The Politics of Reversing Central Bank Independence*

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Abstract

Central bank independence (CBI) is at risk around the world. The confluence of populism, nationalism and acute economic distress is making CBI harder to maintain. However, it remains unclear when and how CBI gets undermined? To answer these questions, we develop a novel power-political framework that outlines the conditions, and processes, under which CBI retrenchment occurs. Specifically, we argue that CBI — splitting central banks off from governments — helps to resolve the core political and contractual problems associated with sovereign lending. The willingness and ability of sovereign lenders to maintain this separation — often buttressed by international surveillance and control — depends on their power to exercise concerted pressure on governments to maintain CBI. Using an in-depth historical survey of the German Reichsbank, we demonstrate that increased government demand for monetary policy control in combination with reductions in the power of sovereign lenders, drives CBI retrenchment.

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1 Introduction

The independence of central banks is increasingly under threat. In 2012, President Abe of Japan secured the resignation of Governor Shirakawa so that the more compliant Haruhiko Kuroda could assume the post. President Trump has repeatedly criticized the Federal Reserve's interest rate decisions, breaking with decades of White House tradition avoiding criticism of monetary policy. Central banks in India, Pakistan, Russia, Nigeria, South Africa, Thailand, and Turkey — to list only the most conspicuous cases — have succumbed to increasing political pressure in recent years.

What explains variation in degrees of CBI, and especially episodes of backsliding in independence? A common argument invokes the degree of domestic fragmentation in a polity. Theories of this sort can tell us about the degree of CBI across nations, but they are not helpful in explaining the dynamics of CBI within countries. Other scholars concentrate on the decline of substitute institutions, such as labor unions and coordinated wage bargaining, to explain increases in CBI. However, recent decreases in CBI can hardly be attributed to a strengthening of such institutions. A third group of scholars focuses on the choice between CBI and fixing the exchange rate, citing its functional equivalence. While the desire to signal a commitment to prudential monetary policies surely plays a role in motivating CBI, this line of argument struggles to explain variation in CBI absent changes in exchange rate policy.

The literature thus lacks a complete account of CBI variation and the process of backsliding in particular. This doubtless reflects the fact that the possibility of CBI retrenchment has been deemed remote. The conventional historical narrative of CBI runs as follows. To end the "great inflation" of the 1970s and 1980s, it was deemed necessary to enhance the credibility of inflation-targeting monetary policy. The main motivation for the adoption of CBI was therefore the desire of governments to lock in stable and low inflation. The subsequent removal of government influence from monetary policy was associated with the era of the "great moderation." The adoption of an independent central bank thus came to be viewed as economic common sense.

This narrative is appealing in its simplicity and happy denouement. But, historical correlation should not be mistaken for causation. It is unclear that independent central banks with discretionary powers are the optimal means of implementing low inflation when compared to fixed rules

governing the money supply or a fixed exchange rate. The conventional wisdom also suffers from presentism and a teleological bias. CBI is cast as a recent invention that only ever increases—toward maximum independence.

Without denying that this technocratic discourse played a role in recent increases in CBI, the conscious design of institutions similar to modern central banks began when John Law published his *Money and Trade Considered, with a Proposal for Supplying the Nation with Money* in 1705, long before any intellectual connection between the money supply and inflation was established. Moreover, CBI has been a matter of international relations at least since the Algeciras Conference in 1906, when twelve European countries and the United States established the Banque d'État du Maroc (Magali, 1975). Since then, as often as monetary powers were delegated to independent central banks, CBI has been attacked: central banks have frequently been nationalized and undermined (e.g., Masciandaro and Romelli, 2015)). The intrinsic political motivation for governments to control monetary policy should not be underestimated. As we illustrate in our case study on Nazi Germany: "*an easy path to social control can be found through the ruthless exploitation of a centralized monetary system.*"(Wolfe, 1955, 401).

CBI should therefore be thought about politically and historically. We develop a novel power political account of CBI to provide such understanding. We argue that independence emerges to resolve the core political and contractual problems associated with sovereign lending. Our central insight is simple: CBI is used by sovereign lenders to split the unity of economic sovereignty. Through CBI, the nation state is transformed into a joint liability structure comprised of a fiscal agent and a monetary agent. This structure introduces a coordination problem for governments tempted to turn on their creditors. The independent central bank can thwart a government's will to lower interest rates or fund deficits through printing money. The central bank can also monitor public finances and reduce information acquisition costs for creditors. Moreover, creditors can embed themselves within the institutional and policy architectures of central banks. But, if the lenders' power weakens and the separation between the government and its central bank will weaken, opening a path for CBI retrenchment. The state, with economic sovereignty unified, can

more easily "*bring the sword of the Lord to the creditors.*"[1]

The paper makes three main contributions. First, the dominant approaches to CBI are focused on the functional choice of politicians to delegate monetary policy authority in light of an inflation-output trade-off and problems of credible commitment. Our conjectures complement these theories, while shifting the focus of analysis, away from the functionalist sources of CBI, in order to introduce the power political dimensions of creditor imposed constraint and governmental demand policy control. Crucially, introducing the incentives and powers of sovereign lenders in the analysis of CBI explains why pegging the exchange rate at best only represents an imperfect substitute for CBI (e.g., Bodea, 2010). Second, building on the arguments of Posen (1995) and Maxfield (1997), the logics of sovereign lending lead us to reconsider and broaden our understanding of what central banks do and how they operate. They are not mere commitment devices or fiscal veto players on the government, but also political-distributional instruments of debt relations and national resource allocation. We show, specifically, not only that central banks can be designed to transfer resources from states to creditors through independence, but also that they can be designed to transfer resources from creditors to states through retrenchment and subordination. This we argue is the essence of the political struggle over CBI. Last, exploring our theoretical propositions in the context of the Reichsbank in the interwar period, we identify the domestic and international conditions that enable a government to rein in CBI, and the politics that can turn monetary authorities into weapons of creditor extortion.

2 Existing Theories of Central Bank Independence

The term "central bank" is used to delineate the authority which is responsible for the policies that affect a country's supply of money and credit. "Independence" denotes the idea of a structural separation between central bankers and politicians.[2] When new central banks are formed, and

[1] "Lee Buchheit: The Crisis Veteran on the Sovereign Debt Frontline." Financial Times. July 2, 2019.

[2] The concept of independence is multidimensional. It includes: institutional independence, defined in terms of freedom from political interference; goal independence, understood as the right to set policy goals such as inflation targeting or maintaining a certain exchange rate; instrumental or operational independence, meaning the capacity to determine how to achieve goals; operational independence, that in practice means security of tenure for personnel; financial independence, in essence, having an autonomous budget; and legal independence, defined in terms of possessing a legal personality separate from the government's (Balls, Howat and Stansbury, 2016).

existing central banks are made more independent, governments give up fundamental levers of economic policy (Bodea and Hicks, 2015; Ugolini et al., 2017; Aklin and Kern, 2019*b*).

