17. Made to measure: how central banks deliver performances of their worth and why unconventional monetary policy is reversing the burden of proof

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INTRODUCTION

Although they are rarely discussed in such a context, contemporary central banking and monetary policy constitute almost a 'poster child' case of 'governing by numbers' (Rose 1991). Since vanquishing the Great Inflation in the 1980s, central banks have evolved into a prototype of the independent technical agency tasked with the provision of a clearly demarcated public good that characterizes the 'regulatory capitalism' of the late 20th and early 21st centuries (Tucker 2018; Wansleben 2021). If central banking is rarely discussed as an issue of 'measuring (of) governance', and especially measuring *performance*, it is because the 'myth' of central bank independence (Binder and Spindel 2017) effectively obscures how their autonomy as organizational actors depends on their ability 'to prove their worth by measuring their activities and results' (see Introduction in this volume).

In recent years, research in the fields of economic sociology and anthropology as well as political economy has increasingly ventured 'inside the black box' of *how* central banks' govern and operate (Zayim 2022). This work has begun to uncover how central banks' independence is a practical accomplishment achieved under particular social, political and economic conditions. It shows that central banks' autonomy depends on a careful orchestration of *performances* that demonstrate their technical expertise, credibility and agency to multiple audiences. Central banks' autonomous agency thus is a performative accomplishment that depends on the construction of institutionally legitimate(d) *scripts* of competent action (Meyer and Jepperson 2000), demonstrable adherence to which continuously renders the organizational actor's performance measurable and legible in terms of institutionally legitimated orders of worth (Shore and Wright 2015, 23). Demonstrating effective technical agency constitutes a particularly acute problem for monetary policy, which 'is generally focused on some relatively complex and uncertain object of knowledge' (Abolafia 2012, 169), namely controlling *future* inflation. Central banks have thus been forced to construct technical scripts allowing them to create a credible linkage between this 'proximate object of knowledge and a more remote object of knowledge. The former is chosen for its immediate efficacy in having an influence on the latter, less accessible goal' (Abolafia 2012, 169).

This chapter, therefore, seeks to show how contemporary central bank agency depends on the *measurability* of monetary policy, by looking specifically at the evolution and functioning of *inflation targeting* as *the* modern organizational script for central banking (Bernanke and Mishkin 1997). It first discusses how central banks constructed an uncontroversial measure of 'successful' monetary policy, allowing them to maintain a position of equidistance to several

social fields and their respective publics (e.g. Thiemann et al. 2021). Second, it shows how central banks' success in accomplishing autonomy has paradoxically entangled their agency with structural contradictions in global finance that undermine the measurable performance of monetary policy success. Finally, the chapter highlights how the 'unconventional' monetary policies (Borio et al. 2018) that central banks have adopted in the wake of the 2007–09 financial crisis to address these contradictions have created novel challenges for their attempts to restore a more unequivocal measurability of their policies.

HOW INFLATION TARGETING MADE MONETARY POLICY PERFORMANCE 'MEASURABLE'

Beginning in the 1980s, central banking has undergone a profound transformation. Where before monetary policy was the ugly duckling of fiscally oriented Keynesian macroeconomic management, since then it 'has emerged as a distinct and highly visible public policy domain', in which 'central bankers have acquired unprecedented power and now count as the quintessential technocratic authorities of our time' (Wansleben 2018, 774). In part, this change of central banks' fortunes can be explained by the diffusion of monetarist ideas about the 'neutrality' (Adolph 2013) of central banking, which has created an ideological environment highly conducive to the narrowing of monetary policy to the control of inflation and the creation of legally and operationally 'independent' central banks. However, the spectacular rise of central bank's (infra)structural power (Braun 2020; Walter and Wansleben 2020) is insufficiently explained as a 'functional' consequence of the importance of monetary policy for neoliberal supply-side reforms, but depends on a radical transformation of *how* monetary policy operates and its social, political and economic conditions of possibility (see Goodhart 2015). Until the 1980s, central banking 'resembled the administrative and regulatory agency through which other parts of the state act on the economy' (Braun 2020, 398), relying on market-constraining interventions such as controlling market interest rates or imposing credit ceilings. Since then, it has evolved into a market-based regime of governing that operates by rendering the market processes that foreshadow the price level/inflation measurable, and uses this legibility to conduct market expectations towards the desired outcome(s): 'modern' central banking thus works through a process of 'performative measurement' (Coombs 2020, 526). On this basis, by the early 2000s independent central banking had become a globally established standard and model (Polillo and Guillén 2005), and 'achieved an almost taken for granted quality in contemporary political life, with little questioning of its logic or effectiveness' (McNamara 2002, 47).

