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Political Discipline Mechanism**

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Performance Measurement as a Political Discipline Mechanism

Governments at one level increasingly develop measures of the activities of policymakers at another. That policymaking behavior as well as the measures can have electoral consequences. A large literature has developed in public administration and policy that assesses the determinants and validity of performance measures and their influence on the strategic behavior of public organizations. While recognizing the progress made by this line of research, we introduce a theoretical framework that accounts for the political context in which performance measures emerge and are implemented. Specifically, we claim that superordinate governments use these kinds of performance measures as a political discipline mechanism (PDM) to incentivize the behavior of subordinate governments. We present a formal model and derive a set of testable implications of interest to researchers on performance management and bureaucratic politics.

Performance management creates powerful incentives for organizations to operate in a different ways. Many performance incentive schemes are implemented within bureaus as a tool of management. Yet, more and more, politicians seek to incentivize the implementation of programs in ways they desire by performance measures. At the core of these incentives is information; politicians use incentives to gain information about policy implementation. Because politicians can use this information about implementation to shape policymaking, we call performance mechanisms of this variety political discipline mechanisms (PDMs). PDMs involve incentive regulation by politicians of decisionmakers located at lower levels of government, many of whom are also elected. The U.S. federal government, for instance, creates a PDM to elicit information about the implementation activities of the subordinate politician, such as a state government.¹ This setting – which we call government-checking-government (GCG) – yields a different outcome to that in standard accounts of bureaucratic control. Any theory employed to understand performance-based PDMs must account for electoral interests. It must also share more with theories of delegation than do current analytic conceptions of public sector performance. Through a formal model and a set of implications, we offer a novel research program for the study of performance-based PDMs that treats seriously the politics underlying these schemes.

One does not have to look far to find prominent examples of GCG. In the U.S., federal initiatives such as supplemental education services for children in failing schools under the No Child Left Behind (NCLB) Act impose mandates on state and local governments (e.g., Heinrich 2010; Burch, Steinberg, and Donovan 2007). In the United Kingdom, a range of performance indicators have been established by the Westminster government to regulate politicians and bureaucrats at the local level; these include school performance ratings as well as the Comprehensive Performance Assessment and Comprehensive Area Assessment (Boyne, James, John, and Petrovsky 2010; Bertelli and John 2010). In Colombia, the Ministry of Finance

¹ The Supremacy Clause (Art. VI, Cl. 2) of the U.S. Constitution establishes the superiority of federal statutes, creating the superordinate-subordinate relationship in our example. See *McCulloch v. Maryland*, 17 U.S. 316 (1819).

developed a system of traffic lights – red, yellow and green – to assess the indebtedness of its thirty-two departments, with red leading to a performance review (Echavarría et al. 2002). In the 1990s the European Union developed the Open Method of Coordination to try to discipline member states, which was given greater force after the Lisbon Summit of 2000. That agreement involves establishing measuring instruments in the form of statistics, indicators and guidelines; benchmarking by comparison of the Member States' performance; and exchange of best practices all monitored by the Commission (Borrás and Jacobsson 2004). Each of these schemes provides information about the policymaking setting to a higher level of government. The model we develop places such information at the center of the performance measurement problem.

The attraction of performance measurement as a PDM is the collection of information is easily cast in terms of technocratic objectivity.² As a result, its implementation in a wide variety of contexts has transformed the public sector, leading public management scholars to pay considerable attention to the phenomenon (e.g. Hood, Scott, James, and Jones 1999; Van Thiel and Leuw 2002; Heinrich and Marschke 2010; Propper et al. 2010). However, this literature has given little systematic consideration of the impact of the wider political institutional environment on these schemes, that is, in their role as PDMs. This omission has not gone unnoticed by scholars, who increasingly argue the politics underlying performance schemes needs more theorizing and investigation (e.g., Moynihan 2008, 14-17, 58-72; Radin 2006). As Hill and Lynn (2009, 320) note, “elected officials want to know how performance will affect their agendas, political bases, districts, constituencies, and re-election prospects.”

We address this challenge and set out a simple formal theory with several important testable implications and a wide variety of fruitful extensions. We claim that the performance-based PDM can be understood through a political logic that can be described in a spatial and informational setting: one group of politicians defines the process and parameters of gathering

² While some desired policies are induced by collecting and publishing information suggesting a self-enforcing PDM, some enforcement by the superordinate may necessary as a credible commitment to achieving those policies (Gambetta 1994).

performance-information from another policymaker, who strategically provides that information. We aim for researchers to apply our approach to a variety of institutional and comparative contexts.

The next section sets out our formal theory of performance-based PDMs. The model generates a set of testable implications, which we discuss, highlighting how variations in political institutions, parties and interest groups affect the operation of performance-PDMs. We conclude with some reflections on the operation of the PDM and implications for the politics of performance management.