This poses a fundamental question, why do governments cede power to independent central banks? The need for an independent authority to direct monetary policy is classically thought to arise from the fact that politicians cannot be trusted with the power to control money and credit, because they will be tempted to use the printing presses to win re-election or fund projects at the cost of long-run economic stability (Kydland and Prescott, 1977; Barro and Gordon, 1983; Alesina and Summers, 1993; Bernhard, 1998). This political commitment problem is what the legal scholar Conti-Brown (2017) calls the "Ulysses/Punch Bowl" conception of CBI. "Ulysses" because politicians (and the public) need to be lashed to the mast by independent central bankers who are unable to hear siren calls for greater inflation (thanks to their technocratic competence and independence). "Punch Bowl" because the purpose of the central bank is akin to that of a chaperone at a party charged with removing the punch just as things are getting started and before they get out of hand. In this view, the fundamental role of central banks is stabilizing the business cycle.

The conventional account of CBI affirms the economic benefit of delegating monetary policy to nonpartisan technocratic experts (Fernández-Albertos, 2015; Balls, Howat and Stansbury, 2016; Borio, 2019). The historical development of CBI relies on a logic of rational learning in this account: CBI is seen to have followed from the ascent and diffusion of a powerful idea rather than from the victory of a particular set of economic or class interests (McNamara, 2002). While there is little doubt that the doctrinal values of CBI attracted many converts, ideational accounts struggle to explain why central banks were constituted in the first place. The beginnings of CBI date back at least to the thirteenth century. It is hardly possible to explain those institutional innovations in terms of present-day technocratic ideas of economic management.

A further issue is that CBI is always contingent and contested. As Lastra (2015, 10) put it, "*central banks inhabit a 'world of policy'*". In this messy world, inevitably, as political scientist Goodman (1991, 330) explained, "*independence is a continuous, not dichotomous, variable. In other words, there are degrees of central bank independence.*" The challenge is to explain the

variation in CBI, including processes of reversal and political subordination.

The comparative political economy (CPE) looks to domestic political structures to explain varying degrees of CBI. Drawing on Tsebelis (2002) veto players theory, the dominant hypothesis is that independence is greater in fragmented polities (Farvaque, 2002; Keefer and Stasavage, 2003; Gilardi, 2007). The more divided the context—a federal system, a state with a strong separation of powers, or a coalition government—the higher the predicted degree of CBI. The literature points to various mechanisms driving this association. Bernhard (1998) finds a role for CBI in conflict resolution among competing ministerial interests. Alesina, Roubini and Cohen (1997), Lohmann (1998), Banaian, Burdekin and Willett (1998) and scholars following their tradition attribute CBI to cooperation between parties mitigating the electoral business cycle. Hallerberg (2002) identifies the limited possibilities for targeting monetary policy to particular groups (as compared to fiscal redistribution) as a reason why multistakeholder governments are willing to delegate monetary policy. He also finds a role for CBI in sub-federal efforts to constrain federal authorities.

The varieties of capitalism tradition introduces the broader macroeconomic and institutional context. CBI variation is understood to be conditioned by the factors that affect the determination of wages and prices in domestic economies. One branch of this work focuses on societal preferences. Most obviously, the strength of social preferences for reduced inflation is closely associated with greater CBI, which is why CBI cannot be assumed to cause lower inflation despite being correlated with it (Scheve, 2004; Braun, 2016). The other branch of this literature considers the institutional drivers of CBI (Franzese and Hall, 2000; Olivei and Tenreyro, 2010). In this perspective, the recent rise of CBI is seen to follow from the breakdown of trade unions, price controls and other socio-economic coordination mechanisms that govern national monetary conditions (Iversen, 2000).

Building on the Mundell-Flemming trilemma, international political economy (IPE) scholars have developed an alternative insight into the puzzle of CBI variation: they note that the macroeconomic commitment problem of governments can also be solved through fixing the exchange rate (Broz and Hawes, 2006; Willett, Chiu and Walter, 2014). So what explains the choice between CBI and fixed exchange rates? Broz (2002) argues that the most important factor is the credibility of a government's commitment to respect the autonomy of the independent central bank to which it

as delegated the power to set monetary policy. This credibility will in turn depend on the political regime type. In open democratic states, commitments to CBI will be more credible to markets. In contrast, autocratic states will need to fix the exchange rate to gain monetary policy credibility. The *locus classicus* in this tradition is Maxfield (1997) who argues that CBI constitutes a signaling device designed to convince international investors that a country is committed to sound macroeconomic management.

Taking stock, insights from both CPE and IPE have started to unravel the puzzle of CBI variation. CBI is seen to develop to the extent that functional substitutes (political consensus, fixed exchange rates, institutions of wage and price coordination) do not exist. We accept the functional basis of the CBI model, but deem it incomplete. Accepting at face value the benefits of delegation without considering the political costs, the existing literature seldom recognizes the political and distributional implications of CBI. But the defining characteristic of monetary sovereignty is that it endows the bearer with the ability to create, revalue, and destroy money. This is a hugely powerful policy instrument: it is costly for governments to give up; and it is always threatening to sovereign creditors.

Power and conflict are therefore a perennial feature of CBI. The mostly benign relations among institutional stakeholders in the "Ulysses/Punch Bowl" conception of CBI lives in metaphor rather than reality. This fact is highlighted in recent contributions to the literature that place conflicts between governments and central banks, and issues around political accountability and legitimacy, at the core of their analyses (Adolph, 2013; Johnson, 2016; Goodhart and Lastra, 2018). Policy and legal research—focusing on central bank governance frameworks bureaucratic aspects, and appointment patterns on central bank boards—likewise provides unique insights into the conflict ridden micro-political dynamics underlying central banking (Ainsley, 2017; Shambaugh, 2019; Baerg, Gray and Willisch, 2020).

These studies remind us that, in the real world, governments trade-off power for CBI; and they often need to be pushed into doing so. The IPE literature has drawn attention to the special role of international financial institutions (IFIs) in this regard (Marcussen, 2007; Johnson, 2016; Kern, Reinsberg and Rau-Göhring, 2019). The introduction of independent central banks in the interwar

period occurred under the auspices of the League of Nations (Flandreau, 2003; Seddon, 2020). Likewise, Kern, Reinsberg and Rau-Göhring (2019) show how, in more recent times, the International Monetary Fund (IMF) targets central bank governance structures in its lending operations.

Existing theories marginalize these politics, because it is assumed that governments and central banks, ultimately, have aligned goals. But CBI is based on goal misalignment. Critics frequently argue against CBI for exactly this reason. James Tobin, for instance, dismissed CBI as "*a paranoiac mania that would prevent governments and central banks coordinating policies on matters of mutual concern*" (Conti-Brown, 2017, 136). The legitimacy of CBI is also often challenged on exactly these grounds. John Galbraith argued the right of central banks to "*exercise independent power to overthrow the decisions reached by [governments] . . . is indefensible*" (Conti-Brown, 2017, 136). We thus propose a complimentary extension to the functionalist CBI model to shed light on the power-political side of the CBI story. We ask: How can we make sense of CBI if not through the desire of politicians (and populations) to have their own hands tied? What forces make up the world of policy that central banks inhabit? And when and how do those forces combined to unravel CBI?