While in a formal-legal sense central banks' authority is delegated to them, in practice the conditions for such organizational autonomy need to be carefully constructed (Carpenter 2001; Goodhart 2015) – in this specific case, through a metamorphosis of central banking from an 'art' (Hawtrey 1970) into a fully 'scientized' agency (Marcussen 2006). Science provides a powerful means for legitimizing formal organization and its technical rationalities (Drori and Meyer 2006), particularly in cases where 'means–ends relationships are unclear or there is no agreement on performance criteria' (McNamara 2002, 64). To firmly establish their independence, central banks thus 'must demonstrate uniqueness and show that they can create solutions and provide services found nowhere else in the polity' (Carpenter 2001, 5). In light of their decisive role in defeating inflation in the 1980s, central banks appeared as

natural custodians of price stability. What scientization helped them achieve, however, was to *translate* this rather abstract public good into a concrete organizational *script*, adherence to which would render monetary policy's ability to govern price dynamics and control inflation *visible and demonstrable.* Drawing on state-of-the-art science allowed central banks to delineate a framework that measurably demonstrated the 'immediate efficacy' of monetary policy *implementation* as a 'proximate object' which would be 'having an influence on the … less accessible goal' of price stability (see Abolafia 2012, 169).

While it took about a decade for this script to evolve into a scientifically codified (Bernanke and Mishkin 1997) technical standard of *inflation targeting*, there has been a global convergence on its key features since the 1990s (Polillo and Guillén 2005). This process of formal organizing, aligning monetary policy and formal economic knowledge and models, has involved two distinct, but interrelated, dimensions. On the one hand, Rational Expectations (RE) economics and its formal models provided central banks both with a legitimating rhetoric and a formal framework for organizing and describing *how* their manipulation of *short-term* interest rates (the 'implementation' of monetary policy goals) allows them to govern or control inflation *over the long term* (the remote object of price stability). While there remain profound doubts about the nature and extent of this 'control' (Blinder 2004, 77ff.), this inflation targeting has proven a phenomenal success in measurably demonstrating central banks' technical agency. It removes the uncertainty about the effectiveness of central banks' control over future inflation by translating it into a technical procedure: the temporal transmission of *present* manipulations of the (short-term) interest rate into control over the (temporally) remote object of *future* inflation becomes a procedural issue of demonstrably shaping the proximate object of *present expectations* of that future (with RE providing the 'transmission belt'). This has allowed central banks to focus their technical acumen on developing and gradually 'formalizing' (Walter 2019) a well-delineated operative 'frame' of relevant variables within which precise control over the definition of the short-term interest rate in money markets becomes possible. This allows the central bank (in theory) 'to manage expectations of the future path of the official short-term rate' (Braun 2015, 370) and thus *demonstrably* 'target' a future inflation rate by shaping the expectations of the economic actors whose conduct produce the (future) price level – by 'anchor[ing] the very expectations it ostensibly measures' (Braun 2015, 379). To demonstrate their performative control over expectations, central banks therefore need markets to react markets 'in a way that is consistent with the central bank' model of the economy' (Braun 2015, 371), proving both the accuracy of central banks' expertise and the adequacy of their policy scripts. Formal economic expertise has become a crucial medium for rendering central banks' communication 'transparent' and legible for market publics and for encoding policy signals in clearly defined 'frames' (Braun 2016; Holmes 2009; Tognato 2013; Velthuis 2015), and for the public display of expertise through the production of forecasts and increasingly sophisticated modelling of economic processes meant to shore up the credibility of monetary policy strategies to its audiences (Braun 2015; Hubert 2015).

