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The Same, But Different: Central Banks, Regulatory Agencies, and the Politics of Delegation to Independent Authorities

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Independent regulatory agencies are the institutional foundations of the regulatory state that, during the past 15 years, has gained prominence throughout Europe. This article studies the rise of independent authorities in European countries by comparing regulatory agencies and central banks. Delegation to independent central banks and to independent regulatory agencies is similar in many respects. In both cases, agents are deliberately made independent from political principals through a specific institutional design. Moreover, it has been argued that delegation to both central banks and regulatory agencies is linked to the need for policy-makers to improve the credibility of policy commitments, to the wish of incumbent politicians to tie the hands of future majorities, and to the extent to which the institutional contexts safeguard policy stability. Through an analysis of the formal independence of central banks and regulatory agencies in Western Europe, this article identifies an empirical puzzle that casts doubts on the accuracy of current explanations. Veto players and the uncertainty of incumbent policy-makers in respect to their re-election prospects matter for delegation to both central banks and regulatory agencies, but in opposite ways. Making sense of these anomalies is necessary to achieve a better understanding of delegation to independent authorities.

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Introduction

The last two decades have been characterized by profound changes in the political economy of European countries. In some domains, such as telecommunications and energy, public monopolies have been replaced by private ownership and free markets, and in many others liberalization has been introduced in various forms. While at first this was perceived as a wave of simple deregulation, scholars progressively realized that an important part of the process was about re-regulation: freer markets were accompanied by more



rules (Vogel, 1996). A somewhat paradoxical consequence of liberalization, therefore, is that regulation has become an important part of public intervention in the economy. Against this background, Giandomenico Majone (1994, 1997a) even argued that the redefinition of the role of the state as an economic actor is so important that it actually amounts to a structural transformation in which regulation becomes a central activity of governments. The thesis that there has been a rise of a regulatory state across Europe has been very influential and has put in the foreground regulation as an important field of study for European political scientists. Although Majone's view of a homogeneous structural trend has been nuanced and also contested (see e.g. Eberlein, 1999; Moran, 2002; Lütz, 2004; Eberlein and Grande, 2005), many recent works have reaffirmed the central place of regulation in modern governance. Some authors have argued that the rise of regulation in public policy is not only a major transformation of the state, but more broadly of the way the economy is organized, so that we could speak of a new model of 'regulatory capitalism' (Levi-Faur, 2005, 2006a, b).

Regardless of labels, there is little question that regulation has acquired an unprecedented place in the governance structures of European states. This article is about the institutional foundations of this new model. In effect, the rise of regulation has been accompanied by the rise of a new type of institution, namely the independent regulatory agency. The characteristics of these agencies, of course, vary considerably from one country to the other, as well as across regulatory domains, but their common feature is that they have been deliberately insulated from political control. When faced with the new tasks of regulation, most governments have set up specialized authorities and have put them outside the 'chain of delegation' that goes from voters to the administration via parliament and government. This model is not entirely new: independent regulatory agencies have existed since long in the United States, and also in Europe they were already well established in some sectors, such as banking and financial markets. However, they have spread explosively since the end of the 1980s, and they are now a very common institutional model in all European countries and beyond (Gilardi, 2002, 2005a, b; Thatcher, 2002; Jordana and Levi-Faur, 2005, 2006).

This article studies a specific aspect of the rise of independent regulators — their formal independence from elected policy-makers — by comparing them with central banks in relation to three factors that have been linked to delegation to independent authorities, namely the credibility problem, the political uncertainty problem, and the institutional context.

Recent reviews of the delegation literature have emphasized that credibility problems are at the core of many delegation relationships (Bendor *et al.*, 2001; Huber and Shipan, 2004; Miller, 2005). The peculiarity of credibility problems is that their solution requires delegation arrangements that are counter-intuitive



from a principal-agent perspective, namely an infringement of the 'ally principle', which postulates that principals delegate to agents with similar goals. Delegation can increase the time consistency and credibility of the policy choices of decision-makers, who are subject to preference reversals, but only if the agent is not prone to the same kind of behavior *and* the principal has no opportunity to influence his/her decisions. Thus, delegation to independent central banks has been seen as a solution for increasing the credibility of monetary policy commitments; similarly, delegation to independent regulatory agencies can be a means to make regulatory policies more credible. Therefore, not only do credibility problems lead to a violation of the ally principle, but in addition they also break a second law of principal-agent relationships, namely that if *ex ante* control is weak, then *ex post* controls should be increased to prevent moral hazard. The logic of delegation to independent authorities is thus different from that of delegation to bureaucracy in general (Lohmann, 1998, 442), where 'politicians typically delegate more discretion to bureaucrats when the bureaucrats are ideological allies and when *ex post* monitoring possibilities are most effective' (Huber and McCarty, 2004, 482).

Credibility is not the only reason that may lead principals to give up the possibility to exert *ex post* control. A second motivation may be 'coalitional drift' (Horn and Shepsle, 1989; Shepsle, 1992) or 'political uncertainty' (Moe, 1990), namely the fact that future decision-makers will be able to change the policies of current decision-makers, unless policy is insulated from politics, for example by making the agent more independent.

In both cases, the institutional context matters. In particular, delegation arrangements are likely to be influenced by the ease with which decision-makers can agree on policy change. This, in turn, depends on veto players: the stability of the *status quo* increases with their number and their distance in terms of preferences (Tsebelis, 2002). There is a sharp disagreement, however, on the nature of this influence. On the one hand, some scholars argue that since more veto players¹ make change more difficult, policies will be more consistent over time, and therefore more credible and less subject to political uncertainty, in the presence of many veto players (Levy and Spiller, 1994). In this view, veto players are a functional equivalent of delegation. However, other scholars argue that in systems with few veto players, delegation itself is not credible and useless as a means to cope with political uncertainty, since it can be easily withdrawn (Lohmann, 1998; Keefer and Stasavage, 2003). In this view, veto players are a precondition for meaningful delegation.