The Model

We examine an agency problem between two institutional actors: a superordinate government that has formal authority to authorize, finance, or otherwise shape administrative activity performed by another actor, the subordinate government. These subordinate governmental actors may or may not face direct election; what is required is only that they have policy preferences. In the case of direct election, publicized performance information can invite voter reaction when deciding whether to retain or reject incumbent politicians and parties (Boyne et al., 2009; Revelli 2008). It may also generate reputational effects within government. When these electoral connections are not themselves related, as in the case where electoral geography for the actors is non-coterminous, the superordinate is likely to be less concerned with policy outcomes produced by the subordinate. In the terms we have introduced, there is no GCG problem. But when the electoral fortunes of these superordinate are related to the policymaking actions of the subordinate – states implementing federal policies, for instance – the superordinate considers any policy drift by the subordinate to be more salient and the GCG problem arises.

Superordinate Preferences

Our model is presented in the form of a one-shot spatial policymaking game with imperfect information. The superordinate's utility is represented formally as follows.

$$U_s = -\rho(\bar{x} - x)^2 - \pi(w)$$

The superordinate cares about policy set by the subordinate and its utility diminishes the more distant the implemented policy $x \in \mathfrak{R}_+$ is from its own ideal point \bar{x} . To capture the impact of electoral geography, the foregoing utility function states that the utility the superordinate draws from policy is salience-weighted, and this weight is based on its electoral prospects in the subordinate's geographical constituency. Specifically, the parameter $\rho \in [0,1]$ is a salience weight. In the case of elected subordinates and party politics (Bertelli and John 2010), ρ is the probability that the characteristic voter in the subordinate's constituency votes for the superordinate's party.³ To simplify the presentation, we treat these electoral prospects as exogenously determined.⁴

PDM and Policymaking Technology

The function $\pi(w)$ represents the performance-based PDM implemented by the superordinate. Specifically, the PDM technology is $\pi(w) = \varphi - \beta\hat{w}$, a linear incentive scheme. The parameter $\varphi \geq 0$ denotes the fixed cost of implementing the performance regime – creating a department to administer it or contracting with a third-party to implement it, acquiring a management information system, and so forth – accrues only to the principal. While this cost is represented parametrically here, it is likely impacted by a variety of institutional factors. In subsequent discussion, we suggest a variety of possible institutional impacts that have empirical implications.

³ It is useful to think more generally about the salience weight as being derived from the limited scope of the policymaking activity of the subordinate. For instance, a state may be particularly important in a particular election or the policy being considered is particularly resonant in public opinion. We do not endogenize the subordinate's own electoral prospects, though this would be a useful extension in future research.

⁴ This simple representation permits a rich intuitive consideration of the incentives we describe. Empirical evidence suggests that voters split their tickets (Burden and Kimball 1998, Heath, McLean, Taylor, and Curtice 1999, Gabel and Palmer 2000), making our assumption more realistic. Such electoral behavior generates outcomes that produce more partisan and ideological differences between superordinate and subordinate politicians. The superordinate might also be a supra-national institution, such as the European Union, which may not have party interests that correspond with the subordinate, such as a member state, but do have ideological leanings that might be represented in a common metric.

The technology by which the subordinate determines policy is $x = p + w$, where $p \in [0,1]$ is the policy chosen and $w \in [0,1]$ is the true state of the world learned by the subordinate when implementing the policy. This technology is standard in the delegation literature (e.g., Epstein and O'Halloran 1999). The magnitude of the performance incentive is captured by $\beta \in [0,1]$. The subordinate submits a "report" $\hat{w} = w + d$ about the state of the world to the superordinate through the performance measurement mechanism. A specific example would be the information submitted in response to a forthcoming inspection, such as in preparation for a school inspection by English Office for Standards in Education, Children's Services and Skills (Ofsted). The report is composed of the true state of the world and the policy "drift" $d \in [0,1]$ that the subordinate chooses. Because this interaction is characterized by imperfect information – the superordinate cannot observe the true state of the world, only the report – drift corresponds to a well-known source of agency loss in delegation models. While the superordinate would like the PDM to reveal the state of the world, there are many things that advantage the subordinate, who is closer to the policy implementation problem, in the process. As a result, the superordinate cannot determine the amount of drift in advance and anticipates none $E[d]=0$.⁵

Subordinate Preferences

The subordinate cares about policy and the inducements the performance measurement scheme offers to it. Disutility is generated by divergence of the implemented policy from the subordinate's ideal point \underline{x} . The utility of the subordinate is denoted as follows.

$$U_s = -(\underline{x} - x)^2 - \beta \hat{w}$$

The performance mechanism in our model assigns a fixed cost to the superordinate (principal) and a variable punishment to the subordinate (agent) as indicated by the decrease in

⁵ While the nature of this expectation is an interesting topic for future research, we note that it can be intuitively understood in our model as an expectation of positive drift $d + \epsilon$ where the superordinate does not know (a) the precise magnitude of d nor (b) does it have any information whatsoever about the size of ϵ , which it considers stochastic. The value of ϵ might be correlated with a host of political and administrative factors such as agency reputation and capacity. The effect of the stochastic component is significant to give the superordinate a zero expectation of d in our model.

utility the subordinate realizes as a result of a report of a positive shock provided to the superordinate. Incentive contracts such as $\pi(w)$ not only transfer utility but also assign risk. The performance-based PDM requires the subordinate to share the risk of unfavorable states of the world with the superordinate. This risk-sharing aspect of PDMs is important. For instance, it is true that educating underprivileged children is challenging and that enacted policies in that area are difficult to achieve, but both federal (superordinate) and state (subordinate) politicians will be blamed by voters for implementation problems. Federal statutes can include performance-based PDMs to share that risk of voter opprobrium with the states. Imperfect information about the state of the world provides an advantage to the subordinate that works against this risk-sharing PDM, but the PDM works against policy drift, a strategic choice for the subordinate.