On the other hand, RE models have also instructed how central banks have cultivated an infrastructure of *market-based* technologies of governing, to make themselves operationally autonomous from the state. To improve the efficacy of those market-based instruments, central banks have strategically shaped the institutional evolution of financial, money and credit markets in ways that would improve their own ability to elicit demonstrable and measurable market reactions (e.g. Braun 2020; Gabor and Ban 2015; Gabor and Vestergaard 2018; Walter 2019; Walter and Wansleben 2020; Wansleben 2018; Wullweber 2021). Thus, not only have

'academic research and scientific prestige become a means to bureaucratic power' as a sort of reputational capital (Mudge and Vauchez 2016, 162); but scientific expertise and calculative techniques have provided a common medium of communication allowing central banks to produce measurable effects by shaping the expectations of the 'insider audience' (Braun 2015, 369) of market participants.

Since the 1980s, then, central banks have proven shrewd strategists, 'capitalizing' on the crisis of organized capitalism (Krippner 2011) to reconstruct monetary policy as the purely formal-technical provision of price stability as an autonomous and well-delineated public good. The infrastructural symbiosis between financial markets and monetary policy described above has allowed them to create a source of performative power they can wield to generate scientific legitimacy and thus organizational autonomy at the interstices of multiple publics – spinning the yarn of central bank independence as a paradigmatic case 'where states can reap the benefits of delegating clearly delineated and unequivocal policy tasks to specialized technocrats' (Wansleben 2021, 909). However, to preserve this legitimacy, central banks have become profoundly dependent on preserving the 'felicity conditions' for these demonstrations of their 'performative power' (Wansleben 2018). Scientization, in this sense, constitutes a double-edged sword. On the one hand, to derive institutional legitimacy from it, central banks have been forced to streamline the formal structure of their operations and their rhetoric to conform to the one-dimensional technical rationality implied by formal models (see Meyer and Rowan 1977 for how strategies of legitimation shape the formal structure of modern organizations). On the other hand, their ability to secure 'reliable, predictable governability only arises through central banks' purchase over processes of expectation formation' (Wansleben 2018, 777), creating a straightjacket of conformity to what and, more importantly, *how* markets and formal economic expertise conceive of financial processes. As formal economic expertise has become more and more inscribed into central banks' *internal* sense-making and interpretive strategies, their ability to 'see' beyond the limits of this expertise has become severely restricted, to the point where the carefully crafted myth of monetary policy as neutral pursuit of the public good of price stability has become severely compromised by the failure to pre-empt or even notice growing financial fragilities and excesses before the crisis of 2007–09 (Abolafia 2004, 2010; Fligstein et al. 2017; Golub et al. 2014). This failure to 'see' beyond what is visible through formal economic models has been compounded by the symbiotic dependence on the integrity of their market-based *infrastructure*, whose stability needs to be constantly shored up against the (growing) instabilities and dysfunctions of global finance. As market dysfunctions have become a rather constant state of affairs since the mid-2000s, central banks have found it increasingly difficult to fend off the impression that their autonomy to pursue price stability as their sole technical mission might be compromised by this functional symbiosis with increasingly 'unfettered' financial markets (Walter and Wansleben 2020).

CENTRAL BANKING AND FINANCIALIZATION: MEASURABLE SUCCESS(ES) AND RITUALS OF GOVERNABILITY

Modern central banking has, by most conventional measures, proven a quite phenomenal success. Following the end of the Great Inflation of the 1970s and early 1980s, central banks have presided over nearly two decades of price stability, and stable and favourable macroeconomic conditions (affectionately dubbed the 'Great Moderation': Bernanke 2004), during