In this article, I show that both these views have empirical validity, but for different cases. Through an analysis of the formal independence of regulatory agencies and central banks in Western Europe, I show that an institutional context protecting the *status quo* is a precondition for delegation to independent central banks, but a functional equivalent for delegation to



independent regulatory agencies. In other words, central banks tend to be more independent in countries characterized by many veto players, while the reverse is true for regulatory agencies: they are more independent in countries with few veto players. In addition, I also show that the political uncertainty problem is relevant for delegation to both central banks and regulatory agencies, but again in a symmetric way. The formal independence of regulatory agencies increases as the risk for a government of being replaced by a coalition with different preferences (replacement risk) increases, while that of central banks decreases as replacement risk increases.

These results constitute anomalies for the delegation literature. Central banks and regulatory agencies are both 'governmental entities that (a) possess and exercise some grant of specialized public authority, separate from that of other institutions, but (b) are neither directly elected by the people, nor directly managed by elected officials' (Thatcher and Stone Sweet, 2002, 2). For both types of authorities, the logic of delegation differs from that of general bureaucracy: credibility problems play an important role in the decision of policy-makers to renounce to the 'ally principle' of delegation and to consciously reduce, rather than maximize, formal controls. In many respects, central banks and regulatory agencies are thus very similar institutions. Some authors have even argued that central banks are the precursors of independent regulatory agencies, and the model upon which these have been built (Jordana and Levi-Faur, 2006). Yet the patterns of delegation are strikingly different. I argue that the acknowledgement of this anomaly is a necessary first step for improving delegation theories, which miss an important part of the story since they cannot explain the puzzling differences between two similar types of independent authorities.

The rest of the article is structured as follows. In the next two sections, I briefly review the credibility and political uncertainty problems, and show their importance for both delegation to central banks and to regulatory agencies. I then discuss the role of the institutional context and show that two clearly contrasted views have been advanced. After the presentation of data and methods, I then demonstrate that both views have empirical validity, but for different cases. In the conclusion, I speculate on possible solutions for the puzzle highlighted in this research and I discuss its broader implications.

Delegation, credibility, and the institutional context

The credibility problem is well known, and derives from the fact that the preferences of policy-makers may not be consistent over time.² Time inconsistency is commonly understood to occur 'when a policy announced for some future period is no longer optimal when it is time to implement the policy' (Bernhard *et al.*, 2002, 705). Since policy-making is not a game against



nature but against other rational actors, the time inconsistency of preferences are likely to be anticipated by other actors (Kydlund and Prescott, 1977). The credibility problem consists in the fact that this anticipation may prevent policy-makers from achieving their goals. In the context of monetary policy, policy-makers may announce a conservative monetary policy at time t , but then have incentives to break this commitment at time $t + 1$, for example so as to raise output and employment in the imminence of elections. However, this attempt is futile if economic actors anticipate this change and adjust their inflationary expectations, in which case the result of the policy-makers' decision is simply higher inflation. In this context, delegation to a conservative and independent central bank is seen as a means for policy-makers to increase credible-commitment capacity in the field of monetary policy³ (Barro and Gordon, 1983). Indeed, most empirical studies have found a negative relationship between central bank independence and inflation (see e.g. the review in Berger *et al.*, 2001), which suggests that delegation is an effective pre-commitment device.

Credible-commitment capacity is a valuable political asset also in regulatory policy, especially in the aftermath of utilities privatization and liberalization (Spiller, 1993; Levy and Spiller, 1994; Majone, 1997b, 2001). The problem in this context is that successful regulatory reform depends on the capacity to attract private investment. Policy-makers have thus clear incentives to promise prospective investors a favorable regulatory environment at the outset of reform (time t), but may be tempted to renege on this commitment once relatively irreversible investments have been made (time $t + 1$). If investors anticipate this preference reversal, they may renounce to invest in the first place, which is a suboptimal outcome both for them and for policy-makers. Empirical evidence suggests that economic actors are in effect sensitive to the stability of the regulatory framework when deciding their investment strategies (Henisz, 2002). In face of this problem, delegation to an independent regulatory authority is a means to improve the credibility of regulatory commitments, and therefore to ameliorate the prospects of successful regulatory reforms (Spiller, 1993, 398).

In the European context, these arguments are especially relevant for regulatory reform in the field of utilities. In effect, until the end of the 1980s utilities were typically state-owned monopolies. In the 1990s, most European governments carried out extensive regulatory reforms that included the privatization of state-owned enterprises (SOEs) as well as the introduction of competition in utilities markets. While at the end of the 1980s only in a few countries telecommunications and electricity providers were not publicly owned, barely a decade later most public assets had been sold to private investors (Levi-Faur, 2003, 2004). These reforms have been part of a broader trend known as the 'rise of the regulatory state' in Europe (Majone, 1997a).

Some authors have argued that the trend has actually a broader scope, both geographically and substantively, and have spoken of 'the global diffusion of regulatory capitalism' (Levi-Faur, 2005, 2006a, b). In this context, credibility problems for policy-makers have been very important not only because of the high-sunk costs of entry in utility markets, which make investments relatively irreversible, but also because the former SOEs, after partial or total privatization, have remained powerful actors. Prospective competitors may thus legitimately fear that, in spite of their promises that regulation will not be biased in favor of the old SOEs, policy-makers will nevertheless be tempted to reserve a preferential treatment for them. Unless the commitment to fair and impartial regulation is credible, prospective investors may be put off by the danger of collusion between the powerful incumbent and regulators, and may thus renounce to enter the market altogether. Delegation of regulatory policy to an independent authority may thus be an attractive means to make regulatory commitments more credible (Spiller, 1993, 398).