Order of Play

The interaction between superordinate and subordinate proceeds in the following manner.

1. In the first period, the superordinate chooses a policy p and institutes a PDM, $\pi(w)$.
2. The subordinate, in the second period, learns the state of the world w and reports \hat{w} to the superordinate via the performance mechanism.
3. Policy x is then implemented in the third stage and payoffs are realized.

A subgame perfect Nash equilibrium for this game can be found via backwards induction.

Proofs for the lemmas and propositions we discuss are presented in the appendix and the presentation of the results below is in an intuitive form.

Results

We begin with a description of the subordinate's optimal choices. The exposition then proceeds to equilibrium results. Each result is discussed intuitively here, while its empirical implications are given a fuller treatment in the next section of the paper.

Lemma 1 (Policy Drift). The subordinate's optimal choice of drift (a) increases with policy conflict and (b) decreases as the legislated policy p increases. (c) Smaller implementation differences due to the true state of the world as well as larger performance weights β decrease drift.

The subordinate's choice of the magnitude of drift is impacted by the PDM in the direction intended by the superordinate. This implies that the risk-sharing element of publicized performance measures is not wholly abrogated by the superior knowledge of the subordinate about the state of the world. At the same time, the subordinate takes advantage of favorable enacted policies and knowledge of the true state of the world when making its choice. We define policy conflict in terms of the spatial distance between the most preferred policies (ideal points) of the actors. As that distance increases, we say that policy conflict increases. Lemma 1 states a version of the well-known phenomenon of drift from policy conflict that favors the "ally principal" (i.e., Bendor and Meirowitz 2004) in the appointment of subordinates. The separate electoral connections driving the form of GCG problem in Bertelli and John (2010) make such appointment impossible.⁶

Lemma 2 (Performance Reporting). The subordinate's report does not depend on the true state of the world, but is impacted by the performance metric in a manner that brings implemented policy in the direction of the superordinate's policy enactment.

This separation result – that \hat{w} does not depend on w – is striking: the performance metric sets up incentives for a report about the state of the world that contains no information about true policy shocks. As the appendix shows, the report decreases in β , which supports a claim that more weight placed on the report by the superordinate induces the subordinate to claim that the policy shock from the state of the world is lower – yielding a smaller difference from the enacted policy – regardless of what the true state of the world may be. As such, the risk-sharing aspect of the PDM still operates. The report also decreases in the enacted policy; as that policy diverges more from the superordinate's ideal point, the subordinate reports a smaller policy shock. Finally, Lemma 2 shows that the report increases in the policy conflict between

⁶ Where appointment is possible, it seems likely that it can mitigate the GCG problem for the superordinate and such an extension would be a profitable avenue for future research.

superordinate and subordinate. As these actors prefer more distant policies, the agent justifies moving policy closer to its own preferred outcome by reporting a larger policy shock and taking the consequences in disutility.

We now present equilibrium behavior for the superordinate. Once again, we consider the form of GCG in which both actors have electoral connections to some portion of the same constituents. These propositions introduce an element of distributive politics. Bertelli and John (2010) note that performance scores are instrumental to the distribution of benefits across jurisdictions. The theoretical literature on distributive politics has elicited competing propositions about whether benefits are distributed to “core” supporters where electoral chances are high (Cox and McCubbins 1986) or “swing” areas where they are nearer to chance (Dixit and Londregan 1996).

Proposition 1 (Policy Enactment). (a) The impact of the report on the optimal policy enactment of the superordinate is negative, and more so when the subordinate operates in a “swing” area. (b) The probability of election positively impacts the optimal policy, but that impact is larger in “swing” areas.

Examining different values of ρ can capture the impact of the electoral geography on the superordinate’s policy enactment. Proposition 1 suggests this compensation is greater in swing constituencies; as the subordinate reports a greater policy shock, the superordinate uses policy enactments to compensate and does so more when its election prospects are questionable. When the superordinate considers its party or ideology safe in the subordinate’s area – in a “core” scenario – the superordinate considers the report to a lesser extent when enacting policy. This can be further understood through in the second part of the proposition. As election probability ρ increases, the superordinate moves policy away from its ideal point and does so more in swing areas. This provides the subordinate with additional autonomy in policymaking; in swing areas, the superordinate will tolerate more policy divergence.

Proposition 2 (Punishment). Total punishment meted out under the performance scheme depends on the true state of the world, ideological divergence between the superordinate and subordinate, and the election probability. (a) The election probability has a negative impact on total punishment, but that impact is less negative when the subordinate represents swing constituents. (b) As the subordinate's ideal point diverges from that of the superordinate, total punishment increases in direct proportion to the punishment weight β . (c) As the impact of the state of the world grows, total punishment increases, but that punishment is greater in core constituencies.