which they could quietly expand and perfect the infrastructural power which undergirds the measurable performance of monetary policy. However, refashioning monetary policy into a sort of performative power has also produced, in the longer run, a number of adverse side effects. The (self-)conditioning of organizational actors to conform to 'pre-specified and narrow accountabilities and performance criteria' commonly leads them to 'develop strategies, knowledge, tools, and professional identities that allow them to … optimize only towards measurable success' (Wansleben 2021, 914). The more central banks have tailored their monetary policy scripts towards the performance of 'narrow measures of success' (Wansleben 2021, 911), the more they have both contributed to and become thoroughly dependent on structural felicity conditions over which they had little or no control. The 'unfettering' of market-based finance helped produce favourable macroeconomic conditions, fuelling stable economic growth while enclosing inflationary pressures largely *within* the financial system (Krippner 2011; Mehrling 2011). At the same time, as monetary policy was increasingly streamlined to align with a body of expertise that considered financial markets to be fundamentally efficient and the market economy as intrinsically stable, central banks became increasingly myopic with regard to not only the emergence of dysfunctions and fragilities in the market-based infrastructures on which they relied, but also how their own activities aimed at stabilizing markets (to secure the felicity conditions for the performance of monetary policy) contributed to this process (Fligstein et al. 2017; Golub et al. 2014; Walter 2019, 2020; Walter and Wansleben 2020).

As central banks streamlined their monetary policy apparatus rather exclusively towards measurable performance in relation to the public good of price stability, other goals traditionally pursued alongside or as instrumental to achieving price stability were gradually abandoned. The result has been a fragmentation of epistemic tasks *within* central banks (between the articulation of monetary policy strategy, its technical implementation, and financial supervision) (Wansleben 2021, 910), leading to a gradual dismantling of both the techniques required for their observation and diagnosis and the instruments required for actively pursuing objectives other than 'price stability' in an increasingly narrow sense. Whereas previously, central banks used money market interventions as an instrument both for stabilizing the price level *and* for maintaining financial stability, it gradually evolved into a tool tailored purely to the implementation of inflation targeting (Wansleben 2021, 914). Without any instruments for practically tackling the problem of financial (in)stability, central banks began to turn a blind eye to it, since available 'response repertoires' control what is being noticed (Weick 1979, 26). This 'division of regulatory labour' (Wansleben 2021) has thus certainly contributed to the failure to 'see' growing financial instabilities (Fligstein et al. 2017), but also to the widely noted (cultural or ideological) 'capture' (Kwak 2013) as central banks grew accustomed to thinking of financial markets as a transmission belt for monetary policy, which needed to be left undisturbed in order for its policy signals to circulate efficiently.

However, financial stability did not only gradually disappear as a separate objective and concern for monetary policy, but, in helping to engineer a more market-based finance, central banks actually contributed to making the financial system more prone to liquidity crises, unfettered credit expansion and thus the build-up of financial fragility. While traditionally, central banks had been very concerned with controlling the (overall) credit expansion in the financial system, and thus had been very sceptical of highly integrated and liquid interbank and capital markets (Wansleben 2018, 795), since the 1980s they have actively supported financial innovation and institutional reconstructions that would enhance reactivity to mon-

etary policy signals (Braun 2020; Gabor 2016; Krippner 2011; Mehrling 2011; Walter and Wansleben 2020; Wansleben 2020). In particular, central banks' and regulatory agencies' tacit regulatory approval of an increasingly complex system of 'shadow' finance (Thiemann 2018), which central banks hoped could improve the transmission of monetary policy (Walter and Wansleben 2020), has effectively eroded the ability of monetary policy to control the endogenous creation of (credit-)money by global finance and the various waves of asset inflation to which it has contributed (Mehrling 2011). Central banks' efforts to disentangle monetary policy from 'fiscal domination' have thus, paradoxically, led them straight into a situation of 'financial dominance' (Diessner and Lisi 2020), where the dependence of their technical agency on a market infrastructure conducive to its measurable performance meant they had little choice but to accommodate financial and credit expansion to avoid disrupting the market processes on which it depended. This, however, places additional constraints on central bankers to (publicly) conform to their narrow mission of price stability and avoid any digression from their organizational script, in order to both preserve the 'credibility' of their commitment (Braun 2015, 381) and the purity of their signalling apparatus, which are crucial to their ability to ensure markets 'perform' in accordance with the inflation targeting script.