In both monetary and regulatory policy, therefore, credible-commitment capacity is a useful political asset, and in both cases delegation to an independent authority can be a means to boost the credibility of commitments. Delegation, however, is not carried out in a void: the institutional context matters, although scholars disagree with respect to *how* it matters. In the central banks literature, there is a consensus that delegation does *not* enhance credibility if it can be easily reverted, since in this case delegation itself is subject to credibility problems. As Moser (1999, 1571) puts it, 'the benefits of central bank independence depend on the existence of some costs of withdrawing the independence'. In line with this view, Keefer and Stasavage argue that delegation increases policy credibility only if political institutions are characterized by many veto players: 'the effectiveness of central bank independence in solving credibility problems depends on the presence of multiple veto players in government' (Keefer and Stasavage, 2002, 751–752; see also Keefer and Stasavage, 2003, 407). This point was forcefully made by Lohmann (1998), who argued that credible threats to revoke independence can be an effective means for politicians to influence central bankers, and that that credibility depends crucially on the ease with which the threat can be carried out. If lowering the independence of the central bank is difficult because the agreement of many actors with different preferences is required, then the threat is not credible, and central bankers are likely to be able to resist political pressures.

To sum up, central banks scholars argue that veto players are a precondition for credible delegation: if delegation can be easily withdrawn it is useless for improving credible-commitment capacity. This argument is consistent with three different types of evidence. Firstly, central banks are significantly more independent in countries with 'strong checks and balances' (Moser, 1999),

'strong bicameralism' (Bernhard, 1998), or many veto players (Hallerberg, 2002; Tsebelis, 2002, 242–244). Secondly, the influence of central bank independence on inflation depends on checks and balances: 'increased central bank independence has a negative effect only in the set of countries with relatively high levels of checks and balances' (Keefer and Stasavage, 2002, 767; see also Keefer and Stasavage, 2003). Thirdly, Lohmann (1998) has shown that the Bundesbank was more sensitive to political pressures when the preferences of the various veto players were closer, or in other words when the threat to revoke independence was more credible. On the other hand, in a recent longitudinal study, Polillo and Guillén (2005) have found no effect of 'checks and balances' on central bank independence. However, their measure for checks and balances is actually a measure of democracy rather than veto players (see Polillo and Guillén, 2005, 1786).

Arguments are completely different in the regulation literature, where an institutional context that favors policy stability is considered a functional equivalent of delegation. Levy and Spiller (1994, 206–207) state this point very clearly: 'Utility regulation is likely to be far more credible — and the regulatory problem less severe — in countries with political systems that constrain executive and legislative discretion'. In other words, to the extent that the political system 'naturally' ensures policy stability and therefore credibility, delegation is redundant. Note that this view is implicitly present also in the arguments advanced in the central banks literature, which argues that the presence of many veto players makes delegation credible. If a certain institutional environment can increase the time consistency of the choice to delegate, it is not entirely clear why it should not be able to do the same for other choices as well.

The idea that institutions protecting the *status quo* can supply pre-commitment capacity resonates with the arguments advanced by North and Weingast (1989), who showed that the institutional reforms brought by the Glorious Revolution in England, notably an increase in the number of veto players, improved the credible-commitment capacity of the Crown. This is a quite robust finding, since several studies have demonstrated that an institutional context preserving policy stability encourages various forms of private investment (Henisz, 2000, 2002; Henisz and Zelner, 2001; Stasavage, 2002). This supports the view that the institutional context can supply credibility; this evidence is, in fact, equivalent to that supplied by studies demonstrating a negative link between central bank independence and inflation. In addition, some analyses of European countries have also shown that utilities liberalization increases the probability that an independent regulatory authority is established, but only in countries with few veto players (Gilardi, 2005b), where regulatory authorities are also less independent from elected politicians (Gilardi, 2002). On the other hand, the pattern seems

different in Latin America, where independent regulators were more likely to be established in countries with many veto players (Jordana and Levi-Faur, 2005).

To sum up, credibility problems matter both in monetary and in regulatory policy (especially in utilities regulation), and in both cases delegation to an independent authority, respectively an independent central bank and an independent regulatory agency, can contribute to improving credible-commitment capacity. On the other hand, arguments diverge sharply with respect to the role of the institutional context. While in the central banks literature institutions preserving the stability of the *status quo* are seen as a precondition for credible delegation, in the regulation literature it is argued that they are a functional equivalent of delegation. As I will show below, both these views are consistent with empirical evidence, which raises a major puzzle on the role of political institutions in delegation processes. Before turning to the empirical analysis, however, it is necessary to discuss a second determinant of delegation to independent authorities, namely political uncertainty.

Delegation and political uncertainty

While credibility is the most popular explanation for delegation to independent central banks and regulatory agencies, a second factor is also important, namely political uncertainty.⁴ A fundamental characteristic of democratic systems is the periodic alternation of elected politicians at top offices, so that any government can expect to exert authority over policy only for a limited period of time. When the partisan composition of government changes, policies are also likely to change, at least in part, and this is something incumbent policy-makers may want to avoid. Shepsle (Horn and Shepsle, 1989; Shepsle, 1992) called this 'legislative drift', with reference to the more common 'bureaucratic drift' that occurs when a bureaucratic agent implements a policy closer to its ideal point rather than that enacted by the political principals (in other words, moral hazard).

