Bureaucrats or Politicians? Part II: Multiple policy tasks*

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Abstract

Policies are typically chosen by politicians and bureaucrats. This paper investigates first the normative criteria with which to allocate policy tasks to elected policymakers (politicians) or non elected bureaucrats. Politicians are preferable if there is uncertainty about social preferences and flexibility is valuable, or if policy complementarities and compensation of losers is important. Bureaucrats are preferable if time inconsistency and short-termism is an issue, or if vested interests have large stakes in the policy outcome. We then compare this normative benchmark with the case in which politicians choose when to delegate and show that the two generally differ.

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1 Introduction

What is the socially optimal allocation of policy responsibilities between elected representatives (politicians) and independent bureaucrats? And how does this optimal task allocation differ from what would be chosen by the politicians themselves?

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Both questions are important. Advanced democracies delegate some key policy areas, such as monetary policy and regulation, to independent bureaucrats who make policy decisions with little political interference. A similar tendency is developing in some young democracies in Asia and Africa (e.g., Khemani 2005). Independent bureaucrats also have important policy prerogatives in super-national organizations, and in particular in the European Union. Yet, other policy areas, such as foreign policy or fiscal policy, generally remain under direct political control. Is this division of tasks appropriate? As the domain of policies chosen by super-national organizations is expanded, should the method of controlling super-national policymakers also become more "political"? More generally, what normative criteria should guide the allocation of responsibilities amongst politicians and bureaucrats? And, if politicians choose whether or not to delegate policy tasks to independent bureaucrats, should we expect systematic deviations from optimality, and if so in which direction?

To address these questions, we study a principal-agent model of policy choice, where the voters are the principals and the policymakers (the agents) are motivated by a "career-concern". But the career concern differs for politicians and bureaucrats. The former want to win elections, by pleasing the voters. Top bureaucrats want to fulfill the goals of their organization, so as to appear competent in the eyes of their professional peers, so they have what is often refereed to as a "career concern".[1] Throughout, we focus the attention on the individuals at the top, neglecting the internal organization of different policymaking institutions.

In a companion paper, Alesina and Tabellini (2006), we use this same analytical framework to study how bureaucrats and politicians differ in their performance of a single policy task. There we show that bureaucrats are preferable to politicians in technical tasks for which ability is more important than effort, and in purely redistributive tasks provided that the bureaucrat can be instructed to be "fair". But elected politicians have an incentive to retain redistributive task under their direct control to build winning coalitions.

Here we study multiple policy tasks. This adds a new policy choice: how to allocate costly effort amongst several tasks. We show that, from a normative perspective, politicians are preferable for tasks that have the

[1] For a discussion of how bureaucrats are motivated by prospect of career enhancement and this leads them to internalize the goals of the organization, see the classic treatment in Wilson (1989) especially Chapter 9. In addition, by appearing competent, the bureaucrat can guarantee his autonomy and independence (Carpenter 2001).

following features: i) flexibility is valuable, because social preferences are unstable and uncertain, or because the policy environment can change rapidly; or, ii) side payments to compensate the losers are desirable and relevant, or bundling of different aspects of policy management and a comprehensive approach is important. Bureaucrats instead are preferred if iii) time inconsistency is a relevant issue and intertemporal trade-offs are important; or iv) the stakes for organized interest groups are large, and law enforcement is strong so that corruption is not widespread.

Next, we address a positive question. Suppose that politicians, rather than voters, choose whether or not to delegate a task to a bureaucrat. Which tasks, if any, would they choose to delegate? We show that generally the arrangements chosen by politicians differ from the normative prescriptions above. Politicians delegate tasks so as to increase the probability of electoral victory, net of costs of executing the task (or of the rents they grab); they do not maximize social welfare in an ex-ante sense. Thus, the pattern of delegation chosen by elected politicians could be very different from that preferred by voters behind a Constitutional veil of ignorance.

