

The Politics of Central Bank Independence

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Abstract

This article reviews recent contributions addressing the following questions: Under what circumstances is monetary policy delegated to politically independent central banks? What effects do these politically independent institutions have, and how do they interact with their macroeconomic institutional environment? What explains the variation in their behavior? And finally, to what extent has the recent economic crisis altered the role of these institutions? In answering these questions, this article advances two arguments. First, even though central banks' activities involve a great deal of technical knowledge, they are unavoidably political institutions: They make distributional choices informed by ideas, preferences, and the political context in which they operate. Second, the economic crisis, by expanding the type of activities that monetary authorities undertake, further contributes to the politicization of these institutions. The final section of the article speculates about the implications of these developments for economic policy making in contemporary democracies.

INTRODUCTION

The economic rationale for why politically independent central banks should be in charge of monetary policy is now relatively well established. Yet, the solution to the time-inconsistency problem in monetary policy means that an electorally unaccountable institution is in charge of one crucial aspect of economic policy, and this fact has been accepted only reluctantly from the standpoint of democratic theory. Partial solutions were offered to make this delegation palatable: These institutions would be forced to be transparent and to explain their decisions, the degree of independence of the central banks would be limited by their legal mandate, and most importantly, monetary authorities' decisions would be circumscribed to technical matters over which little substantive conflict of interests should exist.

In reviewing the literature on the causes and consequences of central bank independence from a political-economy perspective, I question the validity of these partial solutions to the problem of democratic accountability of monetary authorities, and extract some implications for the fragile coexistence between central bank independence and democracy. The essay advances two arguments. First, even though central banks' activities involve a great deal of technical knowledge, they are unavoidably political institutions: They make distributional choices informed by ideas and preferences. This has important implications for our understanding of the role that central banks play in contemporary democracies. And second, the effects of the economic crisis on central banking are likely to call into question the special status that the management of monetary policy used to enjoy in contemporary political systems.

The essay is divided into three parts. First it reviews the literature on the political origins of independent central banks. Then it explores central bankers' preferences, the questioning of central banks' supposed technocratic neutrality, and the implications of that questioning for democratic accountability. The third part of the essay looks at the impact of the economic crisis on central bank activities and discusses its political implications. The concluding section speculates about the future of central banking and proposes some avenues for further research.

THE POLITICAL ORIGINS OF CENTRAL BANK INDEPENDENCE

The economic logic behind the delegation of monetary policy to a politically independent central bank has been long theorized in the economic literature (for a comprehensive review, see Alesina & Stella 2010). Monetary authorities can provide a temporary boost to the economy. Because rational agents anticipate that temptation, the boost automatically translates into inflation, with no gain in output or employment (Kydland & Prescott 1977, Barro & Gordon 1983). One possible way to remove the inflationary bias associated with the inherent time inconsistency of monetary policy is to delegate this policy to a conservative (in the sense of more anti-inflationary) central bank (Rogoff 1985). For this solution to work, the delegation must be perceived as credible, and this requires the monetary authority to be politically independent—i.e., able to resist pressures from electorally motivated officials. If the central bank is conservative and the delegation is credible, inflation will be contained at no real cost in terms of output or employment.

The fact that these academic contributions preceded the widespread diffusion of central bank independence in modern democracies suggests the possibility of a causal relationship between the two phenomena. Once it had been shown that delegation was an institutionally superior mode of governance, efficiency considerations would push countries toward its adoption. The rapid expansion of central bank independence was even perceived by some as an extraordinary and anomalous success of the application of political-economy models to real-world phenomena. As

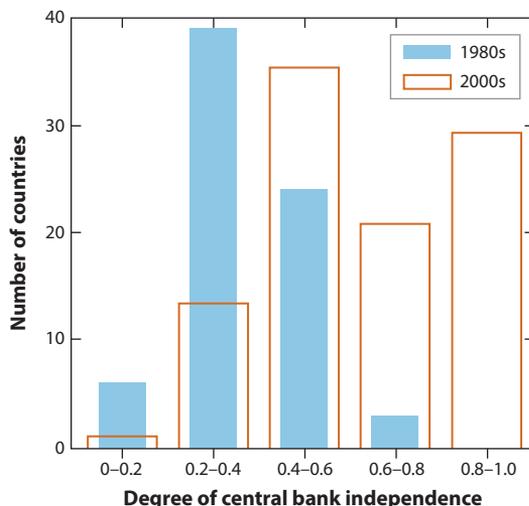


Figure 1

Distribution of the degree of independence of central banks in the 1980s and the 2000s using the Cukierman et al. (1992) index (0: no independence; 1: maximum independence). Source: Data from Crowe & Meade (2007).

Lohmann (2006, p. 536) put it, “in monetary policy, macro political economy made the unthinkable thinkable, and more: turned it into conventional wisdom.”

Figure 1 displays the distribution of countries according to the degree of central bank independence in the 1980s and in the 2000s. The magnitude of the general trend is striking: The mean degree of independence increased by about two standard deviations in only two decades.

Was it really the case that the mushrooming of independent central banks merely reflected the success of this intellectual revolution? Meseguer (2006, 2009) explores whether rational learning can explain the diffusion of policy innovations across countries and finds that, unlike the decision to liberalize trade, privatize, or enter into International Monetary Fund agreements, the adoption of independent central banks cannot be accounted for by any of the convergence mechanisms theorized in her analysis. Moreover, virtually all the political-economy work on the origins of central bank independence implicitly questions the ideational explanation, pointing at several alternative (both political and economic) reasons for this institutional change.¹

To be sure, the strength of the ideational explanation cannot be exaggerated. First, the historical experience of the German *Bundesbank* pervasively informed the debate over the choice of monetary institutions in the last decades of the twentieth century (Cukierman 1996, Cukierman 2007, Issing 2008, James 2012). Postwar Germany has been seen as a success story in which a monetary authority whose political independence was sustained by a solid institutional framework delivered credible and sound monetary policy, keeping inflation firmly under control with no obvious costs in terms of growth and employment. The lessons from the German experience were particularly evident in the creation of a common monetary framework in Europe and the European Central Bank. This process, according to James (2012), reflected “the promotion of an idea or a vision” (p. 266) more than the victory of a particular set of economic interests. Verdun (1999b) and McNamara (2002)

¹Nor can efficiency considerations alone explain the adoption of central banks in the first place. On the political origins of the Federal Reserve system and its consequences, see Broz (1997), Binder & Spindel (2013), Jeong et al. (2009).

show how the diffusion of ideas about the salutary role of independent central banks was greatly facilitated by the existence of a specific “epistemic community” among policy circles in the continent.

However, two aspects of the German success story are typically omitted in this account. First, the macroeconomic stability of Germany probably had less to do with the *Bundesbank* itself than with a whole macroeconomic framework in which the beneficial effects of the monetary authority were the result of its interplay with wage-setting coordinating institutions (Hall & Franzese 1998). Second, the notion that the *Bundesbank* has been able to remain isolated from domestic political pressures throughout its existence is at odds with what students of the bank have found. It is well known that Chancellors Schmidt and Kohl fought the central bank leadership they encountered while they were in office—Schmidt even threatened to use his parliamentary majority to change the central bank statute. But the evidence that the *Bundesbank*'s policies were influenced by political dynamics goes beyond these anecdotes. Lohmann's (1998) analysis of German monetary policy in the postwar years finds that even if bureaucrats in the bank enjoy a fair degree of autonomy thanks to the federal structure of the political system, the de facto independence of the central bank depends crucially on the number of partisan veto points it encounters (that is, how many politically different actors are necessary to enact policy at a given point in time). Lohmann's finding for Germany resonates with abundant scholarship emphasizing that the actual degree of independence of the central bank depends on the existence of political divisions within the polity. The veto-players theory of Tsebelis (2002, ch. 10) indeed suggests that a large number of veto players leads to more autonomous bureaucracies. In line with this expectation, it has been repeatedly shown that countries with federal structures are associated with more politically independent central banks (Farvaque 2002, Hallerberg 2002, Gilardi 2007, Pistoresi et al. 2011).

Comparative Political Economy Approaches to Central Bank Independence

Several studies have provided more nuanced explanations for why delegating to independent monetary authorities might be more politically attractive in contexts with multiple veto players (Bernhard et al. 2002). Bernhard (1998) argues that central bank independence is a way to facilitate the coexistence of actors with heterogeneous policy preferences within the executive. In particular, delegation of monetary policy to independent central banks alleviates the conflicts derived from the existence of informational asymmetries between ministers, who have greater information about the policy process, and coalition partners, who have less. Hallerberg (2002) suggests two additional reasons why the lack of a unified government is associated with higher levels of central bank independence. First, multiparty governments are heavily dependent on the use of fiscal policy (as it can be more easily targeted to key constituencies), which makes it attractive to leave (nontargetable) monetary policy in the hands of an independent political actor. Second, subnational governments in federal systems push for the adoption of independent central banks to limit the structural advantage that central political authorities enjoy as a result of their control over monetary policy.

Alesina et al. (1997) and Lohmann (1997) provide another rationale for why the existence of a well-structured conflict of interests within a polity gives incentives to politicians to delegate monetary policy to independent bureaucrats. If the monetary preferences of the two parties are different but their time horizons are sufficiently long, the two parties might benefit from committing to a monetary institution that implements an intermediate monetary policy. This intermediate solution eliminates the negative social cost associated with the partisan business cycle generated by the alternation in power between the two parties. In summary, all this literature expects that politically heterogeneous contexts (federal systems, strong systems of checks and balances, coalition governments) should be more welcoming to the emergence of independent monetary authorities.

The adoption of this institutional innovation should therefore be understood not only in terms of efficiency but also in terms of political convenience.

Many of the arguments used to explain the political decision to delegate monetary policy to central banks are remarkably similar to those used to understand why other nonelected institutions remain autonomous from political interference—such as the models used to explain the independence of constitutional courts (reviewed in this volume by Vanberg 2015). One could wonder what makes delegation to central banks special. First, the variables affected by monetary authorities' actions (macroeconomic outcomes) are perhaps not distributionally equivalent to those affected by other independent agencies. And second, as I discuss below, the central banks' influence on these outcomes often depends on their particular interplay with other macroeconomic actors such as fiscal authorities or wage- and price-setters. These elements often cause the political-economy literature on central bank independence to depart from these other generic models of delegation.

The first wave of empirical literature aimed at estimating the impact of central bank independence on macroeconomic outcomes found a strong association between the degree of independence of the monetary authorities and the level of inflation (Grilli et al. 1991, Alesina & Summers 1993). But as critics quickly pointed out, such estimates depended on a rather questionable identification strategy. As long as countries differ in their relative propensities to adopt central bank independence (Mas 1995), no causal relationship should be inferred from the existence of such correlation. These results could be showing only that countries with a greater social and political aversion toward inflation are also more likely to grant independence to their monetary authorities (Posen 1993).² In other words, the low inflation observed in countries with independent central banks could have less to do with the institutional innovation itself than with more profound and structural social and political factors. Oatley (1999) initially showed that many results are not robust to the inclusion of institutional variables in the estimation, and this problem remains ultimately unsolved in the empirical literature (for reviews, see Crowe & Meade 2007, de Haan et al. 2008, Alesina & Stella 2010). A key question in this literature is the distinction between *de jure* and *de facto* independence (Cukierman et al. 1992, 1996; Cukierman & Webb 1996). Although there are obvious reasons to be skeptical of the use of formal indicators of independence to measure political interference in monetary policy, measuring independence through behavioral measures (typically through governor turnover rates) is not unproblematic, mostly because the probability of turnover also depends on central bank performance (Dreher et al. 2008, Vuletin & Zhu 2011).

A large and influential institutional literature has argued that the role of central bank independence has to be understood within a broader macroeconomic policy framework. The reason is that the signaling process necessary for central bank independence to produce its anti-inflationary effects is likely to be affected by the institutionally conditioned process of wage and price determination (Hall & Franzese 1998, Cukierman & Lippi 1999, Iversen 1999b, Franzese & Hall 2000, Franzese 2001, Olivei & Tenreyro 2010), and even by government partisanship (Franzese 1999, 2001; Way 2000, Adolph 2013). As long as the effects of the central bank on performance are contingent on the presence of other institutional and political variables, its attractiveness as a way to solve the time-inconsistency problem of monetary policy should also vary across contexts. Iversen (1999a, 2000) argues, for example, that changes in the economic and institutional context since the 1980s and 1990s have increased the political and economic appeal of independent and conservative central banks in economies that were previously highly coordinated institutionally.

²Scheve (2004) and Di Tella (2001) analyze cross-national differences in aversion to inflation. In Posen's (1995) view, this predisposition depends essentially on the political leverage of the financial sector.

Not only institutional constraints or structural forces condition the choice of monetary institutions. Some authors have interpreted this delegation as an attempt of current governments to tie the hands of future ones (Goodman 1991, 1992). Because central banks effectively constrain economic policy making, current governments can extend the implementation of their preferred policies beyond their electoral mandates by delegating monetary policy to central bankers who share their policy preferences. According to this view, governments with preferences closer to those of central bankers would be more likely to delegate monetary authority, and the timing of the delegation should correspond with the expectation of a transfer of power toward a political party with different monetary policy preferences. As Way (2000) shows that central bank independence makes it more difficult for left-wing governments to pursue their partisan goals, one would expect delegation to be more likely under right-wing executives. However, large-N studies (Gilardi 2007) do not find support for this expectation. It might be that governments strategically use this institutional device in more nuanced ways. British Prime Minister Margaret Thatcher, for instance, always resisted the idea of delegating monetary policy to nonpartisan experts partly because a politically independent central bank would “reduce the electorate’s fear of a Labor government” (Peston 2005, p. 144). And in a similar vein, Dellepiane-Avellaneda (2013) argues that the Labor government’s decision to grant political independence to the Bank of England in 1998 was designed to enable the government to achieve other political goals more effectively. Thanks to the existence of the central bank, the government managed to silence internal dissent in the party over some aspects of economic policy and keep powerful external interest groups at bay. According to Dellepiane-Avellaneda’s account, the heresthetic decision to delegate one aspect of policy making to a politically independent central bank had the paradoxical result of expanding the government’s room for maneuver in other (perhaps more important) economic policy areas.

International Political Economy and Central Bank Independence

The international political economy literature provides yet another perspective to understand the political logic behind the decision to delegate monetary policy to independent central banks. The starting point of this strand of scholarship is the recognition that governments have an alternative, more drastic way of solving the credibility problem of monetary policy: an exchange rate commitment (Bernhard & Leblang 2002). Given cross-border capital mobility, a fixed exchange rate regime implies that monetary policy is driven by the need to keep the nominal exchange rate constant, making it impossible for governments to use it as a discretionary domestic policy tool—a direct consequence of the well-known Mundell-Fleming trilemma (Obstfeld et al. 2005, Frieden & Broz 2006). The need to “borrow monetary credibility” from abroad explains, for example, why fixed exchange rate regimes have been extremely common in the aftermath of high inflation episodes (Frieden & Stein 2001). In this view, exchange rate pegs solve the problem that justifies the adoption of independent central banks. But what explains the choice between these two alternatives? Broz (2002) argues that the key variable is the political system’s degree of openness and transparency, as it indicates how credible the delegation to an independent monetary authority will be in the perception of markets. In open and democratic contexts, delegation to an independent central bank will be seen as credible. But when the domestic political context is less transparent, the only way for governments to gain monetary credibility is by tying monetary policy to an exchange rate commitment. Central bank independence and fixed exchange rate regimes are therefore understood in this perspective as substitutes (Copelovitch & Singer 2008). Bodea (2010) argues that the choice between exchange rate commitments and independent central banks

is more complicated: If the credibility that these institutional arrangements provide is imperfect, there is room for some overlap between these two institutional choices.

Others have argued that the relationship between central bank independence and international monetary arrangements might be of a different nature. Frieden (2002) argues that central bank independence, because it keeps inflation under control, prevents the real exchange rate from appreciating under a fixed exchange rate regime. This makes it easier, both economically and politically, to sustain currency commitments. Fernández-Albertos (2012) provides evidence showing that internationally exposed firms tend to be more favorable toward fixed exchange rates when central banks are more independent. In this light, independent central banks and exchange rate commitments are complements rather than substitutes. One way to reconcile these two perspectives is that although these two institutional choices might be alternative ways to achieve monetary credibility in the short run, once a fixed exchange rate regime has been adopted, a central bank might be instrumental in making the currency commitments politically sustainable over the long run. O'Mahony (2007) suggests yet another way to understand the relationship between central bank independence and exchange rate regime choice: Ideologically motivated governments who dislike the distributive consequences of a conservative monetary policy might consider the adoption of an exchange rate peg in order to take monetary policy away from the central bank. In this perspective, central bank independence and exchange rate pegs are substitutes in the sense that they serve the same credibility purpose, but they are complements in the sense that a highly independent central bank might make a fixed exchange rate regime more attractive to a government.

Finally, external constraints related to globalization might also be related to the adoption of this institutional innovation. In her classic study, Maxfield (1997) argues that countries give independence to their central banks as a signaling device aimed at convincing international investors of their commitment to economic openness and sound macroeconomic policy making. Polillo & Guillén (2005) argue that pressures to compete in the global economy force governments to imitate the organizational forms adopted by other countries. This could explain, in their view, why countries that are more exposed to trade and international capital flows, and are economically linked to previous adopters of central bank independence, are more likely to grant independence to monetary authorities.

CENTRAL BANKERS' PREFERENCES AND THE QUESTION OF POLITICAL ACCOUNTABILITY

A topic that has received scant attention until very recently is the question of central bankers' preferences. In the original Rogoff's model, monetary authorities should be more averse to inflation than society as a whole—which does not mean, as it is often understood, that the central bank should be unresponsive to the social preference for employment versus inflation (Blinder 1999, Adolph 2013). How can this optimal level of conservatism be achieved and maintained? What happens if the central bank deviates from the social optimum? And how does the bank's policy stance respond to changes in social preferences over time, as Rogoff's model implies it should do? These questions lie at the heart of the issue of the democratic accountability of the central bank, and some recent contributions call into question the (unstable) consensus that underpins the models of delegation in the public debate.

The "rules versus discretion" controversy spurred by the monetarist proposal of a constant growth rate of the money supply (Friedman 1968) offers a first way to address this question. Friedman's idea was that monetary authorities should enjoy as little discretion as possible and that monetary policy should be conducted in a stable, predictable manner—ideally following a clear

set of rules for which a democratic mandate supposedly exists. If the central bank is “on autopilot,” the question of its members’ preferences and their impact on policy becomes irrelevant.

However, in the real world, monetary authorities do enjoy discretion. Because it is impossible to foresee all potential contingencies that a central bank will confront, managing monetary policy exclusively by rules is not feasible. Even when the central bank statutes set well-defined goals and limit the policy instruments that can be used to achieve them, a certain degree of discretion always exists. Monetary committees discuss and evaluate policy options and make decisions, often in the face of conflict and contestation even within the central bank. If the notion of central banks as monetary policy on autopilot has always been questionable, the financial crisis, in which central banks have been forced to adopt unprecedented policy measures, has made it even more untenable (the last section of the essay discusses this point in greater detail).

If central bankers enjoy discretion, how then can we make sure that they use that discretion to fulfill the purposes for which they were granted autonomy in the first place? One set of proposals, informed by the principal–agent logic that governs the relationship between elected leaders and central bankers, focused on setting the appropriate incentive scheme for the latter (Walsh 1995b, Svensson 1997). The idea is that the inflationary bias in monetary policy can be corrected by designing a contract for central bankers that forces them to internalize the cost of higher inflation. Although the 1989 reform of the Reserve Bank of New Zealand resembles this type of institutional agreement (Walsh 1995a, Archer 1997), solutions of this kind have been perceived as unrealistic, mainly because of the practical difficulties in designing a contract able to specify all contingencies a monetary authority might have to face during its mandate (Drazen 2000, pp. 154–55).

In the absence of such contracts, the acceptance of a certain degree of discretion relied on two simple principles. The first one is that although central banks enjoy room for maneuver regarding policy instruments, they are constrained in the definition of goals. In addition, the fact that central bank statutes can be altered at any time by a new law if the bank deviates from its defined goals means that an indirect democratic control over these institutions’ actions and goals always exists (Pauly 1995). As Eijffinger & De Haan (1996, p. 54) argue, “in the short run, there seems to be a trade-off between central-bank independence and accountability. Not in the long run: a central bank that continuously conducts policy that lacks broad political support will sooner or later be overridden.” Or in the famous words of Federal Reserve chairman Paul Volcker, “the Congress created us and the Congress can *uncreate* us” (quoted in Stiglitz 1998, p. 222). However, the rigidity of some of these statutes is remarkable. For instance, since the statute of the European Central Bank (ECB) is part of the EU treaties, it requires unanimity of all EU member states to be changed. In a way, then, the ECB is the most politically independent central bank in the world.

The second principle that makes delegation of monetary policy to a democratically unaccountable institution less problematic is that monetary policy making is understood as a fundamentally technical activity.³ But is monetary policy really so “depoliticized” that we need not worry about central bankers’ preferences? Obviously, depoliticization cannot mean that monetary policy has no distributional effects; loose and tight monetary policies produce very different and quite predictable coalitions of winners and losers. As Drazen (2002) proposes, what makes monetary policy susceptible of being removed from the hands of politicians is the combination of two elements: recognition of politicians’ temptation to manipulate monetary policy (and recognition that this manipulation is relatively easy to implement), and “the ability of different interest groups to agree

³A related debate developed in the European Union in relation to the so-called “democratic deficit” of the supranational institutions. One defense was that the policies delegated to supranational bodies were mostly regulatory and had limited redistributive content (Majone 1993, Moravcsik 2002). Verdun (1999a) and Follesdal and Hix (2006) contest this view.

on what monetary policy that is not short-sighted would look like” (p. 7). Insofar as there is consensus on the latter (a consensus that is typically lacking, for instance, in the case of fiscal policy), it is possible to depoliticize it in the sense of delegating it to agents who share that consensual view. Blinder (1999) also justifies the depoliticization of monetary policy on the basis of the long-term horizons required in this policy area. However, a similar mismatch between the consequences of a policy and the electoral cycle exists for most policy areas, including fiscal policy (Drazen 2002, Lohmann 2006).

The question is then about the scope of this consensus. Is it well defined (so, again, preferences of central bankers should matter very little), or is it a loose set of prescriptions leaving considerable room for agency, in which case questions about central bankers’ preferences become relevant? Stiglitz (1998) takes the latter view, and argues that monetary policy unavoidably involves trade-offs. Furthermore, not only the choices along these trade-offs but also the perception of their magnitude is heavily informed by values. There is no reason to believe that central bankers’ values are the same as those of their society as a whole, particularly if they are politically isolated from that society (Stiglitz 1998, p. 218).

Adolph’s (2013) comprehensive study of central bankers examines the career trajectories of 600 monetary decision makers in 20 countries during five decades. His research shows that one can go a long way in explaining central banks’ policy choices by understanding their members’ individual preferences. These individual preferences are in turn surprisingly consistent with models of career concerns, in which the existence of “shadow principals” (agents outside the formal relationship between political authorities and legally independent central banks) exert influence on central bankers’ actions because they have some control over their professional trajectories after leaving the central bank.

Indeed, one of Adolph’s (2013) most important contributions is to create a measure of central bank conservatism on the basis of its members’ labor market trajectories. Central bankers with a career background in finance are associated with more anti-inflationary monetary policy views than are those with a background in the public sector. Although processes of socialization and selection within the financial sector partly account for that result, Adolph presents several pieces of evidence indicating that career ambitions are relevant. Because central bankers linked to the financial sector care about their prospects after leaving the bank, they have strong incentives to cater to this industry’s preferences. The consequences of these findings are devastating for the naïve view of central banks as neutral technocrats that use their independence only to be isolated from the myopic pressures of partisan politics. “As long as monetary agents aspire to further wealth or office,” Adolph writes, “paper autonomy alone cannot guarantee the insulation of monetary policy from outside interests” (2013, p. 103).

Central bank conservatism is a central variable in the theoretical models of delegation of monetary policy (Rogoff 1985) but was universally ignored for lack of good data in the comparative empirical work. Adolph shows that the labor-market trajectory measure of central bank conservatism has an effect on monetary policy equivalent in magnitude to the degree of legal independence. And in line with some of the ideas of the political-economy work reviewed above, the effect of conservatism is not the same across institutional contexts. Most notably, Adolph finds that the anti-inflationary effects of monetary conservatism only come at no cost in terms of employment in countries with intermediate levels of wage bargaining coordination, such as Germany (2013, p. 200).

Because who is actually in the central bank does matter for monetary policy, it is no surprise that elected politicians use the most important channel they have to influence central bankers’ actions: the power to appoint them and to renovate their mandates. Adolph (2013) shows not only that left- and right-wing governments tend to appoint central bankers with different monetary preferences, in line with a well-established literature (Havrilesky 1988; Chappell et al. 1993, 2004; Chang

2006), but also that they tend to use different criteria to renew their mandates: Central bank tenures tend to be significantly shorter when inflation is high only under right-wing governments, and when unemployment is high under left-wing ones. Adolph is quite explicit on how awkward for democratic theory is the existence of electorally unaccountable policy makers whose preferences are to some extent under the influence of “shadow principals,” and how important appointments are as the only clear remaining channel of democratic influence. The case of the ECB, where national governments have forgone even that channel, is therefore seen as particularly problematic (Adolph 2013, pp. 306–14).

It is important to note that, as Adolph explicitly recognizes, his analysis focuses on only one aspect of central bank activities, albeit perhaps the most prominent one: monetary policy. But central banks often have responsibilities also in other policy areas, such as financial regulation. The question of whether financial regulation should be in the hands of central banks is not settled. On the one hand, supervision of the financial sector generates information that might be useful for conducting a more effective monetary policy. On the other hand, being responsible for the financial sector might give incentives to the central bank to become too accommodative in order to prevent crashes (Goodhart & Schoenmaker 1995, Di Noia & Di Giorgio 1999, Copelovitch & Singer 2008; Coeuré 2013 and De Grauwe 2007 derive implications of this debate for the design of the ECB). In any event, had Adolph examined this other dimension of central banks’ activities, in which the asymmetry between the intensity of preferences of these “shadow principals” and the public at large is arguably much greater, the effect of the former on policies would have probably been even stronger. This is not a minor question in the current context, as the lack of adequate regulation resulting from capture has been partly blamed for the recent financial crisis (Baker 2010, Johnson & Kwak 2010, Chinn & Frieden 2011, Helleiner & Pagliari 2011).

Abundant evidence indicates that the democratic exposure of financial regulators matters for outcomes, in ways that are broadly consistent with Adolph’s general conclusions. Keefer (2007) argues that electoral competitiveness limits the propensity of policy makers to cater to special interests in the aftermath of financial crises. Because elected officials must weigh the demands of the financial sector against those of the general public, bailouts are less frequent in the aftermath of banking crises in democracies. Rosas (2009) not only finds strong empirical evidence for that conjecture but also finds that in anticipation of this political response, banking crises end up being less frequent in more democratic settings. As democracies have incentives to respond to taxpayers’ demands after a crisis, the financial sector has a lower propensity to invest in risk-taking activities. In other words, electoral accountability reduces the problem of moral hazard created by the financial sector’s expectation of bailouts. Even within democracies, there is evidence that when electoral competition incentivizes politicians to incorporate the preferences of voters at large rather than those of small segments of the electorate, financial regulation tends to be more prudential and less favorable to the banking sector’s interests (Rosenbluth & Schaap 2003). Interestingly, high levels of economic internationalization might limit the impact of these electoral pressures by blurring the accountability link between politicians and electorates. Kayser (2007) and Crespo-Tenorio et al. (2014) show that governments are more likely to survive banking crises in open economies than in closed ones.

Strategic Policy Choices and Accountability

One additional problem, almost invariably neglected in the debate about political accountability of nonelected independent agencies, is the question of policy spillovers and their potential strategic use by these agencies to strengthen their own political leverage or advance their preferences beyond their policy area. In the naïve and technocratic view of a depoliticized central bank, monetary

policy is understood as perfectly separable: Given the existing macroeconomic conditions and the government's economic policies, the central bank implements the optimal monetary policy, the one most likely to achieve its goals. But to what extent should the government's economic policies be treated as exogenous for the central bank? Given that the effects of the central bank's actions on macroeconomic outcomes crucially depend on policy actions that are beyond its control, and given that central bankers have their own policy preferences, why shouldn't the central bank try to use its independence to influence those other policies?

The most obvious example of policy spillover is the interaction between monetary and fiscal policy. It has been pointed out that many of the characteristics that justify the depoliticization of monetary policy (time inconsistency and the temptation of politicians with short-term motivations to manipulate policy in a partisan way) apply to fiscal policy too (Lohmann 2006). Yet, with the exception of countries with independent fiscal authorities, which in any case enjoy much less autonomy and responsibility than central banks, fiscal policy remains in the realm of electoral politics. There are strong political reasons for that: Fiscal policy is crucial for building redistributive coalitions (Alesina & Tabellini 2007, 2008). But what happens when monetary policy, which is delegated to electorally unaccountable bureaucrats, interacts with fiscal policy, which is controlled by elected politicians who must respond to voters?

In the real world, monetary policy is always conducted in cooperation with fiscal authorities and has budgetary consequences (Bodea 2013). In a survey of 24 central banks, Moser-Boehm (2006) shows that in about half of those cases one of the purpose of the meetings between central bankers and government officials is to discuss fiscal policy issues and even to coordinate monetary and fiscal policy between the government and the central bank. In such a setting, it is not difficult to think of cases in which the central bank can act strategically to gain control over fiscal policy.⁴ In the current European context, the ECB has been quite explicit in making their monetary stimulus commitments conditional on the national governments' fiscal stance. Although the merits of that specific policy mix are debatable, it is undeniable that an actor whose mandate was limited to monetary policy has gained control over a policy area (*a*) that is outside of its legal mandate and (*b*) over which a clear distributional and political conflict exists. As Adolph (2013, p. 230) writes, "legal independence allows central banks' power to exist outside the routine channels of democratic accountability, yet have significant influence over not just supposedly technical monetary issues, but the inarguably substantive questions of fiscal policy."

As the consequences of the interplay between central banks and other political actors become more evident, so does the need for more research on these questions: How do central banks use policy spillovers to strengthen their institutional position? Under what conditions should we expect the intensity of the interaction between politically contested policies and monetary policy to lead to a greater influence of elected leaders on the central bank's activities—as many initial defenders of autonomy used to fear—and when should it lead to a greater colonization of other areas of economic management by central banks, as those concerned about the democratic accountability of economic policy making suggest today?

We still know remarkably little about these questions, but some research has already provided important insights. Singer (2004, 2007) provides a very good example of how supposedly technocratic institutions (in his case, financial regulators) can become active actors that, in order to defend their autonomy from domestic pressures, end up reshaping the institutional regulatory framework. According to Singer's account, the Basel Accord—an international agreement on the

⁴Using a different language, constructivists make a similar point: Central banks constantly use their independence to redefine the constitutive rules of the domestic monetary system (Hall 2008).

harmonization of banking regulations—was the result of an attempt by domestic financial regulators to make compatible the political pressures that they face to secure financial stability at home with the increasing international competitive pressures experienced by the national banks they oversee.

Accountability and Multiple Objectives

As pointed out above, central bankers unavoidably face trade-offs when conducting monetary policy: inflation versus unemployment, financial instability versus moral hazard, and domestic versus international stability, to name a few examples. The number and magnitude of these trade-offs, however, depends on the number and complexity of the tasks assigned to the central bank. Central bankers often advocate very narrow mandates to minimize the number of trade-offs as a way to protect the central bank's political independence. The greater the number of politically controversial choices among these trade-offs, the greater the probability that political authorities will be tempted to move the central bank's policy in one direction or the other.

The discussions surrounding the creation of the ECB are particularly illustrative in this respect (Verdun 1999a, Padoa-Schioppa 2004, Issing 2008, Marsh 2009, James 2012). During the creation of the monetary union, there was no shortage of proposals to have a wider mandate for the ECB (including an explicit role as a lender of last resort, banking supervision, or even the inclusion of the exchange rate among its policy objectives), but those who defended a strongly independent central bank built as a mirror image of the German *Bundesbank* strongly fought for a narrow mandate focused exclusively on inflation (James 2012, pp. 290–92). They eventually won the battle, arguing that a wider mandate would force the bank to make politically contested choices in trying to make all these objectives compatible, putting its independence and credibility at risk. However, the financial crisis has shown that the era of “narrow” central banking, if it ever existed, is long gone. This is the topic of the next section.

CENTRAL BANKING AFTER THE CRISIS: TOWARD A RE-POLITICIZATION OF MONETARY AUTHORITIES?

The literature on the consequences of the current financial crisis for central banking has reached two broad set of conclusions (for useful reviews see Mishkin 2012, Cukierman 2013, Reichlin & Baldwin 2013). First, it has been argued that a very narrow understanding of monetary policy in good economic times, with central bankers focused exclusively on inflation, could have allowed the development of bubbles and financial imbalances that were ultimately responsible for the crisis. The general conclusion is that financial regulation should be strengthened, and that central banks setting monetary policy should take into account not only price developments, but also the evolution of credit and the emergence of asset bubbles.

A second set of concerns deals with the central bank's response once the crisis hit. In normal circumstances, it is not very controversial what a central bank should do in economic downturns. But as Blinder (2013, p. 384) put it, the problem in this crisis was that “the Fed ran out of conventional monetary policy ammunition on December 16, 2008, the day it reduced the federal funds rate to approximately zero.” With interest rates at or near zero, and with political authorities either unable or unwilling to pursue aggressive fiscal policies, monetary authorities eventually had to resort to unconventional policy measures to respond to the worst economic crisis since the Great Depression. These unconventional policies can be classified into two types of interventions: first, the provision of liquidity to the financial sector and the purchase of specific assets on a large scale (what has been known as quantitative easing, as it entails an increase of the monetary base and an

expansion of the central bank's balance sheet); and second, the management of market expectations (forward guidance) in an attempt to convince markets that the current accommodating monetary policies will remain in place for long periods of time. If this new communication policy of the central banks is effective, the change in expectations about future monetary policy stance should reduce long-term interest rates (Curdia & Woodford 2010). Or, in the famous Paul Krugman formulation, monetary policy can be effective in a liquidity trap "if the central bank can credibly promise to be irresponsible." (Krugman 1998, p. 139).

There is still a great deal of controversy around the effectiveness of the specific policy decisions proposed and enacted under these two broad strategies, despite a growing literature aimed at evaluating them (Lenza et al. 2010, Palley 2011, Mishkin 2012, Woodford 2012, Reichlin & Baldwin 2013, Reis 2013, Schenkelberg & Watzka 2013, Rogers et al. 2014). In what follows, I focus on four political implications of this rethinking of central bank activities and speculate about what these implications mean for the relationship between central bank independence and democratic politics in the near future.

Central Banks Need Broad Mandates and Discretion

Central banks have been forced to adopt policy measures that were unthinkable only a few years ago. They have bought securities in unprecedented amounts, implicitly engaged in fiscal policy decisions, and changed how they communicate their policy decisions to market participants. They have not only moved monetary policy in unexpected directions—they have redefined what monetary policy making is about. The policy toolkit that central bankers use today is very different from the one they used before the crisis, and it is unlikely that they will abandon these new instruments after the crisis (Whelan 2013). It is important to note that all these heterodox policy changes have been possible because central banks enjoy discretion, which they have used to deviate from the rule-centered approach that was supposedly guiding their monetary policy before the crisis. Indeed, one of the most important lessons of the crisis is that central banks should adopt a broader approach to monetary policy. Narrow rules focused on price developments are inherently problematic (see, for example, the case studied by Jiménez et al. 2014), as they might compromise financial stability—an objective that central banks cannot ultimately reject, as we have also learned in the crisis. As a result, central banks have to play a more prominent role in financial regulation (Blinder 2013, De Grauwe 2013) and engage in what has been called macroprudential regulation (see Galati & Moessner 2011 for a review of the proposals). It is important to note that although prevention of macroeconomic imbalances is usually presented in this literature as a purely technocratic activity, a growing body of literature shows that there were key political dynamics behind the development of asset bubbles preceding the crisis (Ansell 2012, Broz 2013, McCarty et al. 2013). Effective macroprudential regulation should therefore take these political factors into account—making its implementation probably more complicated and politically controversial than is commonly thought. Additionally, cooperation with fiscal authorities in a context in which fiscal and monetary interventions are much more intertwined will become entrenched in the coming years (De Grauwe 2006, Mishkin 2012, Woodford 2012).

It can be discussed whether this new, holistic approach to central banking entails an abandonment or merely a qualification of the previously dominant approach understood as "inflation targeting" (Wyplosz 2013). Some have argued, for instance, that the heterodox policies now in place only make sense in the extraordinary circumstances of today, and that once conditions return to normal, so will precrisis monetary management. This ignores the fact that precrisis monetary policy has been seen as partly responsible for the crisis. Also, deciding whether conditions are "normal" or "extraordinary" is likely to be subject to controversy, as the recent debate on the exit

strategy for the Federal Reserve's monetary stimulus policy shows. In summary, central banks need discretion, and they should be able to take a broader perspective on the economy when setting monetary policy. In line with the discussion in the previous section, this will likely force them to make more politically contested decisions.

Monetary Policy Is a Useful Political Tool

One of the ideas underpinning the depoliticization of monetary policy was that it was ill-suited for distributive purposes. In contrast with fiscal policy, monetary policy is universal and cannot be targeted to particular groups or sectors. However, the current crisis has shown that such universal policies might be politically attractive under some circumstances. In the euro's first decade of existence, the massive capital flows from the core of the eurozone toward the periphery and the different rates of inflation led to a steady loss in the competitive position of peripheral countries. Nominal exchange rate adjustment is not a policy option for these countries as long as they remain within the eurozone, so the only way to regain competitiveness is through "internal devaluation": piecemeal nominal reductions of wages and prices throughout the economy (De Grauwe 2013). As all countries in this situation are experiencing, this strategy is a political nightmare and has huge economic costs. The fact that the adjustment is not universal gives incentives to politically powerful groups to mobilize in favor of shifting a higher share of the burden of the adjustment to the rest of society. The permanent debate on how the costs of the crisis should be distributed across groups, sectors, classes, territories, or even generations slows the pace of the adjustment and makes it less politically sustainable. In these contexts, it is easy to see how the universal nature of monetary policy might make it a more attractive policy tool from a political standpoint.

Central Banks' Policies Can Be More Distributive and Targetable Than Previously Thought

It is important to note that although nontargetability still remains one of the characteristics of monetary policy, some of the unconventional measures embraced by central banks during the financial crisis are in fact very targetable. Every time the central bank decides to inject liquidity by buying a certain type of asset (for example, by buying mortgage-based securities in the United States, or by undertaking transactions in secondary markets to lower the interest rates of a given country's sovereign bond under ECB's Outright Monetary Transactions program in Europe), it is making decisions whose direct beneficiaries can be much more precisely defined than when it simply loosens or tightens monetary policy (Mishkin 2012).⁵ (This does not invalidate the previous lesson because interventions on interest rates and inflation expectations are nontargetable and are still at central bankers' disposal.) The fact that the crisis has made monetary policy more distributive and targetable implies that monetary management has lost some of its previous "exceptionality." **Figure 2** represents graphically how the crisis has changed the analytical categories traditionally used to differentiate between monetary and fiscal policy. Whereas in the precrisis world there was a clear distinction between the characteristics of monetary and fiscal policy, in the aftermath of the crisis it is more difficult to ascertain their differences. On the one hand, monetary policy was supposed to be "technical," have limited distributive consequences, and be difficult to target politically. For the reasons just discussed, these assertions are questionable today. On the other hand, one could argue that the fiscal troubles associated with the crisis and the increasing need to

⁵On the distributional dimensions of monetary policy and some potential implications, see Brunnermeier & Sannikov (2012).

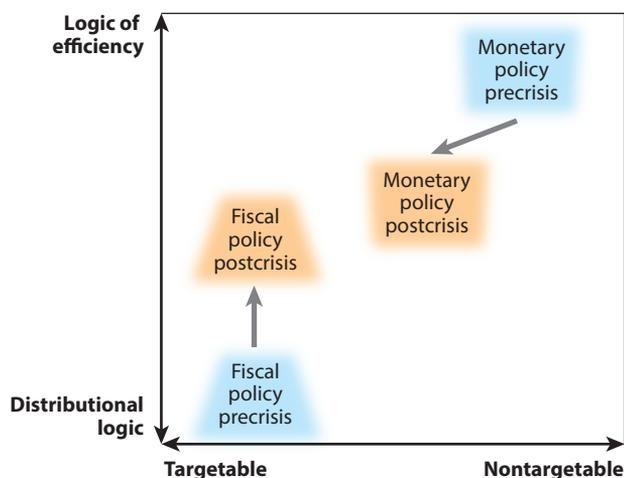


Figure 2

Targetability and distributional/efficiency concerns of monetary and fiscal policy before and after the crisis.

coordinate monetary and fiscal policies have also created a tendency toward the depoliticization of fiscal policies: a greater reliance on independent fiscal agencies, the inclusion of balanced-budgets clauses in Constitutions, and, in the European Union, the supervision of national governments' fiscal decisions by supranational authorities. The overall result is that fiscal and monetary policies have become more alike. The idea that these two areas of economic policy should be governed by completely different logics of democratic accountability is becoming less tenable.