The political uncertainty argument is effectively synthesized by Moe (1990, 227–229):

'Whatever today's authorities create [...] stands to be subverted or perhaps completely destroyed — quite legally and without any compensation whatever — by tomorrow's authorities. Because the dangers of political uncertainty can be anticipated from the outset, however, today's authorities need not leave their creations unprotected. They can fashion structures to insulate their favored agencies and programs from the future exercise of public authority. In doing so, of course, they will not only be reducing their enemies' opportunities for future control; they will be reducing their own opportunities as well.'

There are two important components in the argument. The first is that insulating policy from politics increases its duration, which is a desirable outcome from the point of view of incumbent policy-makers, while the second is that the insulation limits the possibilities of control of all policy-makers, present and future, which in this perspective is a cost. In other words, insulation means both self-binding and binding others, and should thus be expected to be carried out when the benefits of the latter outweigh the costs of the former. This intuition is at the center of de Figueiredo's (2002) formalization of Moe's arguments, which shows that the most likely 'insulators' are 'electorally weak groups', namely those who happen to be in power at a certain moment, but do not expect to be able to regain soon after they lose it. In this case, insulation clearly means more binding others than self-binding, while for stronger groups, who can expect electoral successes in the near future, insulation carries a significant amount of self-binding. In support of these views, de Figueiredo (2003) found that in the US states, the line-item veto, which can work as an insulation technology for budgetary policy, is proposed by conservative legislators, but only when they think their electoral prospects are weak.

Very similar views have been advanced also for central banks. Lohmann argues that, in addition to the credibility problem, a reason why politicians grant independence to the central bank is that 'they anticipate that they might be in the opposition in the future' (Lohmann, 1998, 442), while in the words of Cukierman (1994, 56),

'[...] when different parties competing for office disagree about the structure of government expenditures [...] the party currently in office may grant some independence to the CB also in order to restrict the ability of the opposition (if and when it accedes to office) to spend on public goods which are in low priority for the incumbent party.'

Similarly, in his study of the politics of central bank independence Goodman (1991, 346) comes to the following conclusion:

'Politicians generally wish to maintain a high degree of freedom in their actions. However, they will be willing to change the status of the central bank to bind the hands of their successors, a decision they will make when they expect a short tenure of office. Binding the hands of one's successors, I have argued, is a critical element of any institutional change and a viable political strategy in the area of monetary policy.'

Delegation to an independent central bank or regulatory agency can thus be a means to insulate policy from politics. In other words, delegation can be a means to solve the political uncertainty problem. Of course, political uncertainty and credibility are partially linked, since, all else equal, more

political uncertainty leads to more credibility problems since alternation in government is one of the sources of change in the preferences of policy-makers. However, at the conceptual level the two problems are clearly different, since the incentives for delegation are clearly distinct (cf. also Lohmann, 1998, 442; Pierson, 2000, 491). In one case, the goal is credible-commitment capacity as a means to achieve, respectively, low inflation and appropriate private investment; in the other case, the goal is protecting policy choices from future influence by policy-makers with different preferences.

In the regulation literature, some studies have shown that the probability that an independent authority is established is positively linked to the risk for governments of being replaced by coalitions with different preferences (Gilardi, 2005b). In addition, a prominent scholar of regulatory reform has argued that in the United Kingdom, the preference of the Thatcher government for an independent telecom regulator was partly due to the desire to prevent future Labor governments to control it (Vogel, 1996, 131). Empirical evidence is scarcer for central banks, but one study has found that their independence is negatively related with 'party political stability', which to a certain extent is linked to political uncertainty (Bagheri and Habibi, 1998). More generally, the political uncertainty hypothesis has found empirical support in studies of delegation in the US context (Volden, 2002; De Figueiredo, 2003; Wood and Bohte, 2004).

To sum up, delegation to independent central banks and regulatory agencies may be due not only to credibility pressures but also to political uncertainty, since by insulating policy from politics it makes more difficult for future policy-makers to change the policies that current policy-makers have enacted. We can also note that the institutional context should also matter for political uncertainty. On the one hand, delegation may be useless as an insulation technology if future policy-makers can withdraw it easily, as is the case if political institutions do not protect the *status quo* (veto players as precondition for delegation) (Moe and Caldwell, 1994; De Figueiredo, 2002); on the other hand, if institutions prevent significant policy change, then delegation may not be needed as policies are already protected by existing institutional arrangements (veto players as functional equivalent of delegation).

Data

The dependent variable of the analysis is the formal independence of central banks and regulators in 17 European countries.⁵ More precisely, formal independence refers to the extent to which provisions written in laws or statutes make it more difficult (with respect to 'regular' bureaucracy) for elected policy-makers to control the behavior of bureaucratic agents. Of course, informal or *de facto* independence, as well as independence from other actors (such as

interest groups) are also important, but especially if one is interested in the consequences of delegation, rather than in its origins.

For central bank independence, I use two types of measures. The first is an average of the most commonly used indices, with data taken from Franzese (1999, 2003). All indices take into account aspects such as the status of the chief executive officer, and the powers and objectives of the central bank. Franzese's data reflect the situation in 1990. Secondly, I use the Cukierman index of legal independence (Cukierman *et al.*, 1992), which is probably the best known and the most commonly employed in the literature (and is one of the components of the Franzese measure), with data taken from Polillo and Guillén (2005). Since their data are longitudinal, I take into account central bank independence both before and after the Maastricht Treaty, which established the European Monetary Union and imposed, as a condition for joining the Euro, significant strengthening of the independence of central banks. The Maastricht Treaty thus led to considerable convergence on the level of central bank independence in European countries. Even though it would, in principle, be better to use the more recent data (i.e. for the post-Maastricht period), these are less informative on the country-specific factors leading to delegation to independent authorities, since the requirements of the Maastricht Treaty led to considerable convergence on the level of central bank independence in European countries.⁶ While the impact of supranational organizations on domestic policy-making is obviously an interesting question that deserves consideration, from the perspective of this article the Maastricht treaty has 'artificially' reduced the variation of central bank independence in European countries, and arguably limited the role of domestic factors in the decision to set the level of independence of central banks. Therefore, for the purposes of this study it may actually be more interesting to look at central bank independence in the pre-Maastricht period, when domestic factors were more 'free' to influence central bank structures.