The next section builds a novel theoretical model of CBI, with a view to resolving the questions just broached. The main argument builds on the prevailing functionalist theory—offering a unified domestic and international logic for the creation of independent central banks—but also goes beyond them by introducing a clearly articulated theory of how power and conflict influences movements towards and away from CBI. The understanding is built through a return to two basic insights that can be found in Walter Bagehot's (1873) classic text on central banking *Lombard Street*. The first is that central banks are fundamentally creations of credit and debt. The second is that central banking is not a natural phenomenon. In his words, the monopoly control that central banks have over monetary power is "*a sign of some anomalous advantage, and of some intervention from without*" (Bagehot, 1873, 33). The key to understanding the dynamics of CBI is to identify the precise source and nature of this impetus from without — and what happens when that stimulus weakens.

3 Power-Politics, CBI and Retrenchment

We begin our analytical framework by introducing the tradeoffs involved in CBI and retrenchment therefrom. The benefits of high levels of CBI are well documented. Besides contributing to lower inflation, credible monetary commitments are conducive for achieving greater economic stability. Built on the Phillips-curve trade-off between inflation and employment, the central idea is that governments cannot be entrusted with the conduct of monetary policy as they cannot withstand to inflate the economy for political gain. Drawn from the insights of the principal agent literature, the institutional logic is that delegating monetary policy to an independent central bank mitigates this time inconsistency problem and thus eliminates the inflationary bias (e.g., de Haan and Eijffinger, 2016).

While this rationale for CBI is important, focusing on the Phillips-curve tradeoff under-appreciates the broader power of central banks as what Smith (1776) called "great engine[s] of state." Central banks can forge and shape the political and economic fabric of a nation. As result, concentrating on the inflation-output trade-off, leads to an underestimation of political costs that greater CBI imposes on governments. In fact, the political benefits of controlling monetary policy reach beyond the obvious benefit of debt financing and printing money.

Four crucial sources of power that follow from controlling a central bank are worthy of mention. First, at the most general level, monetary policy conducted by an independent central bank is especially at risk of becoming directed too much by the interests of sovereign lenders and bankers given their status as a powerful special interest group constraining a government's sovereign decision-making (Frieden, 1987). Thus, by freeing itself from these constraints and reversing CBI, a government can attain a greater degree of sovereignty in its economic-policymaking. Second, central banks — bent on deception and trickery — can provide a cloak of legitimacy for financial engineering aimed at the direct appropriation and mobilization of resources for the purposes of waging war or meeting other national exigencies (Poast, 2015). Third, as Putin's seizure of the CBR in 2001 illustrates, governments can steer the allocation of credit to clients and allies and thus exercise substantial financial and political control over a country through central banks (Johnson, 2006). Finally, for purposes of more pure venality, central banks can enable politicians to extort

investors, run-up off-balance fiscal deficits, and transfer resources overseas (Kern, Reinsberg and Rau-Göhring, 2019).

The theoretical framework presented below explains the conditions under which can we expect CBI, and retrenchment therefrom, given this combination of forces pushing and pulling at central banks. It posits that two key factors condition the level of CBI: (1) the degree of sovereign creditor power; and (2) the strength of government demand for monetary policy control. We first elaborate these two factors before bringing them together.

3.1 First explanatory factor - creditor imposed constraints

CBI institutionalizes a split between a government and its central bank. We argue that this separation is not natural. Instead, it represents an artificial constraint introduced to help manage the political risks of sovereign lending. In fact, early versions of central banks were privately owned entities and primarily installed to serve as public debt managers and guardians for investors' claims (Ugolini et al., 2017). Crucially, if creditor power weakens and the imposed straitjacket loosens, CBI reversals are more likely.

We begin with the observation that lending to sovereigns is fraught with informational and contractual problems. There exists an inherent danger of *adverse selection* (or hidden knowledge). It is almost impossible (or at least extremely costly) for a sovereign's creditors to discern what a state will be willing and able to repay (Brooks, Cunha and Mosley, 2015; Ballard-Rosa, Mosley and Wellhausen, 2019). Problems of *moral hazard* (or hidden action) and *time inconsistency* (inconsistent preferences at different points in time) also abound. Lenders cannot ensure that states will use loans as promised and refrain from subverting them (e.g., Sturzenegger and Zettelmeyer, 2006). Finally, a lender cannot be certain of *enforcement*. There is no higher authority, no international bankruptcy court, that can compel loan repayment.

The consequence of such problems is that sovereign debt markets experience high levels of market failure (e.g., Tomz and Wright, 2013). Borrowers are forced to pay higher rates for a smaller supply of credit than would be optimal (DiGiuseppe and Shea, 2019). The literature has established that sovereign creditors can manage the problems of asymmetric information and

enforcement by credit rationing, shortening contractual maturities, screening through self-selection, and repeat contracting (Simmons, 2000; Ballard-Rosa, Mosley and Wellhausen, 2019). But they are able to do more than construct contractual incentives that reduce the transaction costs of sovereign lending.

To protect themselves from appropriation and exploitation, sovereign lenders can also look to introduce frictions into the state by pushing governments into divorcing monetary policy from fiscal policy. Put differently, lenders demand a split in the economic sovereign—through the establishment of an independent central bank or the granting of independence to an existing one. This separation turns the state into a two agent institution (or sometimes called joint-liability) institution. The political construction of this policymaking friction may seem inefficient, but it establishes an extremely elegant means of protecting creditors from sovereign extortion (Keefer and Stasavage, 2003).

Turning the state into a joint-liability structure protects sovereign creditors in four ways. First, complementing the familiar solutions to the transactional problems of sovereign lending, the two agents — government and central bank — will know more about each other than the lending principals helping to solve the informational problems of adverse selection and moral hazard. Second, the government and central bank can sanction one another at a much lower cost than an outside lender, because they can constrain each other through the operation of fiscal and monetary policies. As Seymour Harris has observed, independence means "*the central bank can run in one direction and the government in another*" (Conti-Brown, 2017, 136). Third, granting greater independence to monetary authorities introduces a coordination problem into the state (Kern, Reinsberg and Rau-Göhring, 2019). This coordination problem functions as a check on the government. The need to cooperate with an independent central bank makes accomplishing things more difficult for government officials and politicians. Fourth, sovereign lenders can insist that they be made a formal part of the independent central bank's administrative and policymaking architecture. Once embedded, lenders can obtain inside information on the operations of the state and even influence policymaking (for an extensive discussion, see, for instance, Braun (2018)). This logic of political control through incorporation helps explain why, for creditors, the structural choice of CBI is

arguably preferable to a fixed monetary rule.

What factors shape the willingness and capacity of sovereign lenders to push for CBI? Two considerations are worthy of mention. First, intuitively, sovereign lenders are best placed to secure CBI when governments are reliant on unsecured lending. Most countries will rely — to a non-trivial degree — on such credit. But the degree of dependence will vary. In particular, countries with an abundance of foreign reserves or resources that can be pledged as collateral can avoid instituting CBI (Maxfield, 1997; Bianchi, Hatchondo and Martinez, 2018). This, in turn, implies that countries experiencing windfall revenues will be able to undo CBI. Take for instance the case of Russia. After regaining control over natural resource rents, the Putin administration drastically cut back on CBI, and turned the CBR towards its political agenda (Johnson, 2016).