Monetary Policy Has Cross-Border Spillovers and Crisis Management Requires Intense International Cooperation

The internationalization of capital flows and the existence of contagion effects across national financial systems are not new phenomena. But the crisis has increased the visibility of these cross-border links, and has shown how crucial it is that monetary authorities cooperate under heavy financial stress. Cooperation in the first months of the crisis was indeed unprecedented (Obstfeld et al. 2009, Moessner & Allen 2010), and it has been argued that the degree of cooperation was facilitated by the central bank independence “revolution”—contemporary monetary authorities are relatively isolated from the political process and share a common understanding of economic and financial matters (Irwin 2013). However, it is important to note that even in the crisis, central banks' decisions have been informed also by political-economic considerations. Broz (2012) shows that the loan exposure of US money-center banks is the best predictor of the Federal Reserve's extension of dollar liquidity to countries with banks facing dollar shortages between 2007 and 2009. Also, it has been pointed out that the ad hoc nature of these responses and the lack of institutionalization of international monetary cooperation during the crisis are partly the result of national conflicts of interests that technocratic institutions such as central banks cannot solve on their own. It is thus questionable that the greater need for international monetary cooperation strengthens the case for a more depoliticized monetary policy at the national level.

Taken together, these four lessons suggest that monetary authorities' activities will become increasingly politicized and that the central bank's position as a technocratic decision maker in

charge of a policy domain over which no distributional struggles occur will become less justifiable. The last section of the essay speculates about what these transformations might mean for the future evolution of central banking.

CONCLUSION: THE FUTURE OF CENTRAL BANK INDEPENDENCE

The scholarly contributions reviewed in this essay can be organized around three sets of conclusions. First, the creation of central banks has to be understood as a political phenomenon. Second, a closer analysis of central bankers' preferences questions the naïve and technocratic understanding that has dominated the conventional wisdom about central banking. And finally, the current economic crisis and its policy responses are forcing us to rethink the role that central banks play in contemporary political systems.

The previous section shows that the crisis forced central banks to embrace much wider mandates, responsibilities for financial stability, and influence over fiscal matters. As a result, their decisions have become inescapably more distributive and hence subject to increased political contestation. In the aftermath of the crisis, it will be more difficult to argue that the supposedly technical tasks assigned to monetary authorities are of a different nature than those decided by, say, fiscal authorities. It is possible to envision two ways in which the end of the exceptionality of monetary policy could evolve.

The first one, reflected in **Figure 2**, is an intensification of the tendency to depoliticize fiscal policy and other areas of macroeconomic management. Because many of the arguments for isolating monetary policy from partisan conflict and electoral contestation can be easily extended to fiscal matters, and monetary authorities need stronger cooperation from fiscal ones, it is easy to see how these tendencies to remove fiscal policies from the hand of elected officials might become increasingly attractive. To a certain extent, these dynamics are at work in some contexts: In the debate about the future configuration of the postcrisis European Monetary Union, the proposal to depoliticize national fiscal policies is already on the table. Of course, whether these new institutional arrangements are politically sustainable in the long run in an environment in which governments have to compete in elections remains an open question.

The other possible path is toward a repoliticization of central bank activities. As central bank decisions have more visible distributive consequences, electorates will demand their preferences to be taken into account in these decisions, and politicians will have to find ways to channel those demands. But what kind of institutional reforms will this new politicization entail? And perhaps more importantly, will the pressures from the electorates be able to outweigh those of other groups whose interests seem to be particularly well served when central bankers have no link to electoral accountability?

Will we observe convergence around one of these two modes of governance in macroeconomic matters, or will countries evolve in different directions? What economic, institutional, and political factors will be associated with each of these paths? To what extent will globalization pressures affect these choices, and what consequences will these changes have for the international economic order? Future political-economy work will have to address these questions.

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LITERATURE CITED

- Adolph C. 2013. *Bankers, Bureaucrats, and Central Bank Politics: The Myth of Neutrality*. New York: Cambridge Univ. Press. xxiii, 357 pp.
- Alesina A, Roubini N, Cohen G. 1997. *Political Cycles and the Macroeconomy*. Cambridge, MA: MIT Press
- Alesina A, Stella A. 2010. The politics of monetary policy. *NBER Work. Pap.* 15856
- Alesina A, Summers LH. 1993. Central bank independence and macroeconomic performance: some comparative evidence. *J. Money Credit Banking* 25:151–62
- Alesina A, Tabellini G. 2007. Bureaucrats or politicians? Part I: a single policy task. *Am. Econ. Rev.* 97:169–79
- Alesina A, Tabellini G. 2008. Bureaucrats or politicians? Part II: multiple policy tasks. *J. Public Econ.* 92:427–47
- Ansell B. 2012. Assets in crisis: housing, preferences and policy in the credit crisis. *Swiss Polit. Sci. Rev.* 18:531–37
- Archer D. 1997. The New Zealand approach to rules and discretion in monetary policy. *J. Monetary Econ.* 39:3–15
- Baker A. 2010. Restraining regulatory capture? Anglo-America, crisis politics and trajectories of change in global financial governance. *Int. Aff.* 86:647–63
- Barro R, Gordon D. 1983. Rules, discretion and reputation in a model of monetary policy. *J. Monetary Econ.* 12:101–21
- Bernhard W. 1998. A political explanation of variations in central bank independence. *Am. Polit. Sci. Rev.* 92:311–27
- Bernhard W, Broz JL, Clark WR. 2002. The political economy of monetary institutions. *Int. Organ.* 56:693–723
- Bernhard W, Leblang D. 2002. Political parties and monetary commitments. *Int. Organ.* 56:803–30
- Binder S, Spindel M. 2013. Monetary politics: origins of the federal reserve. *Stud. Am. Polit. Dev.* 27:1–13
- Blinder A. 1999. *Central Banking in Theory and Practice*. Cambridge, MA: MIT Press
- Blinder AS. 2013. *After the Music Stopped: The Financial Crisis, the Response, and the Work Ahead*. New York: Penguin. xix, 476 pp.
- Bodea C. 2010. Exchange rate regimes and independent central banks: a correlated choice of imperfectly credible institutions. *Int. Organ.* 64:411–42
- Bodea C. 2013. Independent central banks, regime type, and fiscal performance: the case of post-communist countries. *Public Choice* 155:81–107
- Broz JL. 1997. *The International Origins of the Federal Reserve System*. Ithaca, NY: Cornell Univ. Press. xiii, 269 pp.
- Broz JL. 2002. Political system transparency and monetary commitment regimes. *Int. Organ.* 56:861–87
- Broz JL. 2012. *The Federal Reserve as global lender of last resort, 2007–2011*. Winner: Best Paper Award, Int. Polit. Econ. Soc. (IPES), Univ. Virginia, Nov. 9–10
- Broz JL. 2013. Partisan financial cycles. In *Politics in the New Hard Times: The Great Recession in Comparative Perspective*, ed. DA Lake, M Kahler, pp. 75–101. Ithaca, NY: Cornell Univ. Press
- Brunnermeier MK, Sannikov Y. 2012. Redistributive monetary policy. In *Jackson Hole Symposium*, pp. 331–84. Kansas City, KS: Federal Reserve Bank of Kansas City
- Chang K. 2006. *Appointing Central Bankers. The Politics of Monetary Policy in the United States and the European Monetary Union*. New York: Cambridge Univ. Press
- Chappell HW, Havrilesky TM, McGregor RR. 1993. Partisan monetary policies: presidential influence through the power of appointment. *Q. J. Econ.* 108:185–218
- Chappell HW, McGregor RR, Vermilyea T. 2004. *Committee Decisions on Monetary Policy: Evidence from Historical Records of the Federal Open Market Committee*. Cambridge, MA: MIT Press
- Chinn MD, Frieden JA. 2011. *Lost Decades: the Making of America's Debt Crisis and the Long Recovery*. New York: W.W. Norton. xvii, 284 pp.
- Coeuré B. 2013. The history of central banks and the European banking union. In *Central Banking: Where Are We Headed?* Frankfurt: Inst. Monet. Financ. Stab.
- Copelovitch MS, Singer DA. 2008. Financial regulation, monetary policy, and inflation in the industrialized world. *J. Polit.* 70:663–80

- Crespo-Tenorio A, Jensen NM, Rosas G. 2014. Political liabilities: surviving banking crises. *Comp. Polit. Stud.* 47:1047–74
- Crowe C, Meade EE. 2007. The evolution of central bank governance around the world. *J. Eur. Perspect.* 21:69–90
- Cukierman A. 1996. *The economics of central banking*. Tilburg Univ., CentER Disc. Paper 1996–31.
- Cukierman A. 2007. The revolution in monetary policymaking institutions. *Vox* Sep. 27. <http://www.voxeu.org/article/central-bank-independence-revolution>
- Cukierman A. 2013. Monetary policy and institutions before, during, and after the global financial crisis. *J. Financ. Stab.* 9:373–84
- Cukierman A, Lippi F. 1999. Central bank independence, centralization of wage bargaining, inflation and unemployment: theory and some evidence. *Eur. Econ. Rev.* 43:1395–434
- Cukierman A, Rodríguez P, Webb SB. 1998. Central bank autonomy and exchange rate regimes. Their effects on monetary accommodation and activism. In *Positive Political Economy—Theory and Evidence*, ed. S Eijffinger, H Huizinga, pp. 78–120. New York: Cambridge Univ. Press
- Cukierman A, Webb S. 1995. Political influence on the central bank: international evidence. *World Bank Econ. Rev.* 9:397–423
- Cukierman A, Webb SB, Neyapti B. 1992. Measuring the independence of central banks and its effect on policy outcomes. *World Bank Econ. Rev.* 6:353–98
- Curdia V, Woodford M. 2010. Conventional and unconventional monetary policy. *Fed. Reserve Bank St. Louis Rev.* 92:229–64
- De Grauwe P. 2006. Flaws in the design of the eurosystem? *Int. Finance* 9:137–44
- De Grauwe P. 2007. There is more to central banking than inflation targeting. *Vox* Nov. 14. <http://www.voxeu.org/article/subprime-crisis-time-inflation-targeting-rethink>
- De Grauwe P. 2013. *Design failures in the eurozone. Can they be fixed?* LSE Disc. Pap. 57/2013
- de Haan J, Masciandaro D, Quintyn M. 2008. Does central bank independence still matter? *Eur. J. Polit. Econ.* 24:717–21
- Dellepiane-Avellaneda S. 2013. Gordon unbound: the heresthetic of central bank independence in Britain. *Br. J. Polit. Sci.* 43:263–93
- Di Noia C, Di Giorgio G. 1999. Should banking supervision and monetary policy tasks be given to different agencies? *Int. Finance* 2:361–78
- Di Tella R, MacCulloch R, Oswald A. 2001. Preferences over inflation and unemployment: evidence from surveys of happiness. *Am. Econ. Rev.* 91:335–41
- Drazen A. 2000. *Political Economy in Macroeconomics*. Princeton, NJ: Princeton Univ. Press
- Drazen A. 2002. Central bank independence, democracy, and dollarization. *J. Appl. Econ.* 5:1–17
- Dreher A, Sturm J-E, de Haan J. 2008. Does high inflation cause central bankers to lose their job? Evidence based on a new data set. *Eur. J. Polit. Econ.* 24:778–87
- Eijffinger S, De Haan J. 1996. *The political economy of central-bank independence*. Princeton Univ., Spec. Pap. Intl. Econ. 19
- Farvaque E. 2002. Political determinants of central bank independence. *Econ. Lett.* 77:131–36
- Fernández-Albertos J. 2012. Exchange rate regime preferences of the international sector. Firm-level evidence. *Econ. Lett.* 116:26–30
- Follesdal A, Hix S. 2006. Why there is a democratic deficit in the EU: a response to Majone and Moravcsik. *J. Common Market Stud.* 44:533–62
- Franzese RJ. 1999. Partially independent central banks, politically responsive governments, and inflation. *Am. J. Polit. Sci.* 43:681–706
- Franzese RJ. 2001. Strategic interactions of monetary policymakers and wage/price bargainers: a review with implications for the European common-currency area. *Empir. J. Appl. Econ. Econ. Policy* 28:457–86
- Franzese RJ, Hall PA. 2000. Institutional dimensions of coordinating wage bargaining and monetary policy. In *Unions, Employers, and Central Banks. Macroeconomic Coordination and Institutional Change in Social Market Economies*, ed. T Iversen, J Pontusson, D Soskice, pp. 173–204. New York: Cambridge Univ. Press
- Frieden JA. 2002. Real sources of European currency policy: sectoral interests and European monetary integration. *Int. Organ.* 56:831–60

- Frieden JA, Broz JL. 2006. The political economy of exchange rates. In *Oxford Handbook of Political Economy*, ed. B Weingast, D Wittman, pp. 587–97. Oxford, UK: Oxford Univ. Press
- Frieden JA, Stein E. 2001. *The Currency Game: Exchange Rate Politics in Latin America*. Washington, DC: Inter-Am. Dev. Bank
- Friedman M. 1968. The role of monetary policy. *Am. Econ. Rev.* 58:1–17
- Galati G, Moessler R. 2011. *Macroprudential policy—a literature review*. Bank Intl. Settlements Work. Pap. 337
- Gilardi F. 2007. The same, but different: central banks, regulatory agencies, and the politics of delegation to independent authorities. *Comp. Eur. Polit.* 5:303–27
- Goodhart C, Schoenmaker D. 1995. Should the functions of monetary policy and banking supervision be separated? *Oxf. Econ. Pap.* 47:539–60
- Goodman JB. 1991. The politics of central bank independence. *Comp. Polit.* 23:329–49
- Goodman JB. 1992. *Monetary Sovereignty: The Politics of Central Banking in Western Europe*. Ithaca, NY: Cornell Univ. Press
- Grilli V, Masciandaro D, Tabellini G. 1991. Political and monetary institutions and public financial policies in the industrial countries. *Econ. Policy* 6:342–92
- Hall PA, Franzese RJ. 1998. Mixed signals: central bank independence, coordinated wage bargaining, and European monetary union. *Int. Organ.* 52:505–35
- Hall RB. 2008. *Central Banking as Global Governance. Constructing Financial Credibility*. New York: Cambridge Univ. Press
- Hallerberg M. 2002. Veto players and the choice of monetary institutions. *Int. Organ.* 56:775–802
- Havrilenky TM. 1988. Monetary policy signaling from the administration to the Federal Reserve. *J. Money Credit Banking* 20:83–101
- Helleiner E, Pagliari S. 2011. The end of an era in international financial regulation? A postcrisis research agenda. *Int. Organ.* 65:169–200
- Irwin N. 2013. *The Alchemists: Three Central Bankers and a World on Fire*. New York: Penguin. xvii, 430 pp.
- Issing O. 2008. *The Birth of the Euro*. Cambridge/New York: Cambridge Univ. Press. xiv, 260 pp.
- Iversen T. 1999a. *Contested Economic Institutions: The Politics of Macroeconomics and Wage Bargaining in Advanced Democracies*. New York: Cambridge Univ. Press
- Iversen T. 1999b. The political economy of inflation: bargaining structure or central bank independence? *Public Choice* 99:237–58
- Iversen T. 2000. Decentralization, monetarism and the social democratic welfare state. In *Unions, Employers, and Central Banks. Macroeconomic Coordination and Institutional Change in Social Market Economies*, ed. T Iversen, J Pontusson, D Soskice, pp. 201–31. New York: Cambridge Univ. Press
- James H. 2012. *Making the European Monetary Union*. Cambridge, MA: Belknap Press of Harvard Univ. Press
- Jeong G-H, Miller GJ, Sobel AC. 2009. Political compromise and bureaucratic structure: the political origins of the Federal Reserve system. *J. Law Econ. Organ.* 25:472–98
- Jiménez G, Ongena S, Peydró JL, Saurina J. 2014. Hazardous times for monetary policy: What do twenty-three million bank loans say about the effects of monetary policy on credit risk-taking? *Econometrica* 82:463–505
- Johnson S, Kwak J. 2010. *13 Bankers: The Wall Street Takeover and the Next Financial Meltdown*. New York: Pantheon Books. 304 pp.
- Kayser M. 2007. How domestic is domestic politics? Globalization and elections. *Annu. Rev. Polit. Sci.* 10:341–62
- Keefer P. 2007. Elections, special interests, and financial crisis. *Int. Organ.* 61(03):607–41
- Krugman P. 1998. It's baaack: Japan's slump and the return of the liquidity trap. *Brookings Pap. Econ. Activity* 29:137–206
- Kydland FE, Prescott EC. 1977. Rules rather than discretion: the inconsistency of optimal plans. *J. Polit. Econ.* 85:473–91
- Lenza M, Pill H, Reichlin L. 2010. Monetary policy in exceptional times. *Econ. Policy* 62:295–339
- Lohmann S. 1997. Partisan control of the money supply and decentralized appointment powers. *Eur. J. Polit. Econ.* 13:225–46
- Lohmann S. 1998. Federalism and central bank independence—the politics of German monetary policy, 1957–92. *World Polit.* 50:401–46

- Lohmann S. 2006. The non-politics of monetary policy. In *The Oxford Handbook of Political Economy*, ed. B Weingast, D Wittman, pp. 523–44. Oxford, UK: Oxford Univ. Press
- Majone G. 1993. *The European Community: an “independent fourth branch of government.”* Eur. Univ. Inst. Work. Pap. 1993/09, Dep. Polit. Soc. Sci., SPS
- Marsh D. 2009. *The Euro. The Politics of the New Global Currency.* New Haven, CT: Yale Univ. Press
- Mas I. 1995. Central bank independence: a critical view from a developing country perspective. *World Dev.* 23:1639–52
- Maxfield S. 1997. *Gatekeepers of Growth: the International Political Economy of Central Banking in Developing Countries.* Princeton, NJ: Princeton Univ. Press
- McCarty N, Poole KT, Rosenthal H. 2013. *Political Bubbles. Financial Crises and the Failure of American Democracy.* Princeton, NJ: Princeton Univ. Press
- McNamara KR. 2002. Rational fictions: central bank independence and the social logic of delegation. *West Eur. Polit.* 25:47–76
- Meseguer C. 2006. Learning and economic policy choices. *Eur. J. Polit. Econ.* 22(1):156–78
- Meseguer C. 2009. *Learning, Policy Making and Market Reforms.* New York: Cambridge Univ. Press
- Mishkin FS. 2012. *Central Banking after the crisis.* Presented at Annu. Conf. Central Bank of Chile, Nov. 15–16, Santiago, Chile
- Moessner R, Allen WA. 2010. *Central bank co-operation and international liquidity in the financial crisis of 2008–2009.* Bank Int. Settlements Work. Pap. 310
- Moravcsik A. 2002. In defence of the “democratic deficit”: reassessing the legitimacy of the European Union. *J. Common Market Stud.* 40:603–34
- Moser-Boehm P. 2006. The relationship between the central bank and the government. In *Central Banks and the Challenge of Development*, ed. Bank of International Settlements, pp. 45–63. Basel: Bank Intl. Settlements. <http://www.bis.org/events/cbcd06.pdf>
- Oatley T. 1999. Central bank independence and inflation: corporatism, partisanship, and alternative indices of central bank independence. *Public Choice* 98:399–413
- Obstfeld M, Shambaugh JC, Taylor AM. 2005. The trilemma in history: tradeoffs among exchange rates, monetary policies, and capital mobility. *Rev. Econ. Stat.* 87:423–38
- Obstfeld M, Shambaugh JC, Taylor AM. 2009. Financial instability, reserves, and central bank swap lines in the panic of 2008. *Am. Econ. Rev.* 99:480–86
- Olivei G, Tenreyro S. 2010. Wage-setting patterns and monetary policy: international evidence. *J. Monetary Econ.* 57:785–802
- O’Mahony A. 2007. Escaping the ties that bind: exchange rate choice under central bank independence. *Comp. Polit. Stud.* 40:808–31
- Padoa-Schioppa T. 2004. *The Euro and its Central Bank: Getting United after the Union.* Cambridge, MA: MIT Press
- Palley TI. 2011. Monetary policy and central banking after the crisis: the implications of rethinking macroeconomic theory. In *The Handbook on Political Economy of Financial Crises*, ed. G Epstein, M Wolfson, pp. 624–43. Oxford, UK: Oxford Univ. Press
- Pauly L. 1995. Capital mobility, state autonomy and political legitimacy. *J. Int. Aff.* 48:369–88
- Peston R. 2005. *Brown’s Britain.* London: Short Books
- Pistoresi B, Salsano F, Ferrari D. 2011. Political institutions and central bank independence revisited. *Appl. Econ. Lett.* 18:679–82
- Polillo S, Guillén M. 2005. Globalization pressures and the state: the worldwide spread of central bank independence. *Am. J. Sociol.* 110:1764–802
- Posen A. 1993. Why central bank independence does not cause low inflation: there is no institutional fix for politics. In *Finance and the International Economy: In Memory of Robert Marjolin*, ed. R O’Brien, I Iversen, pp. 40–65. Oxford, UK: Oxford Univ. Press
- Posen A. 1995. Declarations are not enough: financial sector sources of central bank independence. In *NBER Macroeconomics Manual 1995*, ed. B Bernanke, J Rotemberg, pp. 253–74. Cambridge, MA: MIT Press
- Reichlin L, Baldwin R, eds. 2013. *Is Inflation Targeting Dead? Central Banking After the Crisis.* London: Cent. Econ. Policy Res.

- Reis R. 2013. *Central bank design*. NBER Work. Pap. 19187
- Rogers JH, Scotti C, Wright JH. 2014. Evaluating asset-market effects of unconventional monetary policy: a cross-country comparison. Fed. Reserve Board Intl. Finance Disc. Pap. 2014-1101
- Rogoff K. 1985. The optimal degree of commitment to an intermediate monetary target. *Q. J. Econ.* 100:1169–89
- Rosas G. 2009. *Curbing Bailouts: Bank Crises and Democratic Accountability in Comparative Perspective*. Ann Arbor: Univ. Mich. Press
- Rosenbluth F, Schaap R. 2003. The domestic politics of banking regulation. *Int. Organ.* 57:307–36
- Schenkelberg H, Watzka S. 2013. Real effects of quantitative easing at the zero lower bound: structural VAR-based evidence from Japan. *J. Int. Money Finance* 33:327–57
- Scheve K. 2004. Public inflation aversion and the political economy of macroeconomic policymaking. *Int. Organ.* 58:1–34
- Singer DA. 2004. Capital rules: the domestic politics of international regulatory harmonization. *Int. Organ.* 58:531–65
- Singer DA. 2007. *Regulating Capital: Setting Standards for the International Financial System*. Ithaca, NY: Cornell Univ. Press. xii, 163 pp.
- Stiglitz J. 1998. Central banking in a democratic society. *De Economist* 146:199–226
- Svensson L. 1997. Optimal inflation targets, “conservative” central banks and linear inflation contracts. *Am. Econ. Rev.* 87:98–111
- Tsebelis G. 2002. *Veto Players. How Political Institutions Work*. Princeton, NJ: Princeton Univ. Press
- Vanberg G. 2015. Constitutional courts in comparative perspective: a theoretical assessment. *Annu. Rev. Polit. Sci.* 18:167–85
- Verdun A. 1999a. The institutional design of EMU: a democratic deficit? *J. Public Policy* 18:107–32
- Verdun A. 1999b. The role of the Delors Committee in the creation of EMU. *J. Eur. Public Policy* 6:308–28
- Vuletin G, Zhu L. 2011. Replacing a “disobedient” central bank governor with a “docile” one: a novel measure of central bank independence and its effect on inflation. *J. Money Credit Banking* 43:1185–215
- Walsh C. 1995a. Is New Zealand’s Reserve Bank Act of 1989 an optimal central bank contract? *J. Money Credit Banking* 27:1179–91
- Walsh C. 1995b. Optimal contracts for central bankers. *Am. Econ. Rev.* 85:150–67
- Way C. 2000. Central banks, partisan politics, and macroeconomic outcomes. *Comp. Polit. Stud.* 33:196–224
- Whelan K. 2013. A broader mandate: why inflation targeting is inadequate. See Reichlin & Baldwin 2013, pp. 104–12
- Woodford M. 2012. *Methods of policy accommodation at the interest-rate lower bound*. Presented at Federal Reserve Bank of Kansas City Econ. Policy Symp., Jackson Hole, WY, Aug. 31–Sep. 1
- Wyplosz C. 2013. Will central banking change? See Reichlin & Baldwin 2013, pp. 120–25



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Errata

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