Turning to regulatory agencies, their independence is measured through the index developed by Gilardi (2002), which is based on the Cukierman index for central banks discussed in the previous paragraph. Gilardi's index is composed of five dimensions, namely status of the agency head, status of the management board, relationship with government and parliament, financial and organizational autonomy, and regulatory competencies. Data have been collected by the author of this article.

All independence measures range from 0 to 1. About 20% of regulators actually have a score of 0, since no independent agency exists and regulation is carried out by government and general bureaucracy; by contrast, all central banks have an independence score greater than 0. Figure 1 shows how the different measures of formal independence vary across the countries and domains covered by the analysis.

Since formal independence is relatively stable but does vary over time, ideally we would want to have longitudinal data tracing its evolution. Unfortunately, such data are available for central banks⁷ but not for regulatory agencies. Therefore, it is currently not possible to integrate the time dimension in a comparison of the formal independence of central banks and regulatory agencies, and the analysis presented here is purely cross-sectional, like, it should be noted, most analyses of central bank independence (e.g. Bernhard, 1998; Moser, 1999; Hallerberg, 2002).

With respect to political uncertainty, I follow Franzese (2002) and operationalize it as the risk for a government of being replaced by a coalition with different preferences (replacement risk). Replacement risk depends both on the probability of losing office and on the composition of the new government. Always following Franzese (2002), I measure it as the product of the inverse of actual duration of governments and of the standard deviation of their partisan composition (over 7 years). This procedure gives annual values; since the analysis is cross-sectional, I have taken the average for the period 1960–2000. Data exhibit a good deal of variation, ranging from 0.03 for Austria to 0.57 for France. The mean is 0.25, which roughly corresponds to Norway, while the standard deviation is 0.17. Data have been collected by the author of this article.

Finally, for veto players I use George Tsebelis's own data set.⁸ Therefore, the United Kingdom has a single veto player, while the observed maximum is Switzerland with 3.87 veto players.

Statistical analysis

The results of the analysis are presented in Tables 1 and 2. The former shows models that oppose central banks to regulatory agencies, while in Table 2, for reasons that will be discussed below, models oppose central banks and utility regulators on the one hand, and other regulators on the other.⁹ Models are estimated through OLS, except models 1 and 5 where the tobit estimator was needed to correct for a sizeable clustering of the observations on 0¹⁰ (see Sigelman and Zeng, 2000). In the model that studies regulatory agencies

Figure 1 The formal independence of central banks and regulators in 17 countries.

Note: Bars indicate the independence of central banks and average independence of regulators in utilities (telecoms, electricity) and other domains (financial markets, competition policy, food safety, pharmaceuticals, and environment). Data not available for the central bank (Franzese measure) and utilities regulators in Luxembourg. Correlation between the two central bank independence measures pre-Maastricht: 0.734.

Source: central banks: Franzese (1999, 2003), Polillo and Guillén (2005); regulators: author's dataset.

(models 1), as well as in those that pool central banks and utility regulators (models 5–7), observations are not independent within countries, because several agencies exist in each country. Since this could lead to an under-

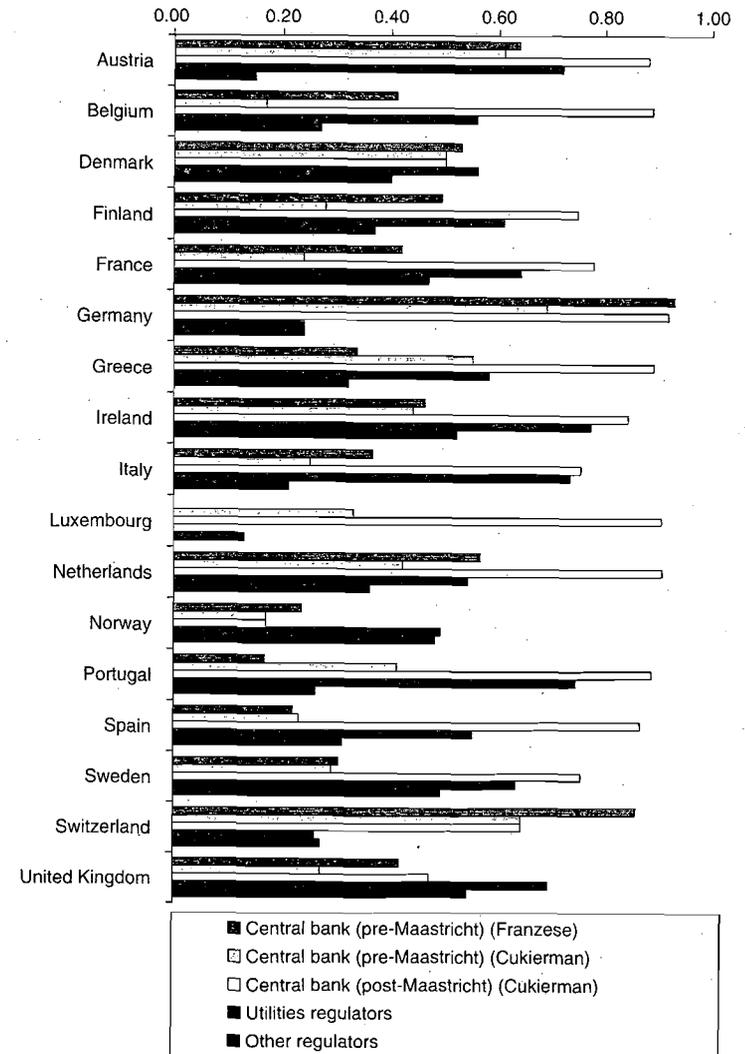


Table 1 Delegation to independent authorities: central banks vs regulatory agencies (dependent variable: formal independence)