Punishment is the impact on the superordinate of reporting a positive state of the world and lies at the center of the risk-sharing mechanism that we have called a PDM. Essentially, it captures the negative consequences of telling the superordinate that its policy enactment is not possible to implement. Empirically, this might be manifest in lower performance assessment scores that are publicized by the subordinate (cf. Bertelli and John 2010; James and John 2007).⁷ Proposition 2(a) states that higher values of ρ decrease total punishment levels, but swing constituencies receive more punishment than do core areas. As the election probability increases, punishment decreases, but that decrease in punishment is more dramatic in swing than in core subordinate constituencies. This result means swing subordinate areas are advantaged over their core counterparts in equilibrium. It received support in Bertelli and John (2010) who find that the English Comprehensive Performance Assessment regime for local authorities targeted swing rather than core voters when it was in the governments interest to do so. Taken together, propositions 2(a) and 2(c) show favoritism for swing subordinates when it comes to the punishment scheme set up by the performance-based PDM. The latter states that even as the impact on drift from the superordinate's ideal policy due to the true state of the world becomes larger, core and swing subordinates are considered differently, and the latter is punished less.

Proposition 2(b) captures an important ideological, or policy preference, component of the story. If party divisions correlated with ideological differences as is ubiquitous in competitive party systems like the U.S. (see, e.g., Poole and Rosenthal 1997), it suggests that divided

⁷ It is important to note that our theoretical argument here does not require the publication of performance information and its access by the voters after it is received through the PDM. Once the superordinate has that information, it can target information – engage in shaming – about the subordinate in any way.

government should increase punishment because the existence of different power holders at each level of government changes the payoff to the superordinate. Bertelli and John (2010, 11) provide evidence of this in that English local authorities (subordinates) controlled by the Conservative party received worse performance ratings under a Labour central (superordinate) government.

Proposition 3 (GCG v. Bureaucratic Control). In a bureaucratic control problem, the policy choice of the superordinate exactly offsets the performance report. In a GCG problem, the policy choice weights that reporting information by the probability of reelection.

In stating the GCG problem, we have distinguished it from the widely examined problem of bureaucratic control as it appears in the literature (cf. Epstein and O'Halloran 1999; Volden 2001). When $\rho = 1$, the superordinate is fully concerned with the policy implemented by the subordinate as in the standard bureaucratic delegation model. Comparing the resulting equilibrium policies in this form of the model with the GCG result stated in Proposition 1 uncovers a crucial difference. In the bureaucratic control problem, policy enactments by the superordinate are formed to offset precisely the policy drift contained in the superordinate's report about the state of the world. The GCG problem weights that correction by the election probability.⁸

These propositions provide the logic for most of the empirical implications discussed in the following section. However, two additional conjectures are necessary for the full scope of the research program we encourage. These are conjectural in the sense that they require speculation about the impact of exogenous correlates on parameters in our model. They nevertheless require the mechanics of the model for their development. Consistent with the presentation style of this section, technical detail of the logic behind these conjectures is presented in the appendix.

Conjecture 1. Institutional and political features that increase the efficacy of the punishment weight β , provide exogenous information to the principal about the true state of the world, and/or reduce policy conflict make the implementation of performance-based PDMs more likely.

⁸ We have noted, however, that our setup is more general. If ρ is interpreted as the salience of the subordinate's policymaking activity, Proposition 1 provides additional leverage on performance management between politicians and bureaucrats. In empirical studies of performance PDMs across policy sectors, difference in salience is likely to matter.

Costs of the PDM must not outweigh its benefits. The model permits our consideration of the impact of policy drift on the superordinate's utility, and Lemma 1 provides us with information about the correlates of that drift. Using these components, we speculate that any exogenous positive correlates of the efficacy of the performance weight β , information about the true state of the world, as well as means of reducing policy conflict will increase the utility the principal gains from the implementation of a performance-based PDM because they will decrease drift. Institutional and political scenarios in which these conditions prevail will allow the superordinate to incur greater fixed costs φ of implementing the PDM, and we will be more likely to observe PDMs – and more costly PDMs – in those settings.

Conjecture 2. Over time, performance mechanisms become less costly to operate. Thus, they will only be replaced for political or other exogenous reasons.

The intuition is drawn from the existence of the fixed cost of the mechanism φ .⁹ Repeating our model with no discounting is tantamount to observing the interaction over again (see e.g., Schmidt 1993). If φ decays over time, as when administrative tasks are learned, sunk costs are not repeated, and so forth, the total cost of the PDM accruing to the superordinate falls. Other reasons, such as increased policy conflict or policy shocks would make drift more costly to the superordinate. Such cost increases would incentivize the replacement or revision of the PDM.

In the following section, we describe implications derived from the model that might be observed in a variety of institutional contexts. Our aim is to develop a preliminary research program. We hope that these extensions will facilitate the development of theoretical and empirical evaluations and extensions.