However, financial domination has another, more structural dimension. As central bank(er)s noticed early on, their ability to make markets' expectations conform to central banks' models depended on avoiding any interference with 'orderly conditions' (Mehrling 2011, 48ff.) in markets that could distort the signal or disrupt its transmission. While central banks' active role in facilitating the diffusion of US-style liquid money and capital markets (Gabor 2016; Konings 2011) was meant to improve the liquidity of those markets in order to shore up their reactivity to monetary policy, its flip side was that market-based finance has exhibited an inherent tendency towards 'pro-cyclical' behaviour, producing cycles of credit expansion and subsequent fragility in which market liquidity evaporates (Goodhart 2015, 281). Over the course of the 1980s, the Federal Reserve had learned this lesson and imparted it to what eventually became the global model of inflation targeting, as it accidentally disrupted orderly conditions when trying to (in line with remnant monetarist ideas) rein in the rapid expansion of credit and the money supply in the US economy. This meant that, if the management of expectations in line with a RE model to demonstrate the ability to target inflation was to work efficiently, monetary policy had to give up all pretensions to be controlling the expansion of credit which might trigger a liquidity crisis and undermine the credibility and autonomy of the central bank itself (Walter and Wansleben 2020). Over the course of the 1990s, as monetary policy increasingly shied away from curtailing liquidity and credit expansion in the financial system, the traditional role of central banks as 'lenders of last resort' during times of acute crisis has thus morphed into one of durable underwriters of market liquidity, as 'dealers' or 'market makers of last resort' (Mehrling 2011) that had a vested interest in 'de-risking' (Gabor 2020) financial markets, that is, structurally propping up asset prices to prevent any disruption of market liquidity that could disrupt the performance of (inflation targeting) monetary policy.Securing and protecting the felicity conditions required for producing measurable performances of their technocratic agency thus locked central banks into a symbiotic dependence with market-based finance, creating a strong and structural bias for central banks not to interfere in markets and their increasingly pro-cyclical dynamics. Over the course of the 1990s and 2000s, this has led numerous observers to point out a pro-market and pro-finance bias of central banks that appeared to result from ideological or technocratic 'capture' of monetary policy. As long as central banks could point to the successes of their inflation targeting 'ritual

performances', however, this charge of technocracy did not pose a significant threat to their autonomy. This changed when the pro-cyclical dynamics and fragilities in financial markets that monetary policy (especially, but not limited to) in the US had long turned a blind eye to erupted into the 2007–09 global financial crisis. With this sudden and complete disappearance of the 'orderly conditions' on which its institutional legitimacy and autonomy depended, central banking entered into a period of profound institutional transformations, the consequences and implications of which are still not fully understood.

THE ADVENT OF 'UNCONVENTIONAL' MONETARY POLICY AND ITS CONSEQUENCES FOR CENTRAL BANKS' PERFORMANCE

The global financial crisis of 2007–09 (GFC), and subsequent debt crises such as in the Eurozone between 2009 and 2014, have profoundly transformed the conditions under which central banks operate. The macroeconomic stability of the Great Moderation and its 'financial Keynesianism' (Minsky 2001), in which financial profits sustained demand without inflating real (as opposed to financial) prices, had played into the myth of central banks' superior technical acumen and effectively immunized them against any critiques of their unwillingness to curb 'unfettered markets', to burst financial bubbles or to regulate rampant financial 'innovation'.

The GFC confronted central banks with multiple challenges. Their systematic reliance on and support for market-based finance put a dent in the technical credibility of central banks. The crisis also profoundly disrupted the normal functioning of market-based finance and thus robbed central banks of most of their tried-and-tested instruments for intervening in financial markets. Simultaneously, central banks faced mounting public pressure to come up with technical fixes to stabilize financial markets and fend off the looming economic crisis – requiring them to develop ad hoc solutions with little or no established scientific legitimacy and whose effectiveness and side effects were difficult to oversee (at best). Two tasks that fell to central banks illustrate particularly well the tensions and fissures that emerged within the careful de-politicization of monetary policy in this new situation: first, the much discussed shift to 'unconventional' monetary policy (Borio et al. 2018) to fend off the looming threat of another Great Depression, and second, the creation of a framework for the 'macro-prudential' regulation of finance to prevent and manage the financial instabilities endogenous to market-based finance (Coombs 2017; Goodhart 2015; Thiemann 2019).