	(1) Regulatory agencies (<i>tobit</i>)	(2) Central banks, pre-Maastricht (<i>OLS</i>) (<i>Franzese</i>)	(3) Central banks, pre-Maastricht (<i>OLS</i>) (<i>Cukierman</i>)	(4) Central banks, post-Maastricht (<i>OLS</i>) (<i>Cukierman</i>)
Utilities	0.267*** (0.059)			
Replacement risk	0.610*** (0.142)	-0.829** (0.268)	-0.832** (0.204)	-0.075 (0.231)
Veto players	-0.091*** (0.026)	0.155** (0.034)	0.081* (0.028)	-0.043 (0.047)
Euro				0.410** (0.131)
Constant	0.368*** (0.081)	0.310* (0.102)	0.382*** (0.072)	0.556** (0.124)
Wald χ^2	35.42			
Prob > χ^2	0.000			
R ²		0.49	0.51	0.66
F		10.6	8.89	7.28
Prob > F		0.002	0.004	0.005
N (censored)	100 (22)	15 (0)	16 (0)	16 (0)

Standard errors in parentheses (model 1: robust standard errors for clustering on countries; models 2-4: robust standard errors).

* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$.

estimation of the standard errors, I employ robust standard errors that account for the clustering of observations on countries. To facilitate the interpretation of results,¹¹ the discussion follows Figure 2, which, in the spirit of King *et al.* (2000), displays predicted values along with estimates of the uncertainty of results.

First of all, it should be noted that, as shown in model 1, regulators tend to be more independent in utilities than in other domains. This is in line with theoretical expectations, and indicates that credibility problems are not equally salient in all regulatory domains. In this respect, utilities regulators are most comparable with central banks, a point to which we shall return below.

Turning to role of the institutional context of delegation, Figure 2 shows that, indeed, the effects of veto players are different for regulators and central banks. Regulators are more independent in countries with few veto players, while central banks are more independent in countries with many veto players. Or, more precisely, central banks were more independent in countries with many veto players, since, as shown by model 4, the link between political institutions and central bank independence has faded away in the post-Maastricht period, when the requirements for joining the Euro have forced most governments to revise central bank structures. But before the emergence of this external pressure,¹² veto

Table 2 Delegation to independent authorities: central banks and utilities regulators vs other regulatory agencies (dependent variable: formal independence)

	(5) Regulatory agencies, without utilities (<i>tobit</i>)	(6) Central banks (pre-Maastricht, Franzese) and utilities reg. (<i>OLS</i>)	(7) Central banks (pre-Maastricht, Franzese) and utilities reg. (<i>OLS</i>)	(8) Central banks (pre-Maastricht, Cukierman) and utilities reg. (<i>OLS</i>)	(9) Central banks (pre-Maastricht, Cukierman) and utilities reg. (<i>OLS</i>)
Utilities		0.113 (0.091)	0.355* (0.131)	0.209* (0.072)	0.283** (0.087)
Replacement risk	0.639* (0.62)	0.069 (0.140)	-0.829** (0.263)	0.058 (0.155)	-0.832** (0.202)
Veto players	-0.088* (0.042)	-0.009 (0.022)	0.155*** (0.034)	-0.033 (0.023)	0.081* (0.027)
Veto players utilities*			-0.246*** (0.047)		-0.172** (0.041)
Repl. risk utilities*			1.347** (0.444)		1.350** (0.361)
Constant	0.346** (0.112)	0.471*** (0.096)	0.310** (0.101)	0.435*** (0.086)	0.382*** (0.071)
Wald χ^2	7.08				
Prob > χ^2	0.029				
R ²		0.07	0.36	0.25	0.46
F		1.17	7.09	7.55	9.54
Prob > F		0.355	0.002	0.003	0.000
N (censored)	70 (20)	45 (2)	45 (2)	46 (2)	46 (2)

Standard errors in parentheses (robust standard errors for clustering on countries).

* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$.

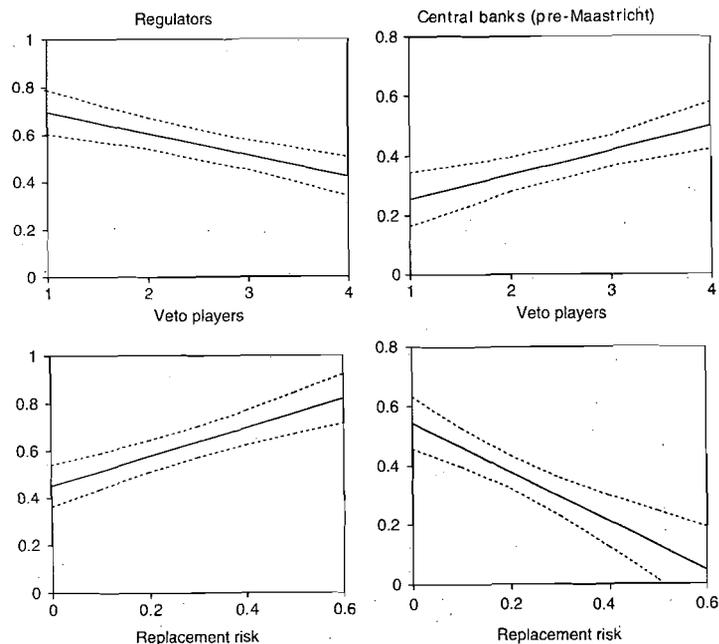


Figure 2 The formal independence of regulators and central banks (predicted values).
Note: Predicted values are computed on the basis of model 1 (for regulators) and model 3 (for central banks) in Table 1. The dotted lines delimit 90% confidence intervals.

players constituted a precondition for delegation in monetary policy, as argued in the literature. This relationship is robust to different measures of central bank independence, as can be seen in models 2 and 3. On the other hand, in regulatory policy veto players are a functional equivalent of delegation.