Second, the power of sovereign creditors to uphold CBI will be strongest when they remain united. If there is a lack of coordination among lenders to a sovereign or multilateral international organizations are circumvented, the power of creditors to secure CBI will weaken. The breakdown of coordination is more likely when financial distress causes lenders to become hostile competitors looking to recover whatever they can for themselves (Buchheit and Gulati, 2017). The case of the Reichsbank in the early 1930s is illustrative. Deep conflicts over reparations payments allowed the Reichsbank leadership — under President Hjalmar Schacht — to undermine collective action among Germany's main creditors, undoing the elaborate system of international controls and surveillance holding CBI in place (Feinstein, Temin and Toniolo, 2005). The capacity to coordinate will also erode with the emergence of new powers or financial players that provide borrowers with an option to exit from existing arrangements. The emerging presence of China and Russia as alternative sources of capital for instance has enabled countries such as Hungary to cast off CBI (Buzogány, 2017).

3.2 Second explanatory factor - government demand for control

The second factor conditioning CBI reversals relates to governmental incentives and motivations. Governments can turn monetary power into a weapon of coercion and redistribution to shape the political and economic fabric of a country. This, we argue, is the other neglected power political

aspect of the CBI story. Given the political potency of central banks, governments have a natural motive to exercise control over them. However, the urgency of activating CBI reversals will vary according to three factors. These can be summarized as "interests, information, and institutions." Let us consider each in turn.

First, the interests of governments in subordinating monetary policy are not constant. They can be muted by factors such as monetarist ideas or strong economic performance attributed to CBI. Conversely, the governmental demand for monetary policy control will be greatest during existential crises such as instances of war or national emergency. When the survival of the state is at risk, the barriers guarding CBI can be quickly washed away. But there are other reasons for governments to subordinate central banks. These motives include efforts to orientate policy towards particular growth and development targets, to maintain patron-client relationships, or to secure the private interests of leaders (Johnson, 2016). To take one example, central banks in Latin America were instrumental in fostering the ambitious economic development agendas in the region until the late 1980s (Carrière-Swallow et al., 2016). In addition to monetary financing, governments can rely on subordinated central banks to disburse cheap credit and grant preferential access to loans to well connected firms and industries (Aklin and Kern, 2019*a*). In countries such as China and Russia, central banks are also willing enablers of financial repression aimed at denying financial resources to opposing businesses and groups (Johnson, 2016; Xu, 2018). They therefore help to consolidate political power in these regimes.

Second, information matters because regaining control of an independent central bank is, more often than not, an arduous and high-risk process. Reversal attempts send an alarming signal to domestic and international investors. Fearing rising inflation and the evaporation of their credit claims, investors often shun governments bent on reversals, leading to a sudden pick-up of capital flight and thus exchange rate volatility (e.g., Bodea and Hicks, 2018). As bond yields and exchange rate volatility are essential components in pricing decisions of banks and investors, government interventions threatening CBI quickly feed back into domestic private and public borrowing conditions, potentially hurting employment and economic growth outcomes. To avoid triggering a downward financial spiral, governments will seek to limit the amount of information available to

outsiders about the extent of backsliding. The process of undermining CBI almost always begins away from public view, making it difficult for opposition groups to collect information about the degree of backsliding and organize resistance. CBI backsliding, in other words, usually begins with secret collusion between a government and its central bank, and progresses gradually from there.

Finally, institutions will influence the costs of reversals. The power of institutionalized monetarist ideas and principles to motivate and defend CBI is well established. Even under assault from politicians however, independent central banks still harbor an organizational and ideational preference for autonomy. Indeed, central bankers themselves constitute an under-appreciated bulwark against government interference Lohmann (1999). In addition, given that CBI is usually embedded in national and international legal provisions — giving opposition groups the means to block reversals (e.g., Mas et al., 2020) — attaining full control over a central bank usually requires a changing of the guard (Dreher, Sturm and De Haan, 2010). Governments seeking to regain control over monetary policy will exert pressure to a point central bankers crack and resign (Binder, 2018). Once resignations are set-in motion, governments move to flip out key personnel to gain greater political control (Binder, 2018; Dreher, Sturm and De Haan, 2010).

Governments can then act to prevent a return to the status quo by destroying the institutional and ideational basis for independence. In particular, they are able to subordinate central banks by imposing on them institutional goals that are incompatible with autonomous action. For instance, in addition to being subordinated to the State Council, the People's Bank of China (PBoC) is trapped between several competing goals. In fact, the central bank's mandate foresees that PBoC distributes subsidized loans to state-owned enterprises, safeguards financial stability, and maintains a stable exchange rate (e.g., Chan, 2019). With so many conflicting targets at its hands, the PBoC is tied up in meeting these competing goals rendering any move towards greater political independence ineffective (e.g., Lohmann, 1992). This kind of government imposed constraint can, ultimately, reshape the preferences of central banks and transform their understandings of what institutional arrangements are best in a given political economy.

3.3 Explaining CBI and retrenchment

To understand CBI and the process of retrenchment therefrom it is necessary to consider the demand for government control of monetary policy in the context of varying degrees of sovereign creditor power to sustain a split between governments and central banks. While sovereign lenders will always favor CBI, the state has a latent interest in eliminating frictions arising from the political independence of monetary authorities. There is therefore nothing intrinsically stable about CBI. We can expect CBI retrenchment to be more likely if sovereign creditor power weakens; and conversely for CBI to strengthen as creditor strength grows.

The combination of the two central variables of our framework generates four CBI conjectures presented in Figure 1. At one extreme, deepening or stable CBI in the context of strong creditor constraints and modest governmental demand for monetary policy control (Conjecture I); at the other extreme, CBI reversions and central bank subordination in the context of diminished creditor constraints and strong government demand for control of monetary policy (Conjecture IV). The framework also generates two intermediate predictions: sham CBI and secret collusion between a central bank and its government when strong creditor power intersects with high government demand for control of monetary policy (Conjecture II); and vicissitudinal CBI, where there is space for central bank autonomy but it lacks an anchor, in the context of modest government demand for monetary policy control and minimal creditor constraints (Conjecture III).

Figure 1: Theoretical conjectures: Political context and the degree of CBI

Government Demand for Monetary Policy Control	Sovereign Creditor Imposed Constraint: Weak	Sovereign Creditor Imposed Constraint: Strong
Weak	II VICISSITUDINAL CBI	I ROBUST CBI
Strong	IV REVERSALS OF CBI	III SHAM CBI

Synthesizing these insights, it becomes apparent that CBI is not a one way street: it is subject to power and conflict. This implies that transition processes within these conjectures depend on the forces that shape a government's demand for monetary policy and creditor power. Demand for monetary policy control will essentially depend on a government's need and ability to mobilize funding to weather an adverse economic shock, to stem against a faltering economy, and/or, often in a process of democratic backsliding, to consolidate its political power. Similarly, creditor coalitions are far from stable. In situations of global financial distress and/or in times of rising nationalism, sovereign lenders might turn into fierce competitors when foreclosing a nation state; thereby 'unintentionally' eroding their collective bargaining power and thus reducing a government's opportunity costs to reverse CBI. Once fully subordinated, a central bank follows a government's directive. As such, it can be turned into a powerful institution channeling funds from creditors and society to a government. In an extreme case, this implies that a subordinated central bank can be used as a means for rent extraction within and even beyond a nation's borders. To illuminate these conjectures, we explore the rise and fall of CBI in interwar Germany in the next section.