The idea that there was a need for 'macro'-prudential regulation emerged from the fact that the pre-crisis division of regulatory labour between a dominant *micro*-prudential regime of financial regulation and monetary policy had failed to stem the pro-cyclical build-up of financial risks and fragilities (Goodhart 2015; Wansleben 2021), as in the case of the US-based real-estate bubble that burst in 2007 and revealed the profound frailties of financial institutions and markets that previously had been considered both robust and resilient. Political decision-makers responded by assigning central banks the task of developing and managing a framework for dealing with financial instability (Thiemann et al. 2021, 1434). Since macro-prudential regulation potentially involved making decisions about the allocation of credit and interfering in the determination of risk and asset values, it posed a significant threat to the carefully calibrated de-politicization and autonomy of central banking. As neither

any scientifically authenticated ways of measuring and assigning macro-prudential risks nor well-scripted and legitimate techniques or instruments for counteracting them existed (Thiemann et al. 2021), central banks faced the unwelcome task of taking over a policy field that remained heavily politicized in the absence of consensual scientific or technical expertise, with no authoritative framework for action or accepted instruments.

While there is some (minor) variation between central banks (mostly as a function of their legal mandates), generally they agreed that 'anti-cyclical policies threatened to re-politicize central bank action' (Thiemann 2019, 564); they ingeniously navigated this potential minefield by transforming macro-prudential regulation into an exercise of 'performative measurement' (Coombs 2020). In the absence of well-defined *measures* of financial fragility and systemic risk (and unable to break down specific financial institutions' contribution to this aggregate), central banks opted to 'pass the buck' to financial institutions; instead of imposing any firm (counter-cyclical) rules on them, there has been a convergence on the 'Solomonic' solution of conducting public 'stress tests' in which financial institutions are enrolled in performances of central bank agency on financial stability by self-auditing their resilience and preparedness for crises of market liquidity (Coombs 2020, 2022). Although there are ample grounds for being sceptical of the effectiveness of such 'rituals of verification' and the ability of risk management to actually neutralize risk (Power 2007), from the point of view of central banks it constitutes a highly effective public 'ceremony' (Meyer and Rowan 1977). It avoids politically controversial interventions while enabling them to perform a very public demonstration of their agency. While, to some extent, stress testing may also serve an epistemic function of sensitizing banks and other financial institutions to systemic risk(s) (Coombs 2020), its main attraction (for central banks) certainly lies in the fact that stress tests function as a sort of 'performative measurement' (Coombs 2020, 526): by communicating assessment criteria 'transparently', central banks can incentivize financial institutions to conform to them and produce measurable performances of central banks' regulatory success. This allows central banks to demonstrate their agency as regulators, *and* to frame 'financial stability as a discrete objective addressed by specific instruments', so that 'financial stability now augments (rather than replaces or amends) the inflation-targeting model of central banking' (Levingston 2021, 1475) as a complementary but functionally separate task (Levingston 2021; Thiemann 2019). As a result, the initially announced 'macro-prudential revolution' has been 'reduced to a much more scaled back incremental approach during the process of implementation. While focusing on increasing the resilience of the system, implemented measures largely refrain from intervening in the build-up of financial risks during the upswing of the cycle' (Thiemann 2019, 562).

Central banks have thus quite successfully incorporated macro-prudential policy as a complementary, but functionally distinct task in a way that does not interfere with the standard monetary policy script. However, unconventional monetary policy has proven more difficult to absorb. 'Unconventional' monetary policy includes a bundle of distinct measures and techniques. Yet, the key difference with conventional policy focused on (short-term) *interest rate manipulation* is the unconventional focus on *balance sheet policies* meant to lock in longer-term structural effects on financial conditions (Borio et al. 2018). Specifically, unconventional monetary policy has been described as 'the unprecedented and extensive use of central bank balance sheets to shape financial conditions', with the aim of removing 'market dysfunctions' and 'maintaining the plumbing of [market-based] finance' (Musthaq 2021, 1). Although the various forms of 'Quantitative Easing' have proven very effective in stabilizing

financial markets, they have also raised awkward questions about the boundaries and scope of monetary policy, and thus about the operational autonomy of central banks.

