The political quarterly, 80 (s1), S302–S315.
- Delors Committee, 1989. *Report on economic and monetary union in the European community*. Brussels: Committee for the Study of Economic and Monetary Union.

Downey, L., 2021. Delegation in democracy: a temporal analysis. Journal of political philosophy, 29 (3), 305-329.

EBA, 2021. On management and supervision of ESG risks for credit institutions and investment firms. Paris: European Banking Authority. No. EBA/REP/2021/18.

- EC, 2020. General government data autumn 2020. Brussels: European Commission.
- ECB, 1998. A stability-oriented monetary policy strategy for the ESCB [online]. *European Central Bank*. Available from: https://www.ecb.europa.eu/press/pr/date/1998/html/pr981013\_1.en.html [Accessed 5 Jul 2020].
- ECB, 2020. Guide on climate-related and environmental risks. Frankfurt: European Central Bank.
- ECB, 2021. Climate-related risk and financial stability. Frankfurt: European Central Bank, ECB/ESRB Project Team on climate risk monitoring.
- Emerson, M., et al., 1992. One market, one money: an evaluation of the potential benefits and costs of forming an economic and Monetary Union. Oxford: Oxford University Press.
- Fastenrath, F., Schwan, M., and Trampusch, C., 2017. Where states and markets meet: the financialisation of sovereign debt management. *New political economy*, 22 (3), 273–293.
- Fontan, C., 2018. Frankfurt's double standard: the politics of the European Central Bank during the Eurozone crisis. *Cambridge review of international affairs*, 31 (2), 162–182.
- Friedman, M., 1968. The role of monetary policy. American economic review, 58 (1), 1–17.
- Gabor, D., 2020. Critical macro-finance: a theoretical lens. Finance and society, 6 (1), 45-55.
- Gabor, D., 2021. *Revolution without revolutionaries: interrogating the new politics of monetary financing.* Berlin: Finanzwende and Heinrich Boell Stiftung. Policy Brief.
- Gabor, D., and Ban, C., 2016. Banking on bonds: the new links between states and markets. JCMS: Journal of common market studies, 54 (3), 617–635.
- Gabor, D., and Vestergaard, J., 2016. *Towards a theory of shadow money*. Institute for New Economic Thinking, INET Working Paper.
- Garbade, K.D., 2021. After the accord: a history of federal reserve open market operations, the US government securities market, and treasury debt management from 1951 to 1979. Cambridge: Cambridge University Press. Gauweiler et al. v. Deutscher Bundestag, 2015.
- Gill, S., 1998. New constitutionalism, democratisation and global political economy. *Pacifica review: peace, security & global change*, 10 (1), 23–38.
- Goodhart, C., 2011. The Basel committee on banking supervision: a history of the early years 1974–1997. Cambridge: Cambridge University Press.
- Goodhart, C. and Lastra, R., 2018. Populism and central bank independence. Open economies review, 29 (1), 49-68.

Habermas, J., 2011. Between facts and norms. Cambridge, UK: Polity Press.

- Hall, P., 1993. Policy paradigms, social learning, and the state: The case of economic policymaking in Britain. *Comparative politics*, 25 (3), 275–296.
- Hall, P., 2013. The political origins of our economic discontents: contemporary adjustment problems in historical perspective. In: D. Lake, and M. Kahler, eds. *Politics in the new hard times: the great recession in comparative perspective*. Ithaca: Cornell University Press, 129–149.
- Hauser, A., 2021. From lender of last resort to market maker of last resort via the dash for cash: why central banks need new tools for dealing with market dysfunction.
- Heimberger, P. and Kapeller, J., 2017. The performativity of potential output: pro-cyclicality and path dependency in coordinating European fiscal policies. *Review of international political economy*, 24 (5), 904–928.
- Heipertz, M. and Verdun, A., 2011. Ruling Europe: the politics of the stability and growth pact. Cambridge: Cambridge University Press.
- Helleiner, E., 2014. The status quo crisis: global financial governance after the 2008 meltdown. Oxford: Oxford University Press.
- Hemming, R., 2013. The macroeconomic framework for managing public finances. In: R. Allen, R. Hemming, and B. Potter, eds. *The international handbook of public financial management*. New York, NY: Springer, 17–37.
- Hockett, R. and Omarova, S., 2017. The finance franchise. Cornell law review, 102 (5), 1143.
- HoL, 2021. Quantitative easing: a dangerous addiction? London: House of Lords, 1st Report of Session 2019–21 published 16 July 2021 – HL Paper 42.
- Hooren, F.v., Kaasch, A., and Starke, P., 2014. The shock routine: economic crisis and the nature of social policy responses. *Journal of European public policy*, 21 (4), 605–623.
- Jabko, N., 2006. *Playing the market: a political strategy for uniting Europe, 1985–2005*. Ithaca, NY: Cornell University Press. James, H., 2013. *Making the European Monetary Union*. Cambridge, MA: Harvard University Press.
- Jones, E., 2020. The political economy of bank regulation in developing countries. Oxford: Oxford University Press.
- Jordà, Ó, Schularick, M., and Taylor, A.M., 2016. The great mortgaging: housing finance, crises and business cycles. *Economic policy*, 31 (85), 107–152.
- Kaya, A. and Herrera, G., 2015. Why the 2008 crisis was a bad crisis for new ideas. *Journal of international relations and development*, 18 (4), 505–531.
- Kindleberger, C.P. and Aliber, R.Z., 2005. *Manias, panics, and crashes: a history of financial crises*. 5th ed. Basingstoke: Palgrave Macmillan.