4 The Dynamics of CBI – The Case of the Reichsbank

To illustrate the mechanisms underlying our theoretical model, we present the case of the Reichsbank for several reasons. First, the Reichsbank's historical evolution illustrates how pressure from international creditors, leads to the adoption of CBI. Indeed, to secure reparation payments after Word War I, the Allies were the main driving force behind the implementation of CBI. Second, the Reichsbank's transformation after the "Great Depression" showcases how mounting internal fiscal and political pressures in combination with a faltering multilateral creditor alliance pave the way to CBI reversal. We show that the increasing political subordination of the Reichsbank was instrumental for massive wealth expropriation, fueling Nazi Germany's war chest. Importantly, a subordinated central bank can expropriate investors and stimulate an economy without (immediate) inflationary consequences. Finally, today, the Bundesbank's governance structure serves as the "*world's role model for a strong and independent central bank*"(Hefeker, 2019, 1). Nevertheless, countries opting to follow this blueprint often fail to recall the historical path to present-day CBI in Germany. Figure 2 maps degree of CBI in Germany in the interwar period onto the four conjectures of the explanatory framework.

Figure 2: The degree of Reichsbank independence in the interwar period

Government Demand for Monetary Policy Control	Sovereign Creditor Imposed Constraint: Weak	Sovereign Creditor Imposed Constraint: Strong
Weak	II Reichsbank 1922-1924	I Reichsbank 1924-1928
Strong	IV Reichsbank 1932-1939	III Reichsbank 1928-1932

4.1 Inserting an independent Reichsbank into the Weimar Republic

The Reichsbank emerged as the central bank of a unified German Reich after the Franco-Prussian War of 1871. Starting its operations on January 1st, 1876, the Reichsbank was a "*juridical person under public law.*" The Reich's Chancellor became head of the Reichsbank, ensuring substantive government control (Holtfrerich, 2012). However, the majority of the Reichsbank's shareholders were private banks, giving creditors substantial control. Further, as monetary policy was anchored in the gold standard, government demand for control of monetary policy was fairly constrained (James, 2016). This situation changed in August 1914, when the Reichsbank was forced to fund Germany's war expenses. The subordination of the bank to the government and its monetization of government debt led to soaring inflation, which was not contained after the end of the war.

Finding itself in economic and political turmoil, Germany agreed to grant the Reichsbank legal independence in late May 1922 in exchange "*for a moratorium on reparations payments*" (Holtfrerich, 2012, 115).[3] We can think about this incoherent period as supporting Conjecture II of our framework. CBI was subject to the vicissitudes of the shifting balance between government, poorly coordinated creditors, and the Reichsbank's own initiatives. There was scope, in this hyper-inflationary context, for central bankers to exercise a non-trivial degree autonomy. This freedom to maneuver proved crucial for the issuance of the Rentenmark in October 1923 and the installment of the Gold Bank in 1924, which established a medium of exchange independent of Germany's chaotic public finances. Given the multiple and competing demands on the Reichsbank, it is obviously misleading to suggest that its independence had a stable political or institutional foundation. Indeed, even though the Reichsbank's new legal basis limited direct government influence, it was not until the ratification of the Bank Act in late August 1924 and the conclusion of the Dawes Plan negotiations, that it gained full legal and operational independence. Importantly, the financing of government deficits by the Reichsbank "*that had motivated the Allies to press the German government for the autonomy of the Reichsbank*" (Holtfrerich, 2012, 116) ended.

To further ensure the viability of CBI and shield reparation payments, the Allies secured seven

[3] CBI was integral to not just the Brussels (1920) and Genoa (1922) international monetary conferences and but also the Dawes Plan (1924). As Northrop (1937, 28) comments, the strengthening of CBI "*was an outgrowth of foreign distrust of Germany.*" The power of Germany's creditors was augmented by their ability to coordinate a common position through the Dawes Plan.

of the fourteen seats on the Reichsbank's General Council, the central oversight body over monetary policy, and placed Dr. Bruins, a Dutch economics professor, into the position of "note Commissioner". (Northrop, 1937; Mee, 2019).[4] Thus, the Board of the Reichsbank would be half foreign and under the effective control of a 'technical adviser'. Norman admitted: " *"The technical adviser" idea was shoved in as being more effective than the mere strengthening of the Reichsbank and less obnoxious than the Caisse de la Dette."*[5] Furthermore, archival documents indicate that the Allies were actively interfering to get Hjalmar Schacht selected as the President of the Reichsbank (Holtfrerich, 2012). As Holtfrerich (2012, 120) documents "*even the British Ambassador in Berlin, D'Abernon [...] intervened in favor of Schacht.*"

In addition to implementing these institutional controls, the installation of Schacht was instrumental to maintain the viability of reparation payments (Mee, 2019). Besides being intimately connected with central and private bankers alike, Schacht worked as an interlocutor on behalf of the Allies. For instance, alongside, Parker Gilbert, the Reparation Agent in Berlin, Schacht repeatedly "*wanted to discipline the states' fiscal policy by drawing funds away from their banks*"(Holtfrerich, 2012, 125). Similarly, Schacht repeatedly refused to lower interest rates or give in to the popular demands of the government to monetize public debt. As an aggressive advocate for fiscal prudence, Schacht "*violently opposed the German social policy and especially the social assistance system*" (Muehlen, 1939, 24), and even went so far to intervene with the Mendelsohn Bank and the Deutsche Bank to effectively block a $75 million loan in December 1929 (Bohle, 2014). Divorcing the Reichsbank from the government, Germany's creditors effectively installed a watch dog that was aligned with their interests, and had the teeth to force the government into fiscal austerity. Underscoring its strong independent stand in relation to the German government, the Reichsbank earned itself the title "Extra-Government" (Mee, 2019).

Viewing the evolution of the Reichsbank through this historical lens, CBI was instituted in a period where the memories of inflation muted governmental demand for monetary policy control.

[4]German and foreign representatives had to be independent of their national governments. Besides England, France, Italy, Belgium, United States, the Netherlands, and Switzerland was represented. Importantly, the 'Note Commissioner,' also called a 'technical adviser' could effectively veto any monetary policy decision and thus exercise substantial power of the decision-making of the Reichsbank (Mee, 2019).

[5]Norman to Strong, 14 November 1921, BOE OV31/5

But the strongest support for Conjecture I of our framework comes from the fact that CBI was imposed by Germany's main creditors to enhance their political leverage and secure reparation payments by turning the on the Weimar Republic into a joint liability structure. The elaborate structure of foreign control imposed under the Dawes Plan together with the internal organization of the Reichsbank was designed to enmesh Germany in a set of commitments that would defend the international monetary construct of the gold-exchange standard and secure creditor's interests at the expense of all other considerations. However, there were latent risks in this joint liability structure. The Reichsbank's independence was in effect detached from most domestic sources of legitimacy. The bank was caught in a straitjacket of foreign creditor influence that made it hard to respond to evolving domestic needs. These latent design weaknesses would surface as governmental demand for monetary control returned with a vengeance with the onset of depression economics.