This paper is related to a rapidly growing literature on principal-agent models of policymaking. One of the first contributions is Rogoff (1985), who pointed out that strategic delegation of monetary policy to an independent and inflation averse central banker could remedy a time inconsistency. But the benefits of strategic delegation could be achieved even without bureaucratic control, by electing a "conservative" politician - see for instance Persson and Tabellini (1994). Moreover, fiscal policy too is marred with a host of time inconsistency problems, but societies seem reluctant to allocate this policy prerogative to independent bureaucrats.[2] An ability to commit to a course of action may even be desirable in foreign policy, which however is always the prerogative of appointed politicians, at least in the more relevant phase of choosing the general strategy. The career-concerns model used in this paper was originally formulated by Holmstrom (1982). Dewatripont, Jewitt and Tirole (1999a,b) have used it to study the behavior of government agencies, while Persson and Tabellini (2000) have adapted it to describe the behavior of an incumbent politician, but none of these contributions contrasts bureaucratic vs political performance. This comparison is instead the focus of three recent papers. In Maskin and Tirole (2001), bureaucrats (judges) have intrinsic motivations, while political incumbents seek to please the voters. In Besley and Coate (2003) and Schultz (2003),

[2]Blinder (1997), Calmfors (2005) and the Business Council of Australia (1999) have all advocated expanding to scope of independent agencies in the formulation of fiscal policy.

both bureaucrats and politicians have intrinsic motivations. In our set up, instead, we neglect the role of intrinsic motivations: both bureaucrats and politicians need to be kept accountable with implicit incentives, but the incentive schemes differ for the two type of policymakers.

Our positive analysis is based on the same premise of Epstein and O' Halloran (1999). In a similar vein Fiorina (1977) points out the blame shifting role of delegation: politicians delegate to agencies in order to blame them when things go badly and claim responsibility when success occurs. We derive this result formally but we point out a trade off between using bureaucrats as scapegoats and rent extraction.[3]

The paper is organized as follows. Section 2, describes the simplest case of our model and justifies its assumptions. Section 3 considers optimal delegation when social preferences change over time. Section 4 studies policy tasks that entail trade-offs and allows for the possibility of compensating losers. Section 5 introduces the possibility of lobbying politicians and bribing bureaucrats. Section 6 discusses how the normative prescriptions derived in the previous sections would or would not be followed if politicians could chose whether to delegate. The last section concludes.

2 The Model

Consider a society that has to decide whether to assign a policy task to an elected officer or to a bureaucrat. With the generic term "policymaker" we indicate who chooses policy, either a politician or a bureaucrat. We illustrate the model with a single policy task, but then the remainder of the paper focuses on multiple tasks.[4]

The policy outcome, y, is determined by the policymaker's effort, a, and by his ability, θ:

$$y = \theta + a \tag{1}$$

Ability is a random variable, with mean $\bar{\theta}$, density $n(.)$ and cumulative distribution $N(.)$. Citizens care about the policy outcome according to

[3] A related and rather large political science literature has also debated the effect of bureaucratic delegation (the so called "bureaucratic drift"), focusing on the US - see Epstein and O' Halloran (1999) for a survey. Some authors argue that delegation is deleterious, an abdication of the legislators' responsibility and a way of favoring special interests (Lowi 1969, Stigler 1971). Others (Mc Cubbins, Noll and Weingast 1987, 1989) instead claim that the legislators can, at least up to a point, control the bureaucratic agencies by means of procedural rules. Carpenter (2001) dissents and argues that the rise of the regulatory state has given a large latitude to many bureaucracies to decide in addition to implement legislation.

[4] This section is similar to Alesina and Tabellini (2006) because both papers are based upon the same fundamental modelling hypotheses. The model is then developed in different directions in that paper and in the present one.

a well behaved, concave utility function, $u = U(y)$. We start with linear preferences, $U(y) = y$, ; we introduce concavity later when it matters.

Effort is costly, and the strictly convex and increasing cost is labelled $c = C(a)$. The reward for the policymaker is labelled $R(a)$ and it differs depending on whether the policymaker is a politician or a bureaucrat. Both of them maximize their utility defined as:

$$R(a) - C(a) \tag{2}$$

with $C_a > 0$, $C_{aa} > 0$ and $R(a)$ to be defined below (subscripts denote partial derivatives).[5]

The timing of events is as follows. At the "Constitutional Table" society chooses who has control rights over policy, whether the bureaucrat or the politician. Next, the policymaker chooses effort, a, before knowing his ability, θ. Finally, nature chooses θ, outcomes are observed and the reward is paid. Irrespective of who has control rights over policy, only the outcome y is observed by the principals, not its composition between effort and ability. Hence the agent's reward can only be based on the policy outcome, y.

In this simple environment, an optimal contract with the policymaker based on performance would achieve the first best level of effort - see Alesina and Tabellini (2006). But the assumption that policy performance is verifiable and contractible is hard to accept. Public policy typically pursues many goals, that are often hard to measure and to reward directly through explicit and verifiable contracts. Moreover, if society could write unrestricted optimal performance contracts with its policymakers, then the question asked in this paper would be utterly uninteresting: bureaucratic delegation under an optimal contract would always dominate political delegation. But this implication does not come even close to any observed institutional arrangement.

We thus assume that policy performance, y, is observable but not contractible. Both bureaucrats and politicians are rewarded based on observed performance, but through an implicit reward scheme that contains specific restrictions compared to an optimal explicit contract. In the next two subsections we spell out our specific assumptions about the implicit rewards offered to a bureaucrat and to a politician, and giving rise to two different reward functions, $R^B(a)$ and $R^P(a)$ respectively. These reward functions are taken as given throughout the analysis.

[5] The model can be restated in terms of rent extraction instead of effort, by defining $a = -r$ where $r > 0$ are rents and $V(r)$ (with $V_r > 0$ $V_{rr} < 0$) is the utility of rents.

2.1 The bureaucrat

The bureaucrat is motivated by "career concerns", as in Holmstrom (1982). That is, he is concerned with the perception of his ability θ in the eyes of those that may offer him alternative job opportunities in the private or public sector, given the stated goals of the bureaucratic organization.

More precisely, let x be the relevant measure of performance with which the bureaucrat is evaluated (the stated goals of his organization). We assume that the bureaucrat's reward is (the suffix B stands for Bureaucrat):

$$R^B(a) = \alpha \mathsf{E}(E(\theta \mid x)) \tag{3}$$

where α is the market value of talent, E denotes unconditional expectations over the random variable x, and E denotes expectations over θ, conditional on the realization of x.

In the context of this simple model, it is natural to assume that the relevant measure of performance for the bureaucrat coincides with social welfare, so that $x \equiv y$, but this assumption is relaxed in later sections. Denoting the public's perception of a by a^e and using (1), we can then re-write the bureaucrat's reward function (3) as:

$$R^B(a) = \alpha \mathsf{E}(y - a^e) = \alpha \mathsf{E}(\theta + a - \ a^e) \tag{4}$$

This allows us to easily compute the equilibrium level of effort. First take the first order condition with respect to actual effort, a, taking expected effort a^e as given. Then, impose the equilibrium requirement that $a^e = a$. By (4) and (2), we obtain:

$$\alpha = C_a(a^B) \tag{5}$$

where a^B indicates the equilibrium effort of the bureaucrat.

How does equilibrium effort by the bureaucrat differ from that induced by an optimal contract? Alesina and Tabellini (2006) show that the bureaucrat puts in the first best level of effort if $\alpha = 1$, i.e., if the market value of bureaucratic talent coincides with the true value of talent for society.[6] But if the value of talent for the bureaucrat differs from that for society, and in particular if it is lower, then bureaucratic behavior is no longer socially optimal.

2.1.1 Discussion

Our model of bureaucratic behavior contains three important assumptions. First, the bureaucrat cares about his talent as perceived by outside

[6] Here we neglect the bureaucrat's participation constraint, which throughout the paper we assume is always satisfied.

observers representing his relevant "labor market". This career-concern can be interpreted broadly, and not just as a future monetary reward: top bureaucrats may care about their perception of talent "per se", as a matter of self-image, pride or legacy. We disregard the internal organization of higher or lower layers of bureaucrats,and focus only on the top level.

Second, the expectation of talent is formed by conditioning on the bureaucrat's observed performance, and the relevant measure of performance, x, is defined in advance and can be interpreted as the stated goals of the organization. If there are multiple tasks, as discussed in the next sections, then this assumption plays an important role: it does not allow the bureaucrat or outside observes to select other measures of performance, for instance by focusing on tasks where the market value of talent is higher. Thus, we rule out the case in which, say, a Central Banker chooses to ignore the problem of controlling inflation and, instead, signals his ability in international relations by publishing speeches and books on that topic. This assumption can be defended on several grounds. To begin with, a broad interpretation of "career concerns" can incorporate a desire for legacy and good reputation with peer groups, say other Central Bankers. Also, even taking the "career concerns" literally, future career prospects are uncertain and there is a coordination problem: how does the bureaucrat know which is the relevant measure of performance used by outside observers? The assumption that performance is assessed on the basis of the tasks explicitly assigned to the bureaucrat is a natural focal point to select amongst possible multiple equilibria. Finally, as stressed for instance by Wilson (1989), bureaucratic organizations have weak internal incentives. To motivate employees, the mission of the organization must be well defined and pursued by the top bureaucrat. A leader who is perceived as pursuing his own personal ambition, rather than fulfilling the organizational goals, is likely to be resisted by his subordinates and this could undermine the leader's own performance. Moreover, a bureaucrat that pursues his own ambitions rather than fulfilling the organizational goals would damage his integrity, and this would certainly hurt his future career prospects.

2.2 The politician

The politicians's goal is to be reelected and this happens if the voters's utility exceeds a threshold W. Denoting by β the value of office, we can write the reward function for the politician as (the suffix P stands for Politician):

$$R^P(a) = \beta \Pr(u \geq W) = \beta[1 - P(W - a)] \tag{6}$$

where $u = y$ is voters' utility and where $P(W - a) = \Pr(\theta \leq W - a)$. Voters are rational. Thus, they realize that the alternative to reelecting the incumbent is to get another politician with average talent, who will exert the equilibrium level of effort. It follows that:

$$W = \bar{\theta} + a^e \tag{7}$$

Like the bureaucrat, the politician chooses effort before observing his talent, taking the voters' expectations as given. Equilibrium effort by the politician, a^P, is thus defined implicitly by the first order condition:

$$\beta n(\bar{\theta}) = C_a(a^P) \tag{8}$$

where $n(\bar{\theta})$ is the density of θ evaluated at its mean.[7]

How does the effort of the politician compare with that of the bureaucrat? Comparing (5) and (8), the answer is ambiguous and depends on parameters' values. A higher value of office, β, increases the effort of the politician, a higher market value for bureaucratic talent, α, increases the effort of the bureaucrat. Under the assumption that the participation constraint is always satisfied, in this simple example voters prefer whatever arrangement results in higher effort. To simplify notation, and since no additional result hinges on the value of these two parameters, in the remainder of the paper we set $\alpha = \beta = 1$.[8]

2.2.1 Discussion

In practice, the contrast between bureaucrats and politicians is not as sharp as in the model. On the one hand top level bureaucrats in charge of important agencies may be preparing a leap into politics, so they may worry about their popularity and not only their competence per se..On the other hand, politicians may look ahead to a career in the private sector. While these caveats point to a large gray area and intermediate cases between our "politician" and our "bureaucrat", it is useful as a first step to clearly identify how career concerns and electoral incentives lead to different results depending on the nature of the policy.[9]

[7] This model could be easily generalized to several periods, if the politician's ability today is a signal of his ability tomorrow but some random element of ability is present every period so that it can never be fully learnt in advance. A widely studied case in the political business ccycle literature is that of a MA (1) process for ability. Persson and Tabellini (2000) discuss the implications of this political model more extensively.

[8] Since we are not considering an optimal contract, both the bureaucrat and the politician could be earning rents in equilibrium (i.e., their particpation constraint need not bind).

[9] Alesina and Tabellini (2006) briefly discuss a more general formulation, where the politician cares about both re-election and, conditional on losing office, his career

In summary, