

Monetary Power Reconsidered: The Struggle between the Bundesbank and the Fed over Monetary Leadership

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Abstract

This article reexamines the theory of monetary power to explain the role of the Bundesbank (and Germany) in the emergence of the rules-based low inflation regime in the late 1980s and early 1990s. Our theory of monetary power draws on the notion of institutional power and the concept of monetary leadership, understood as the capacity to attract foreign investment, and thereby explains how domestic institutional features and contingent historical events affect countries' external monetary power. This theory is employed to trace how the Bundesbank go-it-alone strategy in 1989 triggered a cross-national sequence of events that changed the international monetary order in a way that was consistent with the German interests. The transition was marked by a shift from the US-led pragmatist approach of international macroeconomic coordination to a rules-based approach founded on the principle of low inflation targeting. The article argues that this change took place despite the opposition of the Fed and the US Treasury. The article contributes to the literature on the decline of US hegemonic power as well as the literature on the mechanism of institutional change at the international level. It also sheds new light on current debates about the putative decline of the rules-based world order.

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Introduction

In the early 1990s, policymakers, economists and technocrats reached a consensus on the general desirability of a tight money policy. This consensus became an integral component of the new rules-based world order of the post-Bretton Woods era (Abdelal 2006; Drezner 2008; Hall 2008; Krampf 2012; Mügge 2011; Slaughter 2009). IPE scholars are still debating the political factors that gave rise to this order and sustained it. It is commonly claimed that the new world order, also known as the neoliberal order, was shaped primarily by the hegemonic interests and normative power of the United States (Baker 2012; Harvey 2005; Helleiner 1996; Strange 2009, 1996; Kirshner 2006).

Other scholars, however, reject the US-centric hypothesis, arguing that the US had neither the capacity nor the interest in creating and maintaining a rules-based economic order in the 1990s (Keohane 2005; Abdelal 2006, 2007). Recently, some scholars have suggested that Germany, in particular after the acceleration of European integration, played a much more central role in this process than previously assumed (Newman and Posner 2016; Farrell and Newman 2014; Slaughter 2009; Germann 2014).

The US-centric hypothesis of how the low inflation order came about presents us with a puzzle: In this article we bring evidence that the Fed and the US Treasury had no interest in the internationalization of low inflation as a global policy principle. The reason is quite simple: The conservativeness of the Fed enabled the US to attract foreign capital flows to finance its huge and growing public debt, cover its budget deficit and boost private investment (Kirshner 2008). Therefore, when the Bundesbank—and then the other key central banks—raised its interest rates to the level of the Fed, the US had to take critical

measures to curb its reliance on inflow of capital—at least in the short-run. The question is, therefore, if the US did not have an interest in the institutionalization of the international low inflation monetary order, how did the order come about?

We argue that so far as the monetary and financial suborder is concerned,¹ not only did the US have no interest in building the regime, but it was forced into it. The low inflation regime, we argue, was not “designed” by any single actor, but was rather the consequence of a cross-national sequence of events, which Germany—more particularly the Deutsche Bundesbank (DBB)—initiated.

To explain how a policy choice made by the DBB triggered a cross-national sequence of events that caused macroeconomic policy change in other countries, we need to reconsider the conventional theory of monetary power. In the conventional theory (Cohen 2006; Andrews 2006; Kirshner 1997) the capacity of a country to influence the behavior of its peers is attributed to structural, material and quantifiable variables such as the size of the economy, the share of its currency in international markets and the current account balance. According to these criteria, the US had enough power to influence the behavior of its trade partners and to shape the international system as it saw fit up until not long ago. However, this theory cannot explain how the low inflation order came about despite the opposition of the Fed and the Treasury.

To explain the origin of the rules-based low inflation regime, this article presents an alternative theory of monetary power—an institutional theory—which draws on the notions of monetary leadership and monetary diplomacy (Abdelal 1998; Lake 1993; A. Walter 2006; Kirshner 2008). To conceptualize these notions, the article employs Lloyd Gruber's theory of international institutional power (Gruber 2000). Then, the article demonstrates how the rising institutional monetary power of Germany triggered a cross-country sequence of events, which culminated in the formation of a G5 consensus on very low inflation targeting (Farrell and Newman 2014; Fioretos; Newman and Posner 2016). The institutional theory of monetary power allows us to demonstrate how non-material variables such as (a) domestic institutional arrangements and (b) transient and

¹ Following Johnston (2019) and others (Mazarr, Heath, and Cevallos 2018), we assume that the rules-based order consists of several suborders.

contingent economic and political events affected the institutionalization of international policy rules through the mediation the power relations between industrialized countries. Thereby, the theory demonstrates how domestic institutional factors and contingent historical events can trigger “fluctuations” in the balance geopolitical power, which have long-term international institutional consequences.

On the following pages, we use this framework to trace the interaction between four of the Group of Five (G5) countries—the US, Germany, France and Japan—and their central banks during the period 1988-1992. Within this group, the article focuses on the struggle between Germany and the US over the desirable way to handle the international imbalances. The United States favored an approach of international pragmatism (see, Mügge 2011), which was based on negotiated mutual adjustments. Until the end of the 1980s, this approach prevailed among the G5. Germany, however, had a strong preference replace international pragmatism by a rules-based approach as the latter was more consistent with its medium-term non-inflationary growth strategy.

Between 1988 and 1992, the rules-based arrangement gradually replaced the US-driven pragmatist approach, as the G5 central banks, converged towards the low inflation policy rule. This change, we argue, was the product of a cross-national sequence of events triggered by a go-it-alone monetary tightening of the DBB. The DBB move increased the monetary power of Germany, and it had international consequences we explore in this article.

The article starts by discussing the standard explanations for the consolidation of the low inflation regime: the rational choice theory and the constructivist or ideational theory. We will argue that none of the two theories can explain the consolidation of the low inflation consensus among the industrialized countries. Then, after discussing the conventional theory of monetary power, we introduce our theory of institutional monetary power and explain how it can explain the formation of the low inflation rules-based regime. Finally, the historical sections trace the cross-national sequence of events, starting with the go-it-alone policy of the DBB, continuing with the response of the Bank of France (BoF) and the Bank of Japan (BoJ), and ending with the responses of the Fed and the Treasury. Based on this sequence, we will evaluate our hypothesis.

Is the low inflation consensus a regime?

The conventional wisdom, as set out in the rational choice institutionalism theory, is that the rule of inflation targeting was institutionalized by the domestic legal mandates of central banks to solve a time-inconsistency problem. According to this rationale, governments are prepared to make the short-term sacrifice of committing to a monetary rule in anticipation of higher long-term gains, such as a lower long-term interest rate or a higher growth rate (Calvert 1998). North and Weingast used this principle to explain the establishment of independent central banks committed to a monetary rule (North and Weingast 1989).

The diffusion of the inflation targeting rule to many countries is perceived by rational choice scholars as a spontaneous process reflecting the "equilibrium way of doing things" (Shepsle 2006, 3). Therefore, whereas the convergence of behavior looks like an international order, it does not constrain the behavior of domestic actors and therefore should not be construed a regime. Nevertheless, some economists claim that since convergence of macroeconomic policies contributes to international stability, which is an international public good, it can be seen as an "inward-looking regime" (Benigno and Benigno 2008) or a "Bretton Woods, reversed regime" (Rose 2007).

IPE scholars perceive the low inflation consensus as a feature of the international monetary and financial rules-based suborder, which is part of a broader multilateral order (Johnston 2019; Mazarr, Heath, and Cevallos 2018). Once the low inflation norm is institutionalized, it shapes the expectations of domestic and global actors and therefore reproduces itself (Hall 2008, 183; Blyth 2002). This global suborder is configured by global and domestic technocrats who invest the rule with credibility by force of their professional authority and their institutional autonomy (Drezner 2008; Hall 2008; Newman 2017; Posner 2010; Slaughter 2009). To a large extent, configuration of this type is the product of transnational cooperation between central bankers (Baer 1999; Toniolo 2005).

In this article, we take the view that even though the low inflation order did not consist of formal rules such as the gold standard or the Bretton Woods system, it functioned as an informal order that contributed to international coordination and restricted the behavior

of central banks and governments to a certain non-negligible extent. Given this point of departure, the question is how this order was consolidated.

Several scholars suggest that this change was driven by domestic and global technocrats, who distributed common policy norms, causal beliefs and policy ideas. Such ideational mechanisms are put forward by McNamara (1998) and Mügge (2011), who demonstrate the role of technocrats in promoting the low inflation norm in the European context and by Hall (2008), who demonstrates how central bankers contributed to the legitimacy of a rules-based monetary approach globally. From this perspective, the internationalization of the low inflation rule is part of a broader process of the consolidation of global financial standards and regulatory regimes (Abdelal 2006; Drezner 2008; Posner 2010; Quaglia 2014; Slaughter 2009).

The ideational mechanisms explain quite well the diffusion of the low inflation targeting principle during the 1990s to peripheral and semi-peripheral countries (Maxfield 1997; Polillo and Guillén 2005). However, these mechanisms are less successful in explaining the convergence of macroeconomic policy among the industrialized countries, because, as IPE scholarship demonstrates, states preferences regarding their monetary policies and arrangements are heterogeneous (Henning 2006, 1994; Broz and Frieden 2006; S. Walter 2008; Kirshner 2006). Therefore, powerful states—as the G5 countries—are more likely to try to shape the international norms than to adopt them.

The question is, therefore, how the G5 converged around the low inflation monetary rule, despite their heterogeneous monetary preferences. Specifically, we ask how the US, France and Japan converged around the German formula of medium-term non-inflationary growth by 1992, given that they opposed this formula until 1989. To answer this question, we argue, it is necessary to account for the balance of monetary power among these countries.

Monetary power and US hegemony

Monetary power determines a state's capacity to make macroeconomic policy choices irrespective of the choices and interests of others. A country with little monetary power has to adjust its monetary—and often fiscal—policies to accommodate the policies of a dominant partner. According to Benjamin Cohen, the transmission mechanism of

monetary power is the current account. If two countries face a current account imbalance—surplus or deficit—one of them, at least, will have to adjust in order to reduce or eliminate the imbalance (Cohen 2006, 36). The one that is more powerful will be more likely to demand the other's compliance (Andrews 2006, 8). According to this notion of monetary power, power is not expressed in verbal threats or a strategy, but in the structural relationship between the two partners (Barnett and Duvall 2005; Henning 2006, 118).

This structural theory of monetary power is very useful in explaining the persistence of US hegemony, particularly with respect to peripheral and semi-peripheral countries (Baker 2012; Helleiner 1996, 2006; Kindleberger 1986; Lake 1993; Seabrooke 2001; Strange 2009, 1996). According to this theory, the United States was the most powerful actor and therefore had the capacity to “decide whether or when central banks should intervene to check market trends,” whereas West Germany and Japan—the two other pillars of the international economic triangle, were “powerless” (Strange 2009, 569). The US also enjoyed privileges in global financial governance stemming from the international use of the dollar (Baker 2012, 7). This approach posits that the size of the US economy and the international strength of the dollar puts the US in a position whereby it “cannot help but dominate relations with others” (Strange 1996, 27; see also, Helleiner 2006, 75).

However, IPE scholarship is split over the question of American hegemony. Keohane (2005) argues that US hegemony has declined since the 1970s, giving rise to a coordinated global system. Rawi Abdelal goes further, arguing that the United States was never interested in an “organized” or “rules-based” global regime (Abdelal 2007, 3). If one takes this claim seriously, the implication is that the emergence of a low inflation regime—a regime that is clearly rules-based—was not a manifestation of US power but rather of its demise. This article seeks to examine this hypothesis in detail and on the basis of historical evidence.

Monetary power reconsidered

The historical findings below support Abdelal's claim that the United States—operationalized in this article as the Fed and the Treasury—had no interest in persuading other countries to adopt low inflation targeting. If so, what was the process that gave rise

to the consolidation of the low inflation regime among the industrialized countries, and what were the drivers of this change?

The point of departure of our argument is that an explanation of the consolidation of the low inflation order among the industrialized countries must account for their heterogeneous preferences and the balance of monetary power among them. The structural monetary power predicts that US—given its supreme monetary structural power—would have the capacity to impose its own desired rules on its partners. However, historical evidence show that it failed to do so, and the question is how to explain it.

To explain the emergence of the low inflation regime, we argue, it is necessary to account for the fact that monetary power is not transmitted only through the current accounts, but also through the capital accounts. This mechanism of power became more dominant as capital controls were lifted during the 1980s: by embracing conservative monetary policy, central banks were able to attract foreign capital, thereby inducing other countries to follow. In other words, amid financial liberalization, monetary conservativeness became a means to achieve international monetary leadership or a defense mechanism against capital outflows. Monetary leadership, like monetary structural power, provides a state with certain benefits. It enables the state to adhere to its chosen economic course while the burden of adjustment is on the partners (A. Walter 2006, 53, 54; see also, Abdelal 1998). However, the determinants of economic leadership differ from those of structural monetary power.

Monetary leadership depends on two factors: the conservativeness and credibility of the monetary authority, and financial development (A. Walter 2006, 61). Given that both factors can be partly affected by policy, we may assume that states—governments or other agencies—are likely to enhance their monetary leadership. Therefore, in a highly mobile global financial system, states would compete over monetary leadership by tightening monetary policy or through financial reforms (Underhill 1997).

The capacity of states to enhance their international monetary leadership is constrained, however, by domestic factors. International credibility depends, among other things, on domestic factors which are beyond the immediate control of the authorities, for example, secular trends such as the ebb and flow of the economy. Global factors that affect capital

flows are also likely to enhance or undermine the state's capacity to assume monetary leadership. This is a crucial point because it implies that even key currency countries with superior structural monetary power may themselves be under stress due to "eroding prestige and shared expectations of monetary distress" (Kirshner 2008, 426).

Lloyd Gruber offers a model that conceptualizes how domestic contingent events may undermine the geopolitical power of an otherwise powerful country (Gruber 2000). According to Gruber, a country (say, Y) may enhance its external institutional power by adopting a go-it-alone strategy (such as tightening monetary policy irrespective of external repercussions) and leave it up to the partner (say, X) to adjust. The critical point is that while any country can adopt a go-it-alone strategy, it is effective only if the go-it-alone move is credible. A go-it-alone strategy is credible when

circumstances unique to actor Y are altered—due, perhaps, to a sudden change in Y's domestic political leadership—such that this actor (the ultimate winner) would now be better off changing its initial behavior regardless of how actor X (the ultimate loser) chooses to respond (Gruber 2000, 38; emphasis added).

This mechanism applies to the monetary domain: a go-it-alone strategy of a central bank will be considered credible only if global investors are convinced that it is consistent with domestic circumstances and therefore credible. Otherwise, even if the monetary authority makes a move toward leadership by tightening monetary policy, domestic actors are likely to resist and jeopardize the move.

This conceptualization of monetary power, which we can call *institutional monetary power*, differs from the structural theory of monetary power in its transmission mechanism, the type of independent variables it analyzes, and the phenomena it successfully explains (Table 1).

Table 1: Theories of Monetary Power

	Structural monetary power	Institutional monetary power
Impact	Shifting of the burden of adjustment	Shifting of the burden of adjustment
Transmission mechanism	Trade system and current accounts	Financial system and financial flows
Type of variables determining monetary power	Structural, material and quantifiable (relatively stable over time)	Institutional, contingent and historical (time dependent)
Explains successfully	Long-term stability	Incremental change

Source: author

This simple two-states model of institutional power can explain the interaction between the Bundesbank and the Fed between 1989 and 1991. Historical circumstances enabled the Bundesbank to take a go-it-alone policy and tight monetary policy. At the same time, other circumstances prevented the Fed from defending its monetary leadership. The outcome was that the US had to adjust to Germany, endorse the international rules-based monetary regime and implement tough fiscal reforms.

In practice, the process was more complex as it involved other central banks. The Bank of Japan (BoJ) and the Bank of France (BoF) followed the DBB tight policy, thereby further enhancing the institutional power of the DBB. By 1991 the Fed confronted a new reality in which the interest rate differential between the Fed and the other central banks narrowed and the leadership of the dollar could not be taken for granted anymore. The dollar did not lose its unique strength, of course, but the United States was forced to make domestic adjustments to secure its position rather than relying on the adjustment of the other economies.

Several historical and contingent events played a crucial role in this cross-national sequence. The unification of Germany and acceleration of European monetary integration, which was accompanied by financial liberalization, created domestic conditions in Germany for a credible go-it-alone strategy by the DBB. These conditions enabled the DBB to tighten monetary policy without worrying about the external economic and political consequences. At the same time, the United States was struggling

with a growing public debt and an economic slowdown. The Fed, therefore, found itself in a difficult dilemma: domestic circumstances called for monetary easing, whereas international circumstances demanded a tightening of the monetary policy. This conflict between domestic and international considerations, the theory of institutional monetary power predicts, undermined the Fed monetary power and its capacity to defend the dollar. The implication was that the US had to internalize the burden of adjustments and make a drastic budget cut.

Methodological note

Institutional power is a hard concept to operationalize as it does not depend only on material variables. In this article, mechanisms of power are operationalized in two ways. First, we operationalize power based on actors' perceptions. As Henning puts it, monetary power is the “knowledge that a partner country is more vulnerable and thus subject to incentives to adjust its fiscal or monetary policy” (Henning 2006, 118). Therefore, we will assume that A's power over B can be evaluated by the perceptions of both actors regarding their mutual balance of power. Secondly, we deduce hierarchies of power from the timing and sequencing of events and the putative causal mechanisms that link them (Newman 2017). Neither approach allows us to construct deterministic causal chains. Using the case-centric process tracing method (Beach and Pedersen 2013, 13, 20), our aim is to construct a minimally sufficient explanation of the outcome based on probable causal mechanisms (Trampusch and Palier 2016, 449).

Employing this approach, we trace how and to what extent the go-it-alone policy of the DBB—its decision to raise interest rates dramatically within a relatively short period of time—can account for the behavior of the Fed and the Treasury. In addition, we explore two intervening events that were part of the cross-national sequence which linked the DBB policy and the response of the American agencies: the decisions taken by the BoF and the BoJ to raise interest rates until they converged with that of the DBB.

This research is based on two types of empirical evidence. First, we look at the changing pattern of gross and net short-term capital flows—portfolio investment—between 1985 and 1993 in four of the G5 countries. This data is used to assess the extent to which their responses can be attributed to the short-term financial flows. Second, we examine

published and unpublished documents as well as secondary sources that shed light on the motivations, justifications and perceptions of policy makers.

The first section below sets the stage by depicting the era of international pragmatism during which the advanced countries made mutual adjustments. The next three sections trace the sequence of events triggered by the DBB policy, including the responses of the BoF and the BoJ. The article then documents the responses of the Fed and the Treasury to the rising monetary power of the DBB on the basis of minutes of the Federal Open Market Committee (FOMC) for 1989-1992 and documents from the Sidney L. Jones Papers in Collection (GRF-0297) of the United States National Archive.

In the wake of preliminary research, we decided not to include the case of the UK on two grounds. First, the UK is not mentioned by the actors—specifically the Fed and the Treasury—as a significant actor. Second, we believe the inclusion of the UK will only make the argument more complex but will not make a significant contribution to its validity.

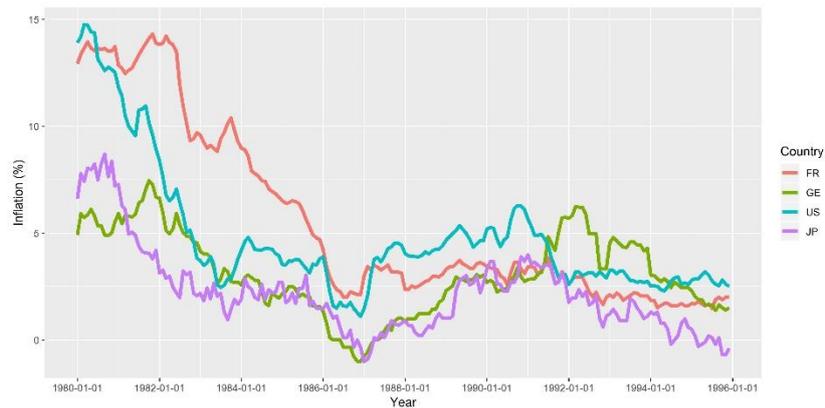
The point of departure: America's international pragmatism

After the industrialized countries managed to overcome the inflation shocks in the mid-1980s (Fig. 1), the trade imbalance between the three top economies and the exchange rate volatility became a major source of concern (Henning 1994; Walsh 2001). To address those problems, the advanced economies engaged in direct negotiation to mutually adjust their respective macroeconomic policies (Funabashi 1988; Henning 1994; Sterling-Folker 2002; Dominguez and Frankel 1993).

These negotiations were conducted in keeping with the principle that macroeconomic policies should be “tailored to the characteristics and circumstances of individual economies” (Frenkel, Goldstein, and Masson 1989, 210). Jacques de Larosiere, director of the IMF, endorsed the view that governments and central banks must take into account the international repercussions of their actions (IMF 1985, 25), which implied that exchange rate stability and current account balance were just as important as domestic objectives. Jacob Frenkel, head of the IMF Research Department, rejected the “false corner solution” of targeting price stability at the cost of the “benign neglect” of external stability (Frenkel, Goldstein, and Masson 1989). The *World Economic Outlook* described an inflation rate of 3.5% as a “favorable inflation performance” (WEO 1987, 5) and

encouraged central bankers to use monetary policy “as an instrument of policy coordination” (WEO 1988, 4–5). These quotes reflect the current conventional wisdom that the maintenance of external stability justified the cost of a somewhat a higher level of inflation.

Figure 1: Inflation rates, 1980-1996



Source: Author; Data: *FRED Economic Data, St. Louis Fed.*

Senior economists did not provide a conclusive opinion regarding the desirability of very low inflation targeting either. In 1988, Stanley Fischer argued that "until and if ever a new generation of models that meets the demanding standards of the profession is developed," economic research could not determine the best monetary rule to adopt (Fischer 1988, 21).

The approach to the coordination of macroeconomic policies can thus be seen as pragmatic.² Whereas inflation was perceived as a threat, policy makers and technocrats recognized that overemphasizing domestic stability could have detrimental repercussions on the exchange rates and the current accounts.

International pragmatism served the American interests in that it allowed the US to take advantage of its supreme monetary power. The lack of transparent rules enabled it, as the most powerful state in the G-7, to pressure other countries to adjust their policies in accordance with US interests. In the Plaza Accord (1985) Germany committed to embracing more expansionist macroeconomic policies to accommodate its G-7 partners’

² The term is borrowed from Daniel Mügge (2011).

preferences (Funabashi 1988, 209–10; Andrews 2006, 9; Henning 1994, 281). Therefore, international pragmatism was inconsistent with the DBB preference to focus exclusively on domestic monetary stability. Studies confirm that in practice the DBB responded to other variables besides CPI inflation, including the exchange rate vis-à-vis the dollar and the US short-term interest rate (Bofinger et al. 2001, 300).

This analysis explains the conflict between the US and Germany and the relative weakness of the latter until 1989: the American pragmatist approach, which was supported by France and Japan, and was legitimized by the IMF, was inconsistent with the German preference for protecting its growth model, based on tight monetary policy. Germany, therefore—and the DBB—had an interest in changing the way external imbalances were addressed by the G7. However, until 1989 it did not have the capacity change it.

The Bundesbank's weakness at the regional level

The adherence of Germany to monetary stability and tight money policies has been extensively documented in secondary sources (Dyson 1994; McNamara 1998; Young 2014). Monetary conservativeness was ingrained in the German growth model and therefore enjoyed broad consensus in German society (Germann 2014, 713). A key component of Germany's stability strategy was the “medium-term orientation” officially adopted by the DBB in 1975, which restricted the bank's responsiveness to business cycles and increased its commitment to low inflation (Schmid and Ascher 1997, 94).

Throughout the 1970s and the 1980s, Germany grappled with the tension between its domestic preference for stability and the external pressures to accommodate the more expansionist policies of its partners. This pressure was partly the outcome of economic diplomacy in the European and the G7 contexts (A. Walter 2006, 69) and partly the product of global financial market forces. Germany responded defensively to those forces and sought to protect itself by restricting the inflow of foreign capital (Gebhard 1998, 149; Germann 2014; Tavlas 1991, 16–18; Story 1997, 255–56).³

As part of its commitment to the European integration process, Germany had to make occasional adjustments to maintain the European Exchange Rate Mechanism (ERM),

³ Otmar Emminger, the Bundesbank president between 1977 and 1979, was among the firm supporters of German defence strategy (See, Emminger 1977).

introduced in 1979. In terms of its regional distributive consequences, the ERM was an ambiguous mechanism. On the one hand, it consisted of fixed and adjustable exchange rate rules, which enabled Germany, as a low inflation country, to impose discipline on France and the other high inflation countries in Europe (Maes 2002, 21; Gros and Thygesen 1998, 396–400; Dyson and Featherstone 1999, 159–66). France often complained about the asymmetry the ERM rules, and demanded reforms that would make it more “equitable” (Mitterand 1988).

On the other hand, the ERM enabled France and other weak currency countries to prod Germany into adjusting its policies and sharing at least part of the burden of maintaining external stability in the EC (Höpner and Spielau 2018). From the perspective of the DBB, the ERM was a temporary arrangement embarked upon because convergence “cannot be attained in a single step” (Bundesbank 1988, 7).

Thus, despite the DBB's independence and its famed adherence to price stability, until 1989 the tension between Germany's domestic and international preferences did not enable it to take a go-it-alone strategy. Therefore, as the theory of institutional monetary power predicts, the power of the DBB was constrained.⁴ This relative weakness was attested to by the outcome of the Basel-Nyborg agreement signed by Germany and France in 1987. The agreement, which called for easing the adjustment rules of the ERM, was signed despite the opposition of the DBB (Dyson and Featherstone 1999, 323; Howarth 2000, 89). A year later, the German foreign minister, Hans-Dietrich Genscher, supported a French proposal for further monetary integration, which was again opposed by the DBB (Buller 2000, 123).

The Bundesbank goes it alone

In the 1980s, global financial liberalization reached a peak (Helleiner 2006) and therefore the German defensive strategy became increasingly costly. As domestic banks and industry representatives lobbied for financial deregulation (Story 1997), Karl Otto Pöhl, who served as DBB director from 1980 to 1991, was more open to the idea of opening up

⁴ We must add the qualification that the relative weakness of the DBB as an international leader does not imply that it lacked power at the domestic level.

the German financial system than his predecessor. In 1985, Pöhl announced the bank's plan to internationalize the mark (Carr 1985). A formal publication of the bank stated:

In view of the international role of the Deutsche Mark, Germany cannot shut itself off from the trend which is now under way, since the Deutsche Mark must remain competitive against the international investment currencies now that it has attained a special status as an investment and reserve currency (Bundesbank 1985, 14).

However, financial liberalization was a risky step that could potentially challenge the autonomy of the fiscal and monetary authorities. In the case of Germany, financial liberalization could undermine the capacity of the central bank to target domestic inflation level amid external imbalances. One possible solution to this problem was to force the country's trade partners to adjust their macroeconomic policies to those of Germany.

The liberalization of the German financial system was therefore linked—institutionally and chronologically—to financial liberalization in France and other EC countries, as well as to the acceleration of monetary integration. The Single European Act included a clause on capital flow liberalization in the EC. In June 1988, the Council of the European Union approved a directive (88/361/EEC) which stated that “member states shall abolish restrictions on movements of capital” (see, Abdelal 2007; Bakker 1996; Howarth 2000). The directive was implemented both in Germany and France, and by the end of 1989 both financial systems were fully liberalized (Coleman 1997; IMF 1989; Story 1997).

Financial reform in Germany satisfied one of the two conditions of monetary leadership and therefore the mark became more popular as a reserve currency in the second half of the 1980s among oil-exporting countries.⁵ However, the change in gross and net capital flows was insignificant until 1989 (Figs. 4 & 5). The other condition of monetary leadership is an internationally credible conservative policy. Whereas the DBB enjoyed domestic credibility, German financial isolation and the uncertain monetary conditions in Europe prevented it from assuming the role of a global monetary leader. But once financial liberalization had taken place and the DBB announced its intention to internationalize the mark, the stage was set for the bank's go-it-alone move.

⁵ The mark share as a global reserve currency grew from 14 percent in 1985 to 19 percent in 1990, while the dollar dropped from 66 to 56 percent (Gebhard 1998 Fig. 10.11, p. 158)

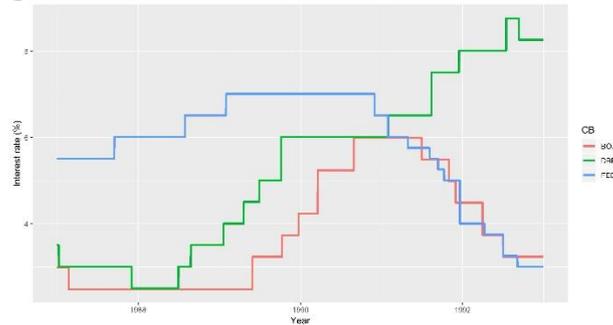
In January 1988, the DBB announced its plan to increase the interest rate from 3 to 6 percent within a year, narrowing the differential with the Fed rate (IMF 1988). In practice, the DBB raised the interest rates beyond the announced 6 percent and reached 8 percent by the end of 1991 (Fig. 2). According to the Annual Report, the bank tightened monetary policy for "domestic reasons" (Bundesbank 1989, 53). But in other public venues, Pöhl did not conceal the fact that he was looking outward at the "exchange rate of the D-Mark" (FAZ, 1989) and the "role played by tighter money in the US" (Marsh 1989). "The key lies in the US," he stated. He believed that the system should be founded on the "stability of the dollar vis-à-vis other reserve currencies" (Lipsky, S. 1988).

France was furious over this uncoordinated move. The French minister of economy portrayed it as "hostile," accusing the DBB of playing the "lone rider" (FT 1988). But France lacked leverage and the DBB move increased Germany's negotiating power in the debate over Europe as a "zone of increasing monetary stability," to quote the Delors report. After financial liberalization, France was fully exposed to capital flows, as demonstrated by the expansion of gross capital flows in Germany and France (Fig. 4) (Coleman 1997). Therefore, the BoF had a very narrow margin of discretion and was compelled to follow the DBB monetary policy. The BoF raised its intervention rate in parallel with the DBB's Lombard rate (Fig. 3). From the end of the first quarter of 1991, the DBB Lombard rate and BoF intervention rate fully converged, an indication that financial investors trusted the credibility of the French liberalization process.

The BoF decision to follow the DBB was a critical event in the European integration process. By doing so, France internalized the burden of adjustment, so that the additional domestic cost of formally accepting the German technocratic proposal for a currency union was thus negligible (Walsh 2001, 67). This change empowered the domestic forces in France which already supported the German proposal (Howarth 2000). France enjoyed a growth of gross short-term flows, without a reduction of net inflows (Figs 4 and 5).

The choice of the BoF to follow the DBB contributed to the latter's international clout as it transmitted the DBB policy across the region. This process, in combination with financial liberalization, enhanced the monetary power of the DBB vis-à-vis non-European central banks, such as the Fed and the BoJ.

Figure 2: Interest Rates of the BoJ, the DBB and the Fed



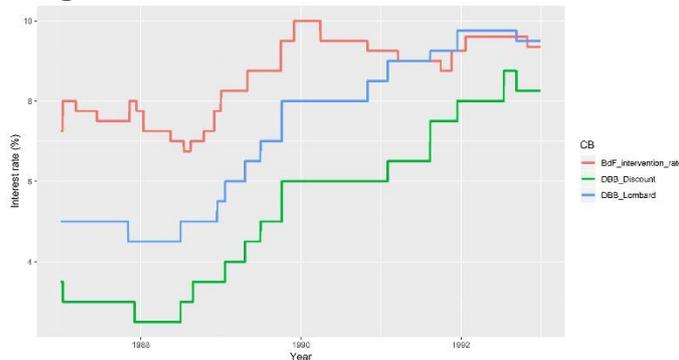
Sources:

DBB: Bundesbank discount rate (Source: Deutsche DBB Annual Reports, different years).