4.2 Depression conditions and retrenching Reichsbank independence

Several historical developments surrounding the "Great Depression" that undermined creditor constraints and increased government demand for monetary policy control are central to the understanding of the Reichsbank's transition from independence to subordination. Even before the pressures of the Great Depression struck, increased political pressure encouraged the Reichsbank to secretly collaborate with the government in a pattern of over-borrowing and overspending that corresponds to Conjecture III of our framework. This hidden backsliding in CBI was vastly accelerated by the rapidly deteriorating global economic conditions between 1928 and 1932, which ultimately led to a significant weakening of political unity among Germany's main creditors. Their own scramble for recovery and increasingly open collusion between the German government and Reichsbank engineered a break-up of their unified position. This lifted the international political pressure that had been essential for maintaining CBI. A faltering German economy and resultant social unrest (Tooze, 2006), made it necessary to deploy the monetary arsenal of the Reichsbank. This combination of a weakening international anchor and increasing domestic pressure, paved the way for a reduction of CBI during the 1930s as posited by Conjectures IV of our framework. We describe both of these developments in turn in greater detail below.

First, the onset of the Great Depression meant a turn to protectionism, which resulted in a reshuffling of global financial relations (e.g., Feinstein, Temin and Toniolo, 2005). Whereas the members of the League of Nations were initially in agreement about Germany's reparation payments, rising political tensions meant a serious setback. Constant disagreement on loan modifications in combination with a deteriorating political climate between the Allies meant that the unified position of those nations crumbled. For instance, the United States declined to participate in the creation of the Bank of International Settlements (BIS), underscoring its political stance in favor of full repayment of outstanding private debts (Simmons, 1993). Schacht worked secretly to undermine collective action between Germany's creditors while maintaining an outward appearance of independence. In particular, he weakened the bargaining position of creditor nations, by opting for a strategy of bilateral negotiations with each individual creditor (Weitz, 1997). The complete breakdown of international cooperation arrived with the Lausanne Conference of 1932, which symbolically was never ratified (Toniolo, 2010).

To put these developments into theoretical context: the onset of the Great Depression amplified existing frictions among Germany's main sovereign lenders (Ritschl, 2012). These tensions were also reflected in the Young Plan's agreed modifications to the Reichbank's governance structure (Bergmann, 1930). Besides a reorganization of reparation payments, the Young Plan eliminated "*not only the Reparations Agent and the Transfer Committee but also the foreign members of the Boards of the Reichsbank*" (Bergmann, 1930, 595).[6] Thus, the Young Plan returned substantial political leverage over the Reichsbank to the German government.

The second development was the collapse of the German economy which hugely increased government demand for monetary policy control. The economy had thrived on monetary stability since 1924, as international investors poured money into Germany (Schnabel, 2004; Ritschl, 2012).[7] For instance, US financiers' direct and indirect investment in Germany "*exceeded 10% of U.S. GDP in 1931*" (Ritschl and Sarferaz, 2014, 350). But at the outset of the global economic crisis, Germany found itself on a devastating downward path (Doerr et al., 2018). For instance, Doerr et al. (2018)

[6]From an institutional perspective, the Young Plan meant the removal of foreign control, whereby "*the President of the Reich was given the deciding voice and all elections by the General Council were subject to his confirmation*"(Northrop, 1937, 31). For an in-depth analysis of additional operational changes, see, Northrop (1937)."

[7]As Ritschl (2012) argues these capital inflows built the backbone for reparation payments.

(citing several sources) report that German industrial production declined more than 40%. In late May 1931, rumors emerged about Germany's inability or reluctance to maintain reparation payments with devastating financial consequences (Bohle, 2014). Domestic and international investors fled the country, effectively putting the German financial system on the verge of collapse (Schnabel, 2004). Trapped between a rock (i.e., a fixed exchange rate) and a hard place (i.e., the need to bailout German banks), the Reichsbank's reserves dwindled in its attempt to counter capital flight out of its failing banking system, resulting "*in the abandonment of the gold standard*"(Schnabel, 2004, 866). Under pressure from international financial markets, the Reichsbank held to its restrictive monetary policy path (even in absence of the gold standard) and introduced capital controls, while the Brühning government pursued extreme fiscal austerity in the hope of restoring international investor confidence (Ritschl and Sarferaz, 2014).

This policy was enacted in the death-throes of creditor imposed constraints however. Walking the path of austerity, the German administration effectively put the national economy into free fall. Since the outset of the Great Depression, Germany was almost completely cut-off from international financial markets, so a combination of crumbling exports (due to an abrupt depreciation of leading global currencies) and extraordinary debt left the government with few options for economic maneuvering or discretionary spending. The Reichsbank's tight monetary policies, in combination with Brühning's austerity measures, lent substantial impetus for rising social tensions. We can safely say that the domestic and international policy responses to the Great Depression created a uniquely adverse environment for maintaining CBI.

4.3 Subordinating the Reichsbank in the Third Reich

While the Brúhning administration clung to its fiscal straitjacket, unemployment soared to 6 million in 1933. This crisis required immediate attention. In light of a crumbling international creditor coalition, the newly elected Nazi regime did not wait long to mobilize the financial arsenal of the Reichsbank. In the following section we outline the gradual transformation of the Reichsbank to powerful weapon expropriation highlighting the role of central banks in shaping the economic and political fabric of a country (i.e., Conjecture IV). In particular, we demonstrate that the

increase in control over the Reichsbank between 1933 and 1939 translated into the development and implementation of increasingly bellicose financial schemes to fuel Germany's war chest (for an overview, see Muehlen (1939)).

As often observed in the process of CBI reversals, one of first moves of the Nazi regime was to quickly switch the leadership team of the Reichsbank, reinstalling Hjalmar Schacht as President of the Reichsbank in March 1933. Advocating for Hitler (in particular among the German business elites) after his resignation from the Reichsbank in 1929, and being intimately connected with central bankers around the world (Mee, 2019), Schacht became an important agent for its transformation "*into a weapon for foreign economic exploitation*"(Wolfe, 1955, 401). In October 1933, to equip Schacht with substantial political leverage, modifications to the banking law (of 1924) were introduced that disbanded the Reichsbank's General Council and thus took away "*control of private owners of the Bank*" (Holtfrerich, 2012, 129).[8] These changes in personnel and in legal statutes marked the onset of CBI reversal that became increasingly aggressive and opaque from a creditor's perspective, leading to a complete revocation of CBI in 1939 (Holtfrerich, 2012; Mee, 2019).

Upon assuming the leadership of the Reichsbank, Schacht immediately started pursuing aggressive debt diplomacy to drive an even deeper wedge into an already fragile creditor coalition (Tooze, 2007). Whereas the US was concerned about private investor exposure, Britain pursued a strategy of "economic appeasement", and France favored full repayment of all debts. In fact, none of the creditors had either sufficient leverage or interest to turn against Germany on their own (Tooze, 2006). Although Schacht had cautiously deployed similar tactics during the late 1920s (per Conjecture III), the emerging global disintegration, in the absence of the gold standard, significantly reduced the opportunity costs of his brinkmanship. In several conferences, Germany started to negotiate debt settlements with countries individually and offered competing deals. As Schacht had hoped for, creditors started "*to fight among themselves*" (Weitz, 1997, 161), leading to an erosion of their collective bargaining power and allowing the Nazi regime to attain an almost

[8]Several other institutional changes, transferring substantial powers to the President of the Reich were also included in these modifications. Importantly, the Reichsbank's President could nominate members of the Banks' Directorate which would be approved by the Reichs' President. For a discussion of these institutional changes, see, Holtfrerich (2012).

full debt moratorium by June 1934. In particular, the inability to counter Germany's financial meddling, meant that Schacht was able to push ahead with critical domestic legislation reducing the sovereign debt burden. For example, the regime put into law the so-called "Gesetz zu den Zahlungsverbindlichkeiten gegenüber dem Ausland" on June 9, 1933. The new law meant that Germany would service its debt payments on long and medium term loans in Reichsmark (Wolfe, 1955).[9] In addition, the Reichsbank engineered numerous monetary instruments to boost public spending and further squeeze creditors.