Discussion and Extensions

The foregoing model develops a series of empirical expectations from a small set of parameters. The task of this section is to discuss these implications in terms of the likely variation

⁹ In reality, the costs of performance monitoring can be shifted to subordinates, who may have to hire consultants and so forth to prepare required reports. These costs are not included in the model we present, but it would be a useful extension to consider them. It is reasonable to expect them to decay as well, suggesting that the incentives are similar to those we discuss here.

in political and institutional structures in the comparative context. Such variation relate both to the extent to which distributive politics enters into performance management and the type of political interests that are rewarded. Differences in both institutional/political context and in the type of PDMs that can emerge generate a further set of testable claims that are summarized in Table 1. The table also notes the propositions and conjectures that are tied to each claim, and our claims in the text reference their number in the table.

TABLE 1 ABOUT HERE

In Proposition 3, we show a principal difference between the bureaucratic control and GCG problems. Superordinates in bureaucratic control problems can offset policy bias due to drift with their choice of policy enactment. This is a result similar to those in well-known models (e.g., McCubbins and Schwartz 1984; McCubbins, Noll, and Weingast 1989). Policy design is a crucial lever for solving the bureaucratic control problem. Lemma 1 shows that the GCG problem introduces a weight on this policy adjustment from the election probability. We claim (1) that the extent of jurisdictional overlap will determine the strength of the incentives for distributive politics. For example, attenuated overlap, such as between the European Commission and constituencies of the European Parliament, should reduce pressure to politicize a PDM, rendering it more truly technocratic.¹⁰ Outside democratic systems there is no overlap, yielding exclusively a bureaucratic control problem. An example is the management of non-mission based targets in China, whereby the central government regulates local authorities (Gao 2010). Where there is close overlap, such as between local authorities and Westminster constituencies, the incentive for targeting will be much stronger. The model provides expectations that drift, reporting information, and punishment depend on ideological (policy or partisan) conflict between the superordinate and subordinate politicians.

Several results in the model reveal that the severity of the GCG problem varies according to ideological and partisan conflict, which in turn vary across political jurisdictions. The U.S.

¹⁰ Attenuation can have an impact, for example, on the transmission of information between the actors.

Department of Education (USED) may be directed by a secretary and top officials appointed under a Republican president, while state officials are Democrats. An example of this kind of federal-state ideological disagreement can be found in a statement by the president of the Virginia Board of Education – the body that sets education policy for the state – when submitting its NCLB Accountability Plan (\hat{w}) in 2003: “Let me state for the record that we are ‘agreeing’ to [regulations promulgated under NCLB] only because USED has mandated them, and we agree only under strong protest. We do not believe these [regulations] represent sound or rational policies...” (Sunderman and Kim 2007, 1068). In 2003, Virginia’s governor was Democrat and then presidential hopeful Mark Warner, and elections that year significantly eroded Republican legislative majorities.

Such ideological and partisan disagreements present incentives for the superordinate’s agent USED to reward (punish) subordinate states on the margin. Voters may use good (poor) information about their state’s performance in assessing subordinate politicians – Warner and Virginia legislators – at the ballot box. In terms of the model, this means the policies of the subordinate will be more distant to those of the superordinate. Our assertion (2) is that, other things being equal, partisan and ideological conflict should be associated at the margin with more while its absence should be associated with less punishment.

Interest groups in a policy area can be characterized as concentrated or diffuse. When key group preferences are aligned, the policy area can be said to display interest group concentration, and when they are not, diffusion is present. For example, the constellations of interests for programs implemented by the U.S. Army Corps of Engineers are likely more concentrated than those surrounding NCLB. Organized interests can defend their positions regarding subordinate outputs and policy outcomes by monitoring PDM information carefully and sounding fire alarms to the superordinate regarding policy drift (McCubbins and Schwartz 1984). This feature of policy-making relates to Conjecture 1; when the superordinate has better information about the state of the world, the potential for agency drift decreases and the efficacy of the punishment

element of the PDM improves. In terms of the model, interest groups provide information about the true state of the world leaving less room for the subordinate to choose significant policy drift. Such influence may be informal as in the sub-government account of policy-making (Richardson and Jordan 1979), but are likely to be greater when a PDM is designed to incorporate representatives from the regulated group on its governing body in a corporatist arrangement. This is related to the strategy that underlies deck stacking in McCubbins, Noll, and Weingast (1987; 1989). But, such a condition may also yield capture. In the case of the Audit Commission, which regulated the performance of local authorities in England, commissioners were appointed by central government from a set of people who have direct ties to the regulated entities, namely, local authorities. Commissioners were current local politicians, bureaucrats, former politicians and bureaucrats, and other local officeholders. This arrangement occurs because local government has a legitimate expectation to be consulted as experts. However, the professionalization and cohesive nature of the regulated group may disguise politics as these people can both give advice and represent the interests of their localities without being detected. Bertelli and John (2010) find Audit Commissioner's ties to local authorities have significant impacts on the performance scores that local authorities receive. In contrast, in Colombia, there are few contacts between mayor and the Contraloría and the Procuraduría - the main oversight groups - because former do not trust the latter (Avellaneda 2009, 302).