On the one hand, central banks *needed* to demonstrate their ability and expertise to intervene – given that they had largely failed to anticipate the crisis and had sung the praises of 'self-regulating finance' until the very moment the crisis broke. Unconventional policies succeeded in demonstrating the scope and range of central banks' infrastructural powers; by effectively de-risking financial assets and restoring the liquidity of the financial system, they also restored the felicity conditions of conventional monetary policy. However, they *also* extend central bank intervention (far) beyond the interbank money market in which interest-rate management had (exclusively) operated. This extension implicated central banks in distributional questions, such as what is the appropriate price for an asset? What losses should be borne by market participants? etc. Another trend in unconventional monetary policy has been to extend liquidity measures not only to more markets and at longer maturities, but also beyond traditionally eligible institutions – including, in particular, so-called 'shadow banks' (Wullweber 2021; for an overview of the growth of shadow banking, see Thiemann 2018) – and to weaken the traditional requirement of full collateralization of liquidity provision, so that considerable market and credit risks have been transferred onto the central banks' balance sheet (Borio et al. 2018).

This massive recourse to 'unconventional' balance sheet measures meant that central banks' continuing adherence to inflation targeting and price stability as the normality, to be restored through the necessary but temporary recourse to *unconventional* policies, came under (increasingly public) scrutiny. This problem was made worse by the widespread perception that central banks showed no hesitation to use these tools when it came to rescuing finance from its self-made crisis. Central banks were acutely aware of the dangers this perceived lack of neutrality posed to their independence, fearing that various publics might 'judge the expansion of liquidity excessive and criticize the apparent accommodation of the financial sector' or, in the case of the Eurozone crisis, accuse them of monetizing public debt (Mabbett and Schelkle 2019, 440). To avoid being left to effectively assume sole responsibility for the fall-outs of instability, they thus sought to enrol the state, and more specifically fiscal policy, in these refinancing operations for financial markets (Abolafia 2012, 169). They therefore faced the following dilemma: they needed to intervene to demonstrate their agency vis-à-vis a problem they were seen to have co-created – but they also needed to avoid *normalizing* unconventional measures and undercut the very delimitations that made this agency so (apparently) measurably effective in the first place.

Faced with such 'institutional pressure to both sustain and not sustain [unconventional policies] as a regular practice' (Ronkainen and Sorsa 2018, 711), central banks needed to portray unconventional monetary policy as *consistent with and complementary to its primary script* – they needed to weave a 'sensible plot' to reconcile unconventional policies with their standard scripts of operating (Abolafia 2004; Ronkainen and Sorsa 2018, 715). Unlike for macro-prudential regulation, central banks have struggled to 'construct an overall narrative of operational schemas that accommodates QE consistently with … other activities to maintain credibility' (Ronkainen and Sorsa 2018, 715). They have tried to portray unconventional monetary policy as little more than a temporary and exceptional crisis intervention – a more extensive version of the 'lender of last resort' rescue operations central banks had provided during traditional financial crisis. They have insisted that 'these programmes serve monetary policy in two ways: (1) addressing disruptions in the monetary policy transmission channel; and (2)

providing additional monetary stimulus once policy rates reach the lower bound' (Musthaq 2021, 15) – but which would be phased out once the normal functioning of markets and thus the conditions for returning to a narrow goal of price stability would be restored. As critics have rightly pointed out, this (rather misleading) framing obscures the systemic and durable dependence of generally inflated financial markets on the (implicit and explicit) support from central banks (Mehrling 2011).

In a tacit acknowledgement of this critique, central banks have increasingly begun to frame unconventional policies as a way of biding time until a more 'stable' system of market-based finance could be engineered (Braun 2020, 408). However, the process of making the financial system more stable and resilient bear a striking resemblance to the blueprints already used by central banks *before* the series of financial and debt crises that began in 2007–08 to make financial architectures more responsive and conducive to their monetary policy scripts and thus increase the resilience of their policy infrastructure. Indeed, numerous central banks around the world have adopted similar recipes of extending and deepening collateral markets (which serve as conduits for their money market operations), encouraging in particular the use of 'repurchasing' or 'repo' techniques by financial institutions for managing their liquidity (Birk and Thiemann 2020; Braun 2020), as these increase the transmission of and thus the reactivity of markets to monetary policy impulses.

Despite central banks' best efforts to (re)create conditions allowing them to return to the pre-crisis (near)-exclusive focus on price stability, unconventional monetary policy has thus become a sort of constant companion to the main organizational script of inflation targeting. For central banks, this situation is deeply ambivalent. On the one hand, the perpetuation of unconventional policies has become indispensable for stabilizing the liquidity of financial markets, required for inflation targeting to operate successfully. On the other, the same unconventional policies serve as a constant reminder of the artificiality and contingency of central banks' (continued) focus on price stability as a narrow measure of success. Central banks are quite aware of how unconventional policies continuously controvert the 'myth' of central bank neutrality (on which their independence rests) by highlighting how their performance could be held accountable to many other measures or 'accounts of worth' (Stark 2009). However, faced with the alternative of a destabilization of financial markets that would undermine the operative foundation of the performances through which central banks continue to exhibit the effectiveness of and justify (the need for) their autonomous agency, they have chosen to drink from the poisoned chalice. Central banks have thus come to systematically and 'increasingly rely on unconventional tools in noncrisis times to maintain confidence in an unstable financial system … these interventions increasingly target "market dysfunction", as opposed to (a narrow interpretation of) monetary policy …, suggesting a convergence in central bank operations around maintaining the plumbing of finance' (Musthaq 2021, 1).

CONCLUSION: HOW NORMALIZING 'UNCONVENTIONAL' POLICIES DE-POLITICIZES CENTRAL BANKS' PERFORMANCE

The need to formally institutionalize macro-prudential policy as a task for monetary policy and the de facto normalization of unconventional monetary policy have created considerable tensions in how the performance of monetary policy is being measured (Walter 2022). As what constitutes effective and efficient monetary policy has become more and more ambiguous, so

has central banks' autonomous agency, premised on the performance of such efficacy, come under increasing stress. The recent 'return' of inflation has added insult to injury, as central banks now face a problem they had, for the better part of three decades, claimed to have acquired technical mastery of. Whereas before they could invoke (structurally) low inflation (in goods and services) as evidence that their relatively close control over financial markets' inflation *expectations* worked, the current bout of inflation increasingly exposes that these performances of measurable control *within financial markets* do not actually transmit very well *into the broader economy* – and how limited central banks' autonomy towards a financial system dependent for its stability on continued expansionary monetary policy has become. From the perspective developed in this chapter, the prospects for a quick return to the system of performance measuring on which independent central banking rests do not seem particularly promising.

Beyond the problems these developments pose for the autonomous agency of central banks themselves, they also reveal the difficulties that the de-centred governance through technical agencies whose autonomy depends on continuous audit and performance measurements face when confronted with problems and crises that 'overflow' their neat divisions of labour and narrow technical rationalities. As these agencies' legitimacy depends on performances of 'narrow measures of success' (Wansleben 2021, 911), they will need to protect their particular formal scripts and organizational rationalities in terms of crisis – seeking to, as central banks have done, to protect and stabilize what they perceive as structural felicity conditions for successful performances. Performance measuring, in this way, encourages a continuous black-boxing of structural tensions and contradictions that overflow the technical division of labour. It renders a more reflexive governance, and organizational and social learning about the origins of crises more difficult by committing technical agencies to increasingly ritualistic pursuits of formally rational goals even while the broader structural conditions within which these tasks acquired a more substantive rationality may be eroding. As has been the case with central banking since the GFC, 'rather than opening space for a discussion about the "social purpose" … rising political turbulence [may] actually strengthen … normative commitment to de-politicisation' (Levingston 2021, 1479). In this way, the dependence of technical agency on measurable performance(s) may work to perpetuate, and even deepen, the entanglement of this agency in the production of the very structural problems that erode its felicity conditions.

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