On the domestic side, the regime put in place numerous repressive financial regulations, setting a path for the full political subordination of the financial system and subsequent elimination of opposing business elites (Wolfe, 1955; Overy, 1996; Tooze, 2006). For example, starting with the Reich Credit Law of December 1934, firms in the financial industry were required to attain a permit for the issuance of any large loans (Wolfe, 1955). Furthermore, firms were restricted to paying out dividends of no more than 6%, unless additional payouts were directly channeled into the purchase of government bonds (Overy, 1996). Another cornerstone of the plan were so-called "Mefo-Bills." Comparably to today's public-private partnership programs, the regime set-up "Metallurgische Forschungsgesellschaft" (i.e., "Mefo") as a private company with the sole purpose of issuing bills in exchange for armament deliveries (Ritschl, 2002; Tooze, 2006). Backed by Reichsbank guarantees, the *modus operandi* was straight-forward: the "Mefo-Billis" could be discounted with the Reichsbank up to a five-year term (Muehlen, 1939; Holtfrerich, 2012). As these bills did not imply a direct fiscal transfer from the Reichsbank to the government, this scheme was an effective way of moving large chunks of defense spending off-balance while avoiding immediate inflationary repercussions. Furthermore, it did not directly violate the statutes of the Versailles Treaty's CBI requirement. However, the launch of "Mefo-Bills" was equivalent to introducing a domestic parallel currency.

On the international front, the Reichsbank acted quickly on the devaluation of major currencies

[9] An important aspect of this arrangement was that German debtors could not directly pay their debt, but had to deposit funds into the so-called "*Konversionskassen*"(Taylor, 1933, 90). These funds would directly reimburse foreign debtors at 50% of their original claim at a discounted interest rate (Weitz, 1997, 154). Furthermore, this scheme allowed Germany to defer its payments until such a time as German export revenues would be sufficient to cover the shortfall in foreign currency reserves. Put simply: if international creditors "*wanted repayment of their debts, they would have to purchase German goods*"(Tooze, 2006, 73).

in 1933 and 1934, and picked up government bills at a fraction of their face value (Muehlen, 1939; Tooze, 2006). Moreover, in light of worsening trade relations with Germany's main trading partners, Schacht started to rapidly set-up bilateral trade arrangements with other countries to boost exports and secure resource imports (Ritschl, 2001). Starting with Hungary and Romania in 1934, Schacht built an entire web of these bilateral trade agreements including with several countries in Latin America (for an overview, see Neal (1979)). At the heart of this web were financial clearing systems. These clearing systems were built on an overvalued Reichsmark vis-á-vis the respective trading partners and were only applied to selected countries that could not effectively retaliate (Ritschl, 2001).

In combination with additional repressive measures — such as import restrictions, wage suppression, and price controls — the aforementioned inventions were effective in containing inflationary pressures and supporting the German economic recovery, but they were not sufficient to garner enough foreign currency reserves and release constant pressure from the balance-of-payments. Under this permanent pressure, the Reichsbank skated on a thin ice of its foreign reserves — covering less than a month worth of imports — curtailing its room for maneuver (Tooze, 2006). Hitler's ambitions to ramp up the armament of Germany, combined with the permanent threat of a detailed balance of payments, increasingly led to tensions between Schacht (who openly advocated the curbing of military spending) and the Nazi establishment (Ritschl, 2002).

4.4 Turning the Reichsbank into a financial weapon

Whereas, initially, the Reichsbank's efforts concentrated on breaking fragile creditor coalitions and manipulating financial accounts, greater political subordination gave rise to the blunt expropriation of trading partners, the extortion of the Jewish population in Germany, and the looting of occupied territories (Tooze, 2007). We will now describe these developments in greater detail.

As the Reichsbank's financial engineering was not sufficient to fund Hitler's 'Four Year Plan' (Tooze, 2006), the Nazi regime's measures to mobilize resources became even more aggressive and desperate. To sideline the Reichsbank's uncooperative leadership, "*on* 4th *April 1936 Hitler appointed Hermann Göring as special commissioner for foreign exchange and raw materials*" (Tooze,

2006, 277). This marked the beginning of increasingly brutal ways of mobilizing funds.

On October 22nd 1936, Göhring issued a circular decree on foreign exchange regulations that implied sweeping confiscations of "*every dollar, franc or pound, every ounce of gold and all Germany's remaining foreign assets*" (Tooze, 2006, 277). The decree's provisions provided the legal basis for expropriating foreign cooperations and creditors. In his Congressional testimony, Heinrich Kronstein (1943, 440) states that — in the case of American companies operating in Germany — the "*decree declares American corporations, domiciled in the United States, residents of Germany and makes their property thereby public property of Germany.*" To enforce the decree, Göhring selected *Reichsführer SS* Reinhard Heydrich. The selection of Heydrich was instrumental for extorting Germany's Jewish population (Bajohr, 2002). For instance, Bajohr (2002, 156) citing the head of the Hamburg Foreign Exchange Office, *Oberregierungsrat* Krebs, states that exchange and customs investigations "*on direct instruction of Heydrich were responsible for the anti-Jewish radicalization of foreign exchange policy.*" Tooze (2006, 277) reports that as a result of this intervention "*over the next twelve months Göhering's teams bagged 473 million Reichsmarks in foreign currency.* Although the Reichsbank administered these 'looted' funds, it was effectively stripped off an important function of controlling the circulation of foreign exchange. As Schacht opposed this radicalization of mobilizing funds for the Nazi's war machinery, constant conflicts with G'ohring and the Nazi elites emerged.[10]

As consequence, Hitler revoked the independence of the Reichsbank on January 30th, 1937 to gain "*total control of the Reichsbank and unlimited access to her credit*"(Holtfrerich, 2012, 135). Furthermore, Schacht was released from his position as Minister for Economic Affairs in November 1937.