BoJ: Bank of Japan official rate. (Source: FRED Economic Data, St. Louis Fed).

Fed: Federal Reserve Primary Discount Rate. (Source: FRED Economic Data, St. Louis Fed).

Figure 3: Interest Rates of the DBB and the BoF



Sources:

BoF (Intervention): Bank of France intervention money rate (Source: Bank of International Settlements Annual Reports, different years).

DBB: Bundesbank discount rate (Source: Deutsche DBB Annual Reports, different years).

DBB (Lombard): DBB Lombard rate (Source: Deutsche DBB Annual Reports, different years)

Japan joins the low inflation club

Less than a year after the DBB started to raise the interest rate, the BoJ followed suit. As figure 2 demonstrates, the BoJ lagged after the DBB, but both central banks raised their rates consistently until they converged with the Fed's rate.

The BoJ's decision to raise its interest rate in May 1989 was depicted a "dramatic U-turn" (Werner 2003, 155). After several years of a relatively expansive monetary policy, by August 1990 the bank raised the interest rate from 2.5 percent to 6 percent. The governor

of the bank, Yasushi Mieno, explained the step as a response to the asset bubble and as an attempt to strengthen the yen amid Japan's current account surplus vis-à-vis the United States (Lewis 2012, 331; Kamikawa 2006, 131). This policy change cannot be explained as an attempt to reach price stability, as the inflation rate in Japan was the lowest among the G5 countries (Fig. 1). The policy of the BoJ was particularly controversial, given the fact that the bank continued raising the interest rates even after the asset bubble burst and the Nikkei index fell by 35 percent in a span of a year (Henning 1994, 165; Sterling-Folker 2002, 178–79). In hindsight, Ben Bernanke portrayed the decision of the BoJ to raise the rate and to keep it high throughout the first half of the 1990s as an “exceptionally poor” choice (Bernanke 2000, 150–51).

Given the inadequacy of domestic-oriented explanations, some authors suggested that the BoJ policy change was a response to US pressure. Throughout the 1980s, the United States exerted pressure on Japan to lift its trade barriers and strengthen the yen. In May 1989, the US Congress passed a bill adding Japan to the "Super 301," a list of countries that employed "anti-competitive practices" (Reuters 1989). The bill implied that Japan was at risk of facing sanctions unless it lifted the barriers (Terada 1994, 50). The US President, George Bush, out of concern for America's strategic alliance with Japan, initiated the Structural Impediments Initiative talks (SII) in September (Farnsworth 1990; Pine 1990). The mounting US pressure on Japan is one probable cause for the BoJ decision to raise the interest rate (Lewis 2012, 331). However, this factor cannot explain why the BoJ maintained the tight monetary policy as late as 1994 (Bernanke 2000, 151). Since 1990, when the US economy entered a recession, the administration made an effort to persuade the G5 countries to initiate a coordinated strong growth strategy (Sterling-Folker 2002, 180; Henning 1994, 299). Japan, like the other advanced countries, declined.

The theory of institutional monetary power offers another complementary explanation for Japan's monetary policy change. During the second half of the 1980s, Japan liberalized its financial system after pledging to do so in the 1984 dollar/yen agreement (Itō 1994; Seabrooke 2001, 125–26). Consequently, between 1986 and 1991 gross short-term flows (portfolio investment) fluctuated dramatically (Fig. 4). This implies that Japan became more exposed to international financial markets, a situation that destabilized the Japanese economy. At the same time, Japan was benefited from this exposure. Whereas in

1986 if faced a net outflow of \$100 billion, in 1991 it managed to attract an inflow of \$50 billion (Fig. 5).

These findings are consistent with the predictions of the institutional monetary power theory, that amid free capital flow, a central bank is likely to respond to interest rate differentials and to short-term capital flows. Therefore, given the weaknesses of the prevailing explanations, the theory of institutional monetary power provides a highly plausible account for the BoJ behavior.

Irrespective of the causes of the policy change, the upward convergence of interest rates among the DBB, the BoF and the BoJ had a dramatic impact on the American interests in two ways. First, France and Japan, which until 1988 supported the US approach of international pragmatism, started to follow the German strategy of medium-term non-inflationary growth framework and they were no longer interested in coordinating policies on the basis of mutual adjustments. In 1991 and 1992, President Bush and the US Secretary of the Treasury, Nicholas Brady, tried in vain to persuade the G-7 to adopt a globally coordinated “strong growth” approach (IMF 1992, 102; see, Sterling-Folker 2002, 180; Henning 1994, 299). Brady informed the Congress of an “intensified economic policy coordination process among the major industrial nations” (Brady 1990). The *Financial Times* reported on a “high profile campaign for lower rates” in the G7 summit in Washington (Norman, 1991). However, at that point the idea of coordinating policies “had completely broken down,” to quote Charles Henning (Henning 1994, 303).

Second, the timing of the upward convergence of interest rate caught the US in a very vulnerable situation due to an economic downturn that turned into a recession. The Fed was locked in a very difficult dilemma: should it respond to domestic conditions and ease monetary policy, or should it respond to the external developments and raise the rate? This conflict between domestic and external considerations, we will argue below, undermined the US institutional monetary power and forced it to internalize the burden of adjustment.

Figure 4: Gross Portfolio Foreign Investment

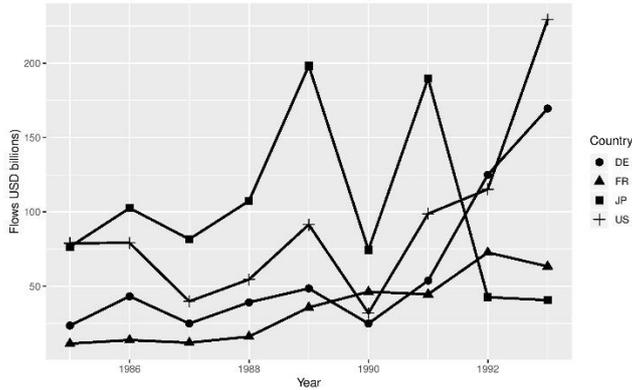
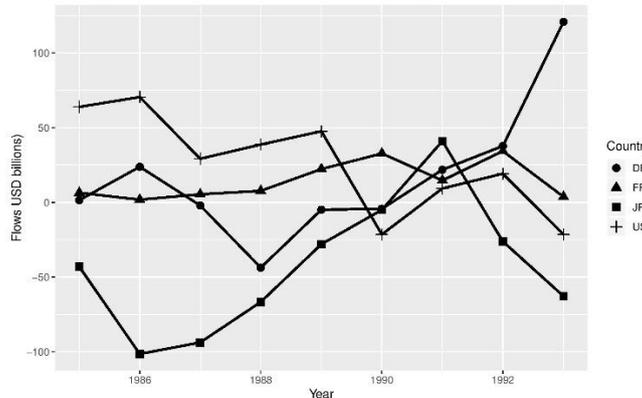


Figure 5: Net Portfolio Foreign Investment



Sources of figures 4 and 5: Data obtained from the Annual Reports of the *Bank of International Settlements* (1991, 88; 1992, 95; 1994, 91 and 152). Data for the capital accounts of Germany and France for the years 1991-1993 obtained from the Bundesbank Annual Report (1990, 33) and the Annual Report of the Bank of France (1993, 149). Calculations made by the author.