We next claim (3) that the more concentrated the interest groups the more impactful is the information they provide to the superordinate (e.g., Banks and Weingast 1992). Such influence has similarities with the Chicago school regulatory capture argument to which we have alluded. Stigler (1971) argues that when regulators can impact the profitability of firms, the firms bid for favorable influence through direct and indirect support. Peltzman (1976) shows that even politically insignificant groups that are sufficiently concentrated can influence regulatory outcomes in this way. When interests are diffuse in a policy domain, PDMs have less potential for capture, but superordinates also have fewer opportunities for exogenous information to make

them more effective. The ability for key interest groups to become informed about the implementation of the performance measurement system is not only part of the legitimation strategy for regulatory regimes, but also aids in informing legislatures about policy implementation realities (McCubbins and Schwartz 1984). Unlike in economic markets, actual performance in government – in the sense of prices, quality, availability of goods for consumers – is rarely measured directly. Outputs are an artifact of the politics of bureaucratic structure, as are legislation and agency structures (Moe 1995). Moreover, in the modern context of networked governance, structures for policy implementation are more complex and fluid than in traditional bureaucratic settings (Heinrich, Lynn, and Milward 2010). Governmental service providers perform multiple tasks when implementing a single policy and goals may be ambiguous (Rainey 1993; Chun and Rainey 2005). These aspects of policy production increase the costs of monitoring and yield strong incentives to involve interest groups in reducing them (Banks and Weingast 1992). Capture and fire alarm oversight work in opposite directions.

The nature of government structures may also impact the level of policy conflict and the availability of reliable information about the state of the world to the superordinate politician. Structures may be centralized in that they concentrate government power or decentralized because they diffuse it. Even when delegating power, centralized states maintain tighter “chains of delegation” (Bergman et al., 2003) so that intervention by central politicians is always possible. Applying the logic of Conjecture 1, we claim (4) that centralization may allow the superordinate to get better information about the true state of the world as well as to reduce ideological conflict with the subordinate. Concentrated power makes it easier and more likely for the superordinate to incur the cost of creating agencies that collect the information and apply the punishment required by the PDM. An example is the creation of “quangos” – arms-length non-departmental public bodies – that have a reputation for independence even though they are subject to political influence (Bertelli 2008). The Audit Commission (AC) was a public body created by Act of Parliament with the remit to audit local government and other agencies in

England. The AC was not under the direct control of central government departments. However, the Department of Communities and Local Government appointed its Commissioners and legislation to change performance management had to be sponsored by that department. The budget of the agency was approved by the Treasury. As Kelly (2003, 466) writes, the AC “is widely perceived to be independent of central and local government, although, in practice, it works closely with Ministers and government departments.” In such context, the PDM can be applied at lower cost than in systems – like the U.S. – where governmental authority is less concentrated.

Decentralized systems generate different incentives. The PDM may not be able to influence subordinate action in such a pronounced way; performance may be subject to political control either by Congress or the president as well as judicial review. PDMs may also introduce risk-sharing across various levels of government. For example, actors at local, state, and federal levels sought to diffuse responsibility for performance failure in the wake of Hurricane Katrina (Maestas, Atkeson, Croom, and Bryant 2008). In more hybrid systems, combinations of such incentives may be observed. In Canada, for instance, a strong performance management system emerged since 2004 to control the activities of federal agencies (Bouckaert and Halligan 2008, 256-282), but is not directed across the states where Canada’s Auditor General does not have jurisdiction.

The degree of party centralization (5) may also play a role in shaping performance-PDMs under a similar logic. Party leaders in the subordinate government can obtain more information from their party organization if there is a top-down structure than if the party is decentralized. In the U.S., national parties are decentralized across federal, state and local levels, making them more like federations. By contrast, many parties in European states are more centralized – central party officials have more leverage with direct local officeholders. Where governments regularly form coalitions, some of these features of centralization may be weakened because the government seeks to enforce policy bargains. The superordinate coalition would have to weight

the electoral interests of more than one party in calculating the electoral benefit in the policy regime.

Conjecture 2 suggests that while there is an economic incentive for performance-based PDMs to be sustained over time, politics may generate costs that make it advantageous for the superordinate to end them and stable PDMs are not consistent with the views of experts who have long observed instability and replacement in performance regimes. The Thatcher government's Financial Management Initiative and subsequent reforms of the British central civil service are examples (Pollitt 1993). Performance ratings may rise universally over time, losing their ability to separate subordinate types. Policymakers may simply wish to claim credit for reforming a system (Pollitt, et al. 2010).

We suggest that the older the PDM, the more fluctuation in relevant political interests can change its value making it more likely that its economic benefits do not outweigh its political costs. This insight is consistent with, but provides a new logic from, some recent work on performance management as a dynamic system (Heinrich and Marschke 2010). In those arguments, the subordinate can use its superior information about the state of the world to improve its performance or to engage in gaming, whichever strategy has benefits that outweigh costs. The subordinate compromises the PDM by aligning it to its own interests over time. In our account, with time, the mechanics of the PDM overcome the possibly high costs of implementing it. But, gaming (as opposed to spatial policy drift), opportunities for credit claiming from reform, and so forth make the scheme less appealing to the superordinate. Formal extensions of our model that examine the variable costs of the scheme under different institutional assumptions could provide important insight into the process by which performance-based PDMs change over time.