This finding constitutes a major puzzle. In principle, incentives for delegation are very similar in the case of both central banks and regulators. As we have seen, the credibility problem is one of the main pressures for delegation in both instances: delegation can be a means for improving the credibility of commitments, which is an important aspect in both monetary and regulatory policy. If this is true, then we should expect the institutional context to play a similar, if not identical, role in both cases. The fact that the institutional context matters so differently for central banks and regulators indicates that we are missing something important in the dynamics of delegation to independent authorities.

Secondly, political uncertainty also matters. As expected, the formal independence of regulators increases as replacement risk increases. This lends support to the argument that one of the motivations for governments to delegate powers to an agency they cannot directly control is the wish to limit the room for maneuver of future governments with different preferences. But again, delegation to central banks is different. Replacement risk did influence delegation to central banks in the pre-Maastricht period (a finding that is robust to different measures of central bank independence, as can be seen in models 2 and 3), but in an opposite way: central banks were more independent in countries with high replacement risk. This result is puzzling because it cannot be squared with the political uncertainty arguments suggested by Lohmann (1998), Cukierman (1994) and Goodman (1991). It is another signal that we are missing something important in our current explanations of delegation to independent authorities. Again, in the post-Maastricht period country-specific factors have lost importance for central banks, as shown by model 4.

How can these striking differences between regulatory agencies and central banks be explained? Of course, a possibility is simply that central banks and regulatory agencies do not belong to the same population. In other words, delegation to central bank and to independent regulators may follow completely different logics. However, we have seen that theoretical arguments are very similar in that they stress the central role of credibility problems, a view that has empirical validity since regulators, as expected, are indeed more independent in utilities, where credible-commitment capacity is a crucial political asset, than in other regulatory domains. A second point that links central banks and independent regulatory agencies is the violation by political principals of some key principles of delegation, notably the explicit renouncement to a series of important formal controls. The idea that bureaucratic autonomy can be granted by politicians in a fully deliberate way is of course not new (Huber and Shipan, 2002). In addition, the absence of formal controls obviously does not mean that no controls exist (McCubbins and Schwartz, 1984). Yet, the specificity of both central banks and independent regulators is not that political principals fail to set up extensive controls; it is that political principals deliberately build institutional arrangements designed to remove a range of controls that would otherwise exist almost by default. Central banks and independent regulatory agencies, therefore, do seem to belong to the same population of independent authorities (see also Thatcher and Stone Sweet, 2002; Jordana and Levi-Faur, 2006).

Continuing on the idea that independent authorities constitute a heterogeneous population, it could be that the relevant boundary is not between central banks and regulatory agencies, but between sectors where credibility issues are very important, and sectors where they are less salient. Since, as I have argued above, it is especially in utilities regulation that governments need

to possess credible commitment capacity, it is possible that central banks and utilities regulators exhibit the same pattern, while other regulators are different. This idea is tested in the models shown in Table 2.¹³ Model 5 analyzes regulatory agencies, but excludes utilities regulators. The findings remain robust, since replacement risk keeps a significantly positive sign, and veto players a significantly negative sign. Models 6 and 8 pool central banks and utilities regulators, and we see that the effects of replacement risk and veto players disappear. When studying central banks and utilities regulators together, neither replacement risk nor veto players seem to influence formal independence. This, however, suggests that delegation patterns may be different in the two subgroups. This idea is confirmed by models 7 and 9, where the interaction terms show that both replacement risk and veto players do matter, but in different ways for central banks and utility regulators. Therefore, it seems that the relevant difference is indeed between central banks on the one hand, and regulatory agencies on the other.

To sum up, the institutional context matters for delegation to independent authorities, but delegation to central banks is different from delegation to regulatory agencies. In the former, veto players constitute a precondition for credible delegation, while for the latter they are a functional equivalent of delegation. Why the same institutions have opposite effects for delegation processes that look so similar is indeed a puzzle indicating that our explanations are seriously incomplete. Political uncertainty is also important, but the findings raise a second puzzle, since replacement risk matters differently for regulators and for central banks. Again, what is so different in two delegation processes that seem so similar?

Conclusion

In this article, I have shown that delegation to central banks and independent regulatory agencies is in many respects very similar. In both cases, credibility concerns are one of the main drivers of delegation, the institutional context matters, and so does the uncertainty of incumbent policy-makers with respect to their re-election prospects. On the other hand, both the institutional context and the political uncertainty created by alternation in government work in opposite ways for central banks and regulators. Many veto players are a precondition for delegation to central banks, but a functional equivalent of delegation to independent regulators. Delegation to independent regulators is most extensive when political uncertainty is high, while the opposite is true for delegation to central banks, which are most independent when political uncertainty is small. I argue that these inconsistencies are a clear indication that current theories of delegation to independent authorities are seriously

incomplete. How can the differences between central banks and regulatory agencies be explained?