The "*Anschluss*" of Austria marked another escalation. Although the motives for annexing Austria were political, it provided the Nazi regime with ample opportunities to loot the country (Tooze, 2006). Immediately after German forces moved into Austria on March 15th, 1938, Reichsbank employees took control of the Nationalbank and ordered the transfer of its reserves (Taber, 2014). Similarly, one day after the occupation of Czechoslovakia on March 14th, 1939, a represen-

[10]For an in-depth analysis of the ongoing conflicts between Schacht and Göhring, see, for instance, Simpson (1959).

tative of the Reichsbank arrived at the Czech National Bank ordering the immediate transfer of its gold reserves to the Reichsbank. Furthermore, the Nazis dismissed the bank's leadership, introduced a currency peg favoring the Reichsmark, and put an occupation tax into practice, siphoning out resources (for a survey, see, Schweigl (2016)). Throughout the war, the Nazis applied this tactic and variations of it in occupied territories to gain access to ever more financial funds (Wolfe, 1955; Taber, 2014).[11]

The Nazi regime also ramped up its brutal extortion measures against the Jewish population. In addition to serving the Nazi regimes political ideology, these measures were effective in redistributing wealth from the Jewish population to the state and consolidating economic control over society, transferring key sectors and assets to loyal business groups (Tooze, 2006). Since 1933, the Reichsbank played a crucial role in this process. Besides implementing financial regulations facilitating an expropriation of Jewish wealth, it was instrumental in laundering and re-investing these looted assets (Eizenstat, 2004; Mee, 2019). For instance, in exchange for emigration permits, the Reichsbank administered the conversion of assets into "*Konversionskassen*" — whereas only a fraction could be converted into foreign currency (at an arbitrary exchange rate) (Ritschl, 2019). Further discriminatory measures — such as prohibitions against Jews engaging in certain business activities and professional occupations — were dramatically extended with Reichsbank support. In April 1938, Jewish wealth exceeding 5000 Reichsmarks had to be registered and became subject to a 25% capital levy. A perverse clause on these additional taxes were that they had to reach the amount of 1 billion RM (Ritschl, 2019). The events of *Kristallnacht* meant the "*massive country-wide burning of Jewish synagogues and attacks on Jewish stores and shops, as Jewish men were beaten, arrested, and sent to concentration camps*" (Weitz, 1997, 238). These events set in motion the "*fiscal destruction*" of the Jewish population (Ritschl, 2019): coupled with a brutal tightening of existing regulations, the "Aryanization" of Jewish property went into full force, which meant the transfer of this property (at a fraction of its actual value) to German elites.[12] The events of November 1939 marked an escalation of one of the most horrific crimes in human history: the

[11]For instance, Wolfe (1955, 400) analyzing the French occupation finds that the Nazi regime installed a perverse barter trade system that served as a means to service the 'occupation tax.' Similar to the occupation of other territories, the Reichsbank played an instrumental role in putting these scheme to work.

[12]For an overview of these measure of extortion, see, Bajohr (2002), Kuller (2013), and Ritschl (2019).

Holocaust.

The Reichsbank's leadership privately equivocated about these measures but still processed and laundered the looted assets.[13] The fiscal extortion of the Jewish population and opposing business groups strikingly demonstrate the extent to which conceiving for devices of inflation control underestimates the actual economic capabilities and powers vested in central banks.

There were no limits on the Nazi regime's to abuse its central bank for these purposes. When Schacht attempted to block the use of central bank funds, he was removed from the Reichsbank on January 20th 1939 with the words that "he would not fit into the entire National Socialist Framework"(Schacht, 1953, 495). The last vestige of institutional independence was thus terminated. Hitler's replacement of Schacht with Walther Funk as President of the Reichsbank cleared the way for unlimited monetary financing and full extortion (for an overview, see, Mee (2019)). To ensure the full compliance, the Reich's government passed a new banking law on 15th June, 1939, according to which the "*Bank was subjected to the Reich's unlimited sovereignty and [...] obliged to support the realization of aims set by the Nazi leadership*"(Holtfrerich, 2012, 134). Germany's isolated international financial standing with no creditor control or oversight meant the Reichsbank was turned into a financial weapon in the arsenal of the Nazi regime. Here, "*Schacht [and his colleagues were] no longer a hindrance, a brake, a nuisance*"(Weitz, 1997, 246). With a fully subordinated Reichsbank, almost all remaining institutional barriers to priming the credit pump, and to outright looting of occupied territories, were removed (Tooze, 2006).

To summarize the financial *modus operandi* after 1939, the Nazi regime kept its war machinery going by "*stealing the gold out of the central banks of the countries they occupied, and the rings and gold fillings of the victims they killed, [and] smelting it all into gold bars disguised to look like it came from their own central bank*"(Eizenstat, 2004, 340). The Reichsbank played a critical role in laundering this money, assisting the regime to fill its war chest.

This history provides strong support for Conjecture IV of our framework. It reveals the enormous power that can be gained from subordination once the separation between them is dissolved.

[13] Harshly criticizing the course of the Nazi leadership, Schacht speaking to Reichsbank employees said: "*The burning of Jewish synagogues, the destruction and looting of Jewish businesses, the ill treatment of Jewish citizens was so disgraceful that every decent German must blush with shame.*" (Weitz, 1997, 241).

Freed from the straitjacket imposed by creditors, the Reichsbank was turned under the German government's demand to wage war into a weapon of increasingly overt and coercive appropriation and exploitation.

5 Concluding Remarks

This study offers a simple yet important contribution to the CBI literature. CBI has mostly deepened since the 1980s. Yet, as is increasingly apparent, CBI is always and everywhere contested. This reality surfaces a key shortcoming in the existing CBI scholarship: the absence of a unifying framework capable of explaining the dynamic evolution of CBI — in particular accounting for reductions in CBI. What explains CBI and backsliding therefrom?

In addressing this question, we have proposed a new theoretical framework that allows for the mapping of CBI within a greater political game and broader historical context than that found in the existing literature. Starting from the idea that central banks play a key role in sovereign debt markets, we showed how creditors pressure states into adopting CBI. This mitigates the enormous political risks of sovereign lending by creating a structure in which governments and central banks monitor and discipline each other. However, when creditor coalitions weaken, CBI retrenchment is predictable. Two factors seem to influence the strength of creditor coalitions: first, acute economic distress that drives a scramble for recovery; and, second, the emergence of new powers that provide borrowers with alternative sources of capital. Our framework also unpacks the various sources of a government's demand for monetary policy control (crises, resource mobilization, and political control), and considers the factors (interests, information, and ideas), that will influence the price that government's will need to pay to achieve CBI reversals.

Drawing on historical evidence from the Reichsbank in the 1930s, we first show how CBI was instituted by creditors under an elaborate system of international controls to help protect reparations and debt servicing schedules. We have further verified that a weakening of international creditors and the diminishing political potency of multilateral organizations substantially reduced the opportunity costs of reigning in CBI. Finally, in the absence of creditor imposed constraints, we have demonstrated that an increasing political subordination of monetary authorities to na-

tional governments can allow for wealth expropriation by means other than through an immediate increase in inflation.

We see our study as a complementary extension to the literature that has so far focused on the rational-functionalist rather than the rational-distributive sources of CBI. It may also serve as an important corrective to the analytical tenor of existing studies, where the acceptance of the functionalist basis of CBI has sometimes led to rather bloodless depictions of institutional efficiency and ever deepening CBI.

From a policy perspective, our work closely maps onto the monetary responses to the current pandemic, which have kick-started the monetary financing of sovereigns. An increased demand for monetary financing maneuvers central banks to the verge of their mandates and boosts their political leverage in a disproportionate way. This, in turn, raises concerns about central bank accountability towards the wider public, and thus will further increase political pressure to deliver on wider public goals, threatening CBI. In light of an increasingly fragmented international financial architecture, the next chapter in the history of central banks will likely bring CBI reversals.

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