Conclusion

We have offered a political-economic theory of performance-based PDMs, a growing world-wide phenomenon. We claim its basis in the GCG problem that arises when a superordinate government seeks to regulate organizations whose performance influences their

electoral prospects. Constituents reside and vote within jurisdictions where subordinates provide important public services. A political dimension to mechanism of collecting and evaluating performance information is important for scholars to recognize. Incorporating an electoral component, our framework differs from bureaucratic control model as well as the application many principal-agent models in public administration. Extant work in this area is characterized by elected representatives shaping the actions of unelected bureaus as they implement particular public policies (cf. Aberbach and Rockman 1976; Carpenter 2001; Gailmard 2009; Huber 2007; McCubbins, Noll, and Weingast 1987, 1989; Whitford 2005; Wood and Waterman 1994). We have added this component in a simple way and urge scholars to extend it.

Our approach incorporates some familiar features of the political economy of bureaucracy. Of particular importance is the concept of policy drift, which we model as a choice for the subordinate. We argue that a performance-based PDM helps to rein in policy drift in some ways, but the subordinate's superior information works against that impact, a tradeoff that has been discussed by various scholars (cf. Courty and Marschke 2003, Smith 1995, Pollitt 1988; Van Thiel and Leeuw 2002, Jacob and Levitt 2003, Bevan and Hood 2006, Hood 2006, Kelman and Friedman 2009). Our findings about the determinants of drift, policy adjustment, and punishment are consistent with recent findings that gaming is limited and that there are real performance gains induced by PDMs. Propper et al. (2010), for instance, evaluate target setting in the National Health Service in England when compared to a regime in Scotland without those targets.

The essence of performance measurement is the collection of information. A performance-based PDM is effective partly because it induces the subordinate to share the risk of policy shocks with the superordinate. This type of incentive regulation is markedly different than the classic regime of policy implementation, which works by a system of feedback and correction and attempts to surmount the inevitable information gaps (Pressman and Wildavsky 1973). Not all aspects of behavior will be monitored, but subordinate behavior will be altered simply because of the requirements for reporting information incorporated in the measures. Public management

scholars have long recognized this. For example, Dunsire (1986; 1993) notes the aim of such schemes is to create a self-enforcing system – driven, we argue, by the risk-sharing they create – that needs only occasional manipulation and intervention. That these schemes can be self-enforcing as well as reward superordinate politicians may be one explanation for their expansion across the world in recent years.

Because bureaucrats implement the performance scheme, they may play an important role that should be the subject of future formal extensions. We believe that initial steps should introduce monitoring and credible policy commitments to our framework. As in any monitoring scheme, there is a need for systematic information gathering, which wraps the performance scheme in technocratic justifications and appeals to specialist knowledge. These technocratic aspects also serve to enhance the credibility of monitoring and measurement. This can be seen as part of the use of the state of forms of metrics and scientific evaluation that seek to provide objectivity to government activity but may act as forms of political control, such as the use of official statistics (Scott 1998; Desrosières 1998). Received wisdom is that performance management is the domain of the bureaucrats who take many decisions, and politicians only weakly respond to performance information rather than actively shape it (Van Dooren and Van de Walle 2010). Such delegation of tasks is consistent with the technocratic aims of the system and the willingness of the political principals, both superordinate and subordinates, to delegate detailed administrative matters. This remains part of the PDM because the design and operation of the system is designed to respond overall to the preferences of the politicians.

Our work here is only a start. We encourage scholars to develop theoretical and empirical strategies for better understanding the politics we have described. We believe public management scholars could address the wider political context of performance management much more fully than they do now in several ways: through case studies of the politics of performance management, by examining the origins of its reforms, and in seeking to understand the role of parties and entities serving as agents to the politicians in our model. More quantitative work

should be done as well, using theoretical specifications consistent with bureaucratic and distributive politics scholarship. Most importantly, as our theory makes clear, performance management scholars must acknowledge that the performance-PDM is endogenous to a political process. It both impacts political and policy outcomes and is shaped by them. Regression-based analysis using metrics as proxy variables for observed performance should take this into account.

Given its importance and interest among public management scholars, we, finally, hope our argument helps to generate interest in performance studies among members of the political science community. Scholars who imply the importance of politics in their models, could make it more explicit their future work. Doing that could extend Moynihan's claim that "Performance management doctrine ... promises to change the nature of accountability" (2008, 11) and verify his description of the "multiple ways in which politics interacts with performance management" (199). Whenever politics is a central element in performance measurement, it should be taken seriously.

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Table 1: The Politics of Performance-PDMs: Testable Claims

Characteristic	Expectation
(1) Shared political geography	Swing subordinates favored; Ideological allies favored
(2) Ideological or Partisan Congruence (Dissonance)	Superordinate rewards (punishes) subordinate to further electoral goals
(3) Interest group concentration (diffusion)	Increases (decreases) information quality and probability of capture
(4) Centralized (decentralized) political system	More (less) political influence
(5) Party centralization (decentralization)	More (less) political influence
(6) Age of performance-PDM	Credible and self-sustaining, replaced when political credibility is weak.