786 🕒 J. VAN 'T KLOOSTER

van 't Klooster, J., 2020. The ethics of delegating monetary policy. The journal of politics, 82 (2), 587-599.

van 't Klooster, J. and Fontan, C., 2020. The myth of market neutrality: a comparative study of the European Central Bank's and the Swiss National Bank's corporate security purchases. *New political economy*, 25 (6), 865–879. Krippner, G.R., 2011. *Capitalizing on crisis*. Cambridge, MA: Harvard University Press.

Lagarde, C., 2020. Our response to the coronavirus emergency [online]. *ECB Blog*. Available from: https://www.ecb. europa.eu/press/blog/date/2020/html/ecb.blog200319~11f421e25e.en.html.

Lall, R., 2012. From failure to failure: the politics of international banking regulation. *Review of international political economy*, 19 (4), 609–638.

Lemoine, B., 2016. L'ordre de la dette. Paris: La Découverte.

Levingston, O., 2020. Minsky's moment? The rise of depoliticised Keynesianism and ideational change at the Federal Reserve after the financial crisis of 2007/08. *Review of international political economy*, 0 (0), 1–28.

Lockwood, E., 2015. Predicting the unpredictable: value-at-risk, performativity, and the politics of financial uncertainty. *Review of international political economy*, 22 (4), 719–756.

Lombardi, D., and Moschella, M., 2017. The symbolic politics of delegation: macroprudential policy and independent regulatory authorities. *New political economy*, 22 (1), 92–108.

Mann, G., 2017. In the long run we are all dead: Keynesianism, political economy, and revolution. London: Verso.

Matthijs, M. and Blyth, M., 2018. When is it rational to learn the wrong lessons? Technocratic authority, social learning, and Euro fragility. *Perspectives on politics*, 16 (1), 110–126.

McNamara, K., 1998. *The currency of ideas: monetary politics in the European Union*. Ithaca, NY: Cornell University Press. Minsky, H.P., 2008. *Stabilizing an unstable economy*. New ed. New York, NY: McGraw-Hill.

- Monnet, E., 2018. Controlling credit: central banking and the planned economy in postwar France, 1948–1973. Cambridge: Cambridge University Press.
- Moschella, M. and Pinto, L., 2019. Central banks' communication as reputation management: how the fed talks under uncertainty. *Public administration*, 97 (3), 513–529.
- Mudge, S.L. and Vauchez, A., 2018. Too embedded to fail: the ECB and the necessity of calculating Europe. *Historical social research / Historische Sozialforschung*, 43 (3 (165)), 248–273.
- Mügge, D., 2010. Widen the market, narrow the competition: banker interests and the making of a European capital market. Colchester: ECPR Press.
- Mügge, D., 2013. Resilient neo-liberalism in European financial regulation. In: M. Thatcher, and V.A. Schmidt, eds. *Resilient liberalism in Europe's political economy*. Cambridge: Cambridge University Press, 201–225.
- Murau, S., 2017. Shadow money and the public money supply: the impact of the 2007–2009 financial crisis on the monetary system. *Review of international political economy*, 24 (5), 802–838.
- NGFS, 2019. *A call to action: climate change as a source of financial risk*. Paris: Network for Greening the Financial System. First comprehensive report.
- NGFS, 2020. Macroeconomic and financial stability implications of climate change. Paris: Network for Greening the Financial System.

NGFS, 2021. NGFS climate scenarios for central banks and supervisors. Paris: Network for Greening the Financial System.