The deterioration of the Fed's institutional power

While the Fed eyed this global trend of monetary tightening with concern, its chairman Alan Greenspan, was cautious not to “trigger an international competitive spiral” between the United States, Germany and Japan (FOMC June 30, 1988) lest it “accelerate the dollar's strength and initiate some fairly broad increases in interest rates amongst our trading partners” (FOMC July 19, 1988). However, as monetary tightening continued, the Fed's anxiety mounted.

When the interest rates of the DBB and the BoJ continued to soar well beyond Greenspan's expectations, while the US economy began to slow down, the Fed found itself in a tough conundrum.⁶ Vice chairman Edward Gerald Corrigan described the situation as the "box we're in with respect to the interactions between domestic interest rates, foreign interest rates... and the exchange rate" (FOMC February 7, 1990). FOMC members spoke about the "extraordinary convergence of inflation rates" among the industrial nations (FOMC February 5, 1992) and the "conservative tide" driven by the central bankers' "reluctance to respond to rather low monetary growth" (FOMC March 31, 1992). The FOMC minutes substantiate the claim that the Fed did not endorse in any sense the conservative tide and at least some of them believed that this tide was not driven by domestic high inflation rates.

The members of the FOMC were concerned by the implication of the conservative tide on the dollar as it was "lessening of the uniqueness of the dollar" (FOMC October 2, 1990), which did not provide "a safe haven anymore" (FOMC October 6, 1992). These observations were borne out by capital flight. Between 1986 and 1993 US gross short-term capital flow increased from \$75 billion to above \$225, but the net flow fell from an inflow of \$75 billion to an outflow of \$25 billion (Figs. 4 & 5). According to William McDonough, then manager of foreign operations, the trend was a product of the "interest rate differential, which is clearly against us, and the view that the Wall Street may not be as attractive [as it was previously]" (FOMC July 1, 1992). The fact that during this period the net Foreign Direct Investment—long-term flows that were not affected directly by interest rate differentials—fell from an inflow of \$40 in 1988 to an outflow of \$30 billion in 1992, only aggravated the problem.

The Fed was torn between the need to reinvigorate America's sluggish economy and the international goal of providing "greater competitive scope for well capitalized banking organizations", as Greenspan explained (Senate 1991). The FOMC members decided to lower the interest rate out of domestic considerations, but not as fast as the Treasury would have liked. This triggered an internal debate within the FOMC over the Fed's prioritization of domestic as opposed to external interests (See FOMC October 6, 1992). Some FOMC members warned that lowering the rate too quickly would result in a

⁶ The growth rate fell from 5.7 percent in the first quarter of 1988 to 0.5 percent in the second quarter of 1991 (FRED Economic Data).

deterioration of capital inflow and an increase in the long-term interest rate, which could prompt a “serious breakdown” of the financial system (FOMC August 18, 1992). Others were concerned by the recession and favored a more drastic monetary easing.

The FOMC minutes demonstrate that the “conservative tide” was perceived as a threat to the US growth model, and for a good reason. From the mid-1970s and throughout the 1980s, the US had financed its growing public debt and domestic investment by attracting foreign capital (Helleiner 1996, 148). The US exploited its position as a monetary leader to suck liquidity from other countries. Over the course of the 1980s, the US attracted around \$100 billion a year, around half of which consisted of portfolio investment (FOMC February 7, 1990). The conservative tide severely undermined the capacity of the US to pursue this strategy.

This situation demonstrates what A. Walter (2006, 52) and Kirshner (2008) refer to as the vulnerability of monetary leaders at times of free flows of capital. This vulnerability is explained by the theory of institutional power: despite the monetary supremacy of the dollar, the US was trapped in a difficult position, in which it could no longer defend the dollar without internalizing the burden of adjustment.

The Treasury’s response

The dilemma of the Fed intensified its clash with the Treasury. The rational choice theory interprets the clash between central banks and ministries of finance as a struggle between independent central bankers and power-hungry politicians (Barro 1992; see also, Goodfriend 2007; Thornton 2010). The evidence we found suggests a different interpretation: the contestation between the two agencies was fueled by a policy dilemma regarding the sustainability of the US growth model. Whereas each of the two agencies had a somewhat different prioritization of the domestic and international policy problems, both of them acknowledged the costs associated with each policy alternative. Above we showed that the FOMC members understood the dilemma. This section will show that also the Treasury took into account the international problem and responded to it. By the end of the Bush administration, we will argue, the Treasury converged with the approach of the Fed, and was willing to make fiscal reforms.

In 1990 and 1991, the public battle between Greenspan and the administration intensified. No other chairman in the history of the Fed has had to withstand the kind of

treatment to which Greenspan was subjected by Bush and Brady. The Treasury accused Greenspan of “myopic concentration on inflation rates at a time when the pace of economic activity is deteriorating rapidly” (Jones, 1991) He was also showered with criticism from senators on both sides of the political map, who accused Greenspan for being responsible for the worst recession since the Great Depression (Senate, 1991).

But despite the high-profile public attack, the Treasury was as concerned as the Fed by the precarious position of the dollar and the US addiction to foreign capital. In December 1989, the Treasury established the *Working Group on Saving and the Cost of Capital*, affiliated with the US Economic Policy Council. The aim of the Working Group was to address the US low level of domestic savings, which required a constant inflow of foreign capital and “carries the burden of creating trade imbalances and ultimately of allowing returns to investment to flow overseas.” The reliance on capital inflow increased the cost of capital, “placing US companies at a long-term competitive disadvantage” compared to German and Japanese companies. The Working Group recommended three measures to resolve the problem: reducing the Federal deficit, lowering the capital gain tax and encouraging households to save (Working Group, 1989). In that sense, both the Treasury and the Fed shared the view that the US reliance on inflow of capital was not sustainable.