Appendix

Proof of Lemma 1. The objective of the subordinate is stated by substituting the policy production technology $x = p + w$ and the composition of the performance report $\hat{w} = w + d$ into the utility function of the subordinate.

$$\max_d U_s = -(x - p - w)^2 - \beta[w + d] \quad (1)$$

The first order conditions imply that the subordinate's optimal choice of drift is the following.

$$d^* = \frac{2(x - w - p) - \beta}{2} \quad (2)$$

Without loss of generality, we assume that the superordinate's ideal point $\bar{x} = 0$. Thus, as the subordinate's ideal point increases in value, the ideological conflict between these two actors increases. Partially differentiating d^* reveals $\frac{\partial d^*}{\partial x} > 0$; $\frac{\partial d^*}{\partial p} < 0$; $\frac{\partial d^*}{\partial w} < 0$; $\frac{\partial d^*}{\partial \beta} < 0$. \square

Proof of Lemma 2. The report made to the superordinate is $\hat{w} = w + d$. Substituting (2) and rearranging terms yields:

$$\hat{w}^* = \frac{-2x - 2p - \beta}{2} \quad (3)$$

Differentiating yields $\frac{\partial \hat{w}^*}{\partial \beta} < 0$; $\frac{\partial \hat{w}^*}{\partial p} < 0$; $\frac{\partial \hat{w}^*}{\partial x} > 0$. \square

Proof of Proposition 1. Subgame perfection next requires consideration of the superordinate's problem which is formed by substituting the performance technology $x = p + w$ into the superordinate's utility function. Because the subordinate provides the only information about the state of the world via the report $\hat{w} = w + d$, imperfect information makes $E[d] = 0$, and we assume $\bar{x} = 0$ without loss of generality as we have discussed, the superordinate's problem is the following.

$$\max_{p, \beta} U_s = -\rho(-p - \hat{w})^2 + \beta\hat{w} - \varphi \quad (4)$$

The first order conditions state that $2\rho - (\hat{w} + p) = 0$ and $\hat{w} = 0$; rearranging terms yields the superordinate's optimal policy enactment.

$$p^* = \frac{-(2\rho+1)\hat{w}}{2\rho} \quad (5)$$

Differentiation yields $\frac{\partial p^*}{\partial \hat{w}} = -\frac{2\rho+1}{2\rho}$. “Perfect” core constituencies have an electoral probability

of unity where $\frac{\partial p^*}{\partial \hat{w}} < 0$, while “perfect” swing constituencies have a probability of 0.5 where

$\frac{\partial p^*}{\partial \hat{w}} = 0$. Furthermore, $\frac{\partial p^*}{\partial \rho} = -\frac{(2\rho+1)w}{2\rho^2} - \frac{w}{\rho}$ which is equal to $\frac{w}{2}$ in perfect core and $2w$ in

perfect swing scenarios. \square

Proof of Proposition 2. Recall from the first order conditions in the preceding proof that the equilibrium “bonus” was independent of our variables of interest; this was due to the imperfect information. The penalties meted out under the performance scheme are $\Pi = \beta\hat{w}^*$ and the equilibrium report is given by (3), so substitution yields $\Pi = \frac{\beta(2x - 2p - \beta)}{2}$. We also know the equilibrium policy enactment from (5), and substituting it into the immediately foregoing equation yields the following.

$$\Pi = \beta(w + \underline{x}) + \frac{\beta(w - \beta\rho)}{2\rho} \quad (6)$$

Differentiation yields $\frac{\partial \Pi}{\partial \rho} = -\frac{\beta w}{2\rho^2}$ which is $-\frac{\beta w}{2}$ in perfect core and $-2\beta w$ in perfect swing

scenarios. Further differentiation yields $\frac{\partial \Pi}{\partial \underline{x}} = \beta > 0$ and $\frac{\partial \Pi}{\partial w} = \frac{\beta(2\rho+1)}{2\rho}$. The latter is $\frac{3\beta}{2}$ in

perfect core and β in swing scenarios. \square

Proof of Proposition 4. In the bureaucratic control problem, the only difference from the model described above is that the superordinate's problem is $\max_{\rho, \beta} U_s = -(-p - \hat{w})^2 + \beta\hat{w} - \varphi$. The

probability of election has been removed. The first-order conditions show that $p^* = -\hat{w}$.

Comparing this result to (5) yields the result. \square

Logic of Conjecture 1. The logic underlying this conjecture is as follows. The total benefits of the performance mechanism accruing to the superordinate are $\Pi - \varphi = \beta\hat{w} - \varphi$. The costs of the mechanism φ , must not outweigh the benefits. Substituting the report generating equation $\hat{w} = w + d$ into the subordinate's problem in (4) and rearranging yields the following.

$$U_{\underline{x}} = -\rho(-p - w - d)^2 + \beta w - d - \varphi$$

Notice policy drift decreases utility by $d + \rho d^2$ and from (2) we know drift increases in \underline{x} and decreases in β and w . Any exogenous positive correlates of the efficacy of the "bonus" β , information about w , as well as means of reducing \underline{x} will increase the utility the principal gains. Institutional and political scenarios in which these conditions prevail will allow the superordinate to incur greater fixed costs φ of implementing the performance mechanism.