Firstly, the relationship between veto players and the formal independence of central banks could be spurious. Some authors have argued that cultural factors play an important role in monetary policy: historical experiences of high inflation may create strong cultural preferences for price stability. Germany is a case in point. Consistently with this view, central bank independence has been found to be correlated with public attitudes towards inflation (Hayo, 1998) and societal acceptance of the unequal distribution of power (de Jong, 2002). Although in the second analysis veto players (measured through checks and balances) remain significantly and positively associated with central bank independence,¹⁴ a possibility is that countries with a high number of veto players happen to be those whose political culture is more compatible with price stability as the primary objective of monetary policy, and therefore more compatible with the prescription of central bank independence as a means to achieve that goal. Since these arguments relate only to central banks and not to independent regulatory agencies, an implication could be that the 'real' effect of veto players on formal independence is negative (that is, they are functional equivalents of delegation), and that their positive effect for central banks is, in fact, due to the fact that attitudes on price stability and political institutions are correlated. Of course, this is just a speculation, which however deserves further investigation.

A second possibility could be that in the case of central banks, veto players are significantly related to formal independence, but have nothing to do with the credibility problem. Hallerberg (2002) has argued that, to explain central bank independence, two components of veto players matter, namely federalism (which affects the number of subnational veto players, as well as the strength of bicameralism), and multipartism (which affects the number of partisan veto players). In conjunction with differences between monetary and fiscal policy (e.g., the level of decision-making), the combination of federalism and multipartism determines the extent to which policy-makers can control policy outcomes, and to which they can be held responsible for them. These incentives then influence choices over the independence of the central bank. What is important for our purposes is that this argument does *not* link veto players with the credibility problem. Veto players are positively related to central bank independence, but for reasons that have nothing to do with the need to increase the credibility of monetary policy commitments. Since Hallerberg's (2002) argument is grounded on the specific characteristics of macroeconomic policies, it cannot be directly extended to regulatory policy. A possible explanation for differences between central banks and regulatory agencies, therefore, could be that veto players are positively related to central bank independence for the reasons developed by Hallerberg (2002), which are not

linked to credibility, while they are negatively related to the independence of regulators because, as argued here, they are functional equivalents of delegation. Again, this is just a speculation that should be further explored.

Far from being mere academic quibbles, these questions have significant implications for important issues such as the legitimacy of contemporary democratic systems. Delegation to independent authorities, in effect, is not a pure technocratic exercise. Independent central banks help crystallize an order that prioritizes monetary stability and from which some actors are set to benefit more than others, and prominent voices have been raised to question the appropriateness of this model (e.g. Stiglitz, 1998). More generally, the compatibility of delegation to independent authorities with democratic principles has been amply debated, with no clear answer in sight (Elgie, 1998, 2001, 2002; Majone, 1999, 2002; Scott, 2000; Sosay, 2006). Delegation to independent authorities has consequences also on policy-making. While the effects of independent central banks in inflation are well documented (though certainly not uncontested), the impact of independent regulators on regulatory policies remains largely obscure. Regardless of whether we are interested in the democratic or in the policy-making implications of independence, knowing where independence comes from in the first place seems a necessary condition for any assessment of the desirability of these institutional arrangements.

In conclusion, the main contribution of this study has been to identify a puzzle concerning delegation to independent authorities. The institutional context and electoral prospects matter for delegation to both independent central banks and independent regulatory agencies, but in symmetric ways. Making sense of this contradiction will lead to a better understanding not only of delegation to independent authorities, but also of the normative implications of these institutional arrangements.

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Notes

- 1 For simplicity, throughout the article 'more' or 'many' veto players imply also 'more distant'.
- 2 As with all theories, there is obviously no consensus on the relationship between the credibility problem, central bank independence, and inflation, nor on the 'reality' of the credibility problem itself. There is a large number of sceptical and overtly critical assessments of the credibility approach to central banking (see e.g. Hayo, 1998; Forder, 2000, 2001; Bell, 2002; Hayo and Hefeker, 2002; McNamara, 2002; Bibow, 2004; Quaglia, 2005), and a thorough discussion would be outside the scope of this article. The prominence given to the credibility problem here rests on two grounds. Firstly, the credibility hypothesis has proved to be useful for the empirical study of the formal independence of regulators (Gilardi, 2002, 2005a,b). Secondly, it supplies a link between central banks and independent regulatory agencies; as this article shows, the comparison of these two types of institutions has interesting implications for the study of delegation to independent authorities.
- 3 Fixed exchange rates are an alternative means to improve credibility, and actually consist in delegating monetary policy to a *foreign* central bank (Bernhard *et al.*, 2002, 706).
- 4 Which, quite ironically, was called by Moe (1990) 'the neglected side of the story' already 15 years ago.
- 5 Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom. Regulatory domains: telecoms, electricity, financial markets, competition policy, food safety, pharmaceuticals, and environment.
- 6 Among the countries that have joined the Euro, the variance in central banks independence has decreased, while the mean has increased (both differences are significant at the 0.01 level).
- 7 Polillo and Guillén (2005) have data for 71 countries from 1989 to 2000.
- 8 Downloadable at <http://www.polisci.ucla.edu/tsebelis/>.
- 9 I have also run a pooled model with both central banks and regulators and including interactions between central banks and, respectively, veto player and replacement risk. The interactions clearly show that veto players and replacement risk have opposite effects for central banks and regulatory agencies. The analysis is not shown but is available upon request.
- 10 All models estimated in Stata 7 for Macintosh. For tobit models I used the `-intreg-` command rather than the `-tobit-` command in order to obtain robust standard errors for clustering on countries.
- 11 As is known, tobit coefficients cannot be directly interpreted since they do not represent marginal effects on the dependent variable.
- 12 Of course, strictly speaking the Maastricht treaty is not an external pressure on Member States since it has been established precisely by those Member States. In the context of this article, however, the Maastricht treaty is an exogenous variable.
- 13 Models 6 to 9 are estimated through OLS since only two observations are clustered on 0 for the dependent variable. Estimating the models through a tobit gives virtually identical results.
- 14 Hayo (1998) does not take veto players into account.

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