These recommendations became the basis for the *Savings and Economic Growth Act* (1990). Brady justified the act citing America's “excessive reliance on foreign capital inflows” (Brady 1990) Bush, in his message to Congress, stated that it was one of his key priorities to “promote risk-taking and entrepreneurship by lowering the cost of capital, thereby encouraging new business formation and creating new jobs” (Bush, 1990). The administration embraced the view expressed in the president's Economic Report that the “major suspect in the slowdown of US productivity growth is thus to be found not in the labor markets but in the capital markets” (Economic Report 1992, 93).

Later that year, despite Bush's pre-election promise not to raise taxes, he and Brady pushed through the Omnibus Budget Reconciliation Act of 1990, which was designed to restrict public spending and increase revenues. This legislation, which was described as one of the “most sweeping budget packages of the past thirty years” (LeLoup 2005, 112), led— together with Clinton's Omnibus Budget Reconciliation Act of 1993—to a “dramatic improvement in the current and projected budget balance and a shift to a new political

consensus in favor of balancing the budget” (Elmendorf, Liebman, and Wilcox 2002, 61; see also, Steuerle 2002, 144).

Whereas some FOMC members were skeptical about the impact of the Omnibus Act on fiscal deficit, others believed that it “does have some real taxes and some real cuts in it.” Greenspan was optimistic, on the ground that “there is some evidence that there are teeth in it and that's encouraging” (FOMC October 2, 1990).

Towards the end of the Bush administration, after domestic economic conditions improved and the fiscal reforms were implemented, there were signs of change in the view of the Treasury regarding the prioritization of price stability. Sydney Jones, Brady's assistant secretary for economic policy, distributed a memo in which he endorsed the new anti-inflationary norm that emerged internationally. He portrayed the achievement of price stability as the “major economic achievement of the 1980s, both in America and many other nations” (Jones, 1992). The memo, titled “The Inflation Transition,” hailed the benefits of low inflation but also meticulously enumerated its many risks. The memo concluded that the US should follow the other countries because its inflation rates were “above the pace in other industrial nations” (Jones, 1992).

To conclude, documents in the Treasury archive suggest that despite the public clash with the Fed, both institutions were concerned by the international financial position of the United States. Moreover, both agencies acknowledged the failure of the US to externalize the burden of adjustment, and the need to internalize it in the form of an adjustment of fiscal policy.

Conclusion and discussion

The 1990 annual report of the Bank for International Settlements spoke of a “widespread agreement” that monetary policy should aim for price stability (BIS 1990, 160). The 1992 *World Economic Outlook* reported the “consensus” reached among the industrial countries based on “medium-term objectives” and “anti-inflationary monetary policies” (WEO 1992, 16). The pragmatic American approach to international imbalance was thus replaced by the dogmatic “German” approach founded on the idea that all countries should abide by the same rule (Mügge 2011). The aim of this article was to explain how

the four industrialized countries—the US, Germany, Japan and France—converged around this principle, despite their original heterogeneous preferences.

Three types of mechanisms of change were considered: domestic mechanisms upholding the principle of commitment through delegation; ideational mechanisms, which underline the role of technocrats; and mechanisms pertaining to institutional monetary power. We argued that whereas the domestic and ideational mechanisms played a partial role in this process, the theory of monetary power provided a more comprehensive explanation that was more consistent with archival evidence and the timing of the events.

The article presented a complex cross-national sequence of events triggered by the DBB go-it-alone policy that culminated in fiscal reform in the US. As in the case of the process-tracing method, we did not attempt to present a deterministic causal chain linking the starting point and the end-point. Rather, we sought a probable course of events based on the theory of monetary power and empirical findings. This course of events, we argued, includes elements that are not consistent with the rational choice or the ideational approaches, and which can be explained by the institutional monetary power theory.

This historical analysis provides strong support for our claim that during the period 1989 to 1991 the US monetary power declined, and Germany's monetary power rose. The two claims are related because monetary power is a relational concept—when the power of one state goes up, the power of the other goes down. What we have shown is that in both cases, the change in monetary power was the result of contingent domestic events and circumstances unique to each of the two countries. In the case of Germany, the unification of Germany, the European monetary integration process and financial liberalization were necessary conditions for the DBB effective go-it-alone strategy. Taken together, they increased the international leverage of the DBB. As for the United States, the economic recession combined with the global “conservative tide” undermined the Fed's capacity to defend the position of the dollar. There was also a structural factor involved, namely, the addition of the US to foreign capital inflow. The balance of power between Germany and the US was also affected by the choices of other central banks—the BoF and the BoJ—which followed the DBB, thereby amplified its monetary power. The case of Japan is important for our argument because it shows that the US, by putting a pressure to

strengthen the yen during the 1980s, contributed to the consolidation of the conservative tide, which it had to face in the early 1990s.

As for the role of norms, ideas and technocrats, the article does not rule out their contribution to the formation of the low inflation consensus but shows that they cannot provide a full explanation for the emergence of consensus among the G5 countries. Previous studies have demonstrated that the desirability of price stability was an idea circulating among policymakers in the European arena from the early 1980s (McNamara 1998; Murlon-Druol 2012). However, as Amy Verdun cautiously puts it, the European experts were not “a political actor which stood ‘above’ the political struggle between nation-states” (Verdun 1999, 323). This is probably true at the international level as well. What our study suggests is that the global community of technocrats was not as homogenous as it is often assumed. Moreover, the article shows that in the monetary policy area technocrats at the IMF followed governments, rather than vice versa.⁷

This article does not dismiss the domestic-oriented rational choice theory of central banking, but proves its incompleteness. Whereas the rational choice theory provides a plausible explanation for why governments would make a commitment to a monetary policy rule based on domestic considerations, it does not account for the fact that a purely inward-looking monetary policy approach has external political and economic costs in terms of geopolitical tension, exchange rate volatility, current account imbalances and destabilizing capital flows. This article challenges the rational choice theory by arguing that central bankers, including conservative ones, do take into consideration the external implications of their policies (See, Eleftheriou 2017; Hagen 1989; Posen 2016). Thus, Greenspan’s conservativeness, according to this analysis, was not only driven by ideology, but also by the standing of the US in the international monetary system.

⁷ IMF technocracy started to preach very low inflation targeting only after consensus was reached by the G5 countries. During the 1980s the IMF preached for financial liberalization (Boughton 2001; Chweroth 2009), but it did not advocate very low inflation targeting.

Supplemental Information

Data file for figures 1-5: [ISQ URL]

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