Ojala, M., 2020. Doing away with the sovereign: neoliberalism and the promotion of market discipline in European economic governance. *New political economy*, 0 (0), 1–13.

- Orphanides, A., 2017. ECB monetary policy and Euro area governance: collateral eligibility criteria for sovereign debt. Cambridge, MA: MIT Sloan School. Working Paper No. 5258–17.
- Pettifor, A., 2019. The case for the green new deal. London: Verso Books.

Pistor, K., 2013. A legal theory of finance. Journal of comparative economics, 41 (2), 315-330.

Porter, T., 2010. Risk models and transnational governance in the global financial crisis: The cases of Basel II and credit rating agencies. In: E. Helleiner, S. Pagliari, and H. Zimmermann, eds. *Global finance in crisis: the politics of international regulatory change*. New York, NY: Routledge, 56–73.

Quaglia, L., 2010. Governing financial services in the European Union: banking, securities and post-trading. London: Routledge.

Randall Henning, C., 2017. Tangled governance: international regime complexity, the troika, and the Euro crisis. Oxford: Oxford University Press.

- Rogoff, K., 1985. The optimal degree of commitment to an intermediate monetary target. *The quarterly journal of economics*, 100 (4), 1169–1189.
- Ronkainen, A. and Sorsa, V.-P., 2018. Quantitative easing forever? Financialisation and the Institutional legitimacy of the Federal reserve's unconventional monetary policy. *New political economy*, 23 (6), 711–727.
- Ryan-Collins, J. and van Lerven, F., 2018. Bringing the helicopter to ground. A historical review of fiscal-monetary coordination to support economic growth in the 20th century. UCL Institute for Innovation and Public Purpose Working Paper Series No. IIPP WP 2018-08.
- Schmidt, V.A., 2020. Europe's crisis of legitimacy: governing by rules and ruling by numbers in the Eurozone. Oxford: Oxford University Press.
- Schnabel, I., 2020. The ECB's policy in the COVID-19 crisis a medium-term perspective [online]. Available from: https:// www.ecb.europa.eu/press/key/date/2020/html/ecb.sp200610~a16c903e5c.en.html.

Schonhardt-Bailey, C., 2013. Deliberating American monetary policy: a textual analysis. Cambridge, MA: MIT Press. Sigl-Glöckner, P., et al., 2021. A new fiscal policy for Germany. Berlin: Dezernat Zukunft.

- Slobodian, Q., 2018. Globalists: the end of empire and the birth of neoliberalism. Cambridge, MA: Harvard University Press. Smoleńska, A., 2021. Governing EU banks after the global financial crisis: from regulation to governance. In: Y. Cassis, and J.-J. van Helten, eds. The legacy of the global financial crisis. London: I. B. Tauris, 177–190.
- Smoleńska, A. and van 't Klooster, J. 2021. A risky bet: should the EU choose a microprudential or a credit guidance approach to climate risk? (104 No. ID 3949541). Frankfurt. https://doi.org/10.2139/ssrn.3949541
- Streeck, W., 2014. Buying time: the delayed crisis of democratic capitalism. London: Verso.
- Tarullo, D.K., 2008. Banking on Basel: the future of international financial regulation. Washington, DC: Peterson Institute.
- Thiemann, M., 2018. The growth of shadow banking: a comparative institutional analysis. Cambridge: Cambridge University Press.
- Thiemann, M., 2019. Is resilience enough? The macroprudential reform agenda and the lack of smoothing of the cycle. *Public administration*, 97 (3), 561–575.
- Tooze, A., 2018. Crashed: how a decade of financial crises changed the world. London: Penguin Publishing Group.
- Urbinati, N., 2017. Populism and the principle of majority. Oxford: Oxford University Press.
- Van Doorslaer, H. and Vermeiren, M., 2021. Pushing on a string: monetary policy, growth models and the persistence of low inflation in advanced capitalism. *New political economy*, 26 (5), 797–816.
- Vlieghe, G., 2021. Monetary policy and the Bank of England's balance sheet [online]. Available from: https://www. bankofengland.co.uk/-/media/boe/files/speech/2020/monetary-policy-and-the-boes-balance-sheet-speech-bygertjan-vlieghe.pdf?la=en&hash=D76269239470F000514B5F6AA76500590254DBDC.
- Zilioli, C., 2017. Justiciability of central banks' decisions and the imperative to respect fundamental rights. In: *ECB legal conference 2017*. Frankfurt: European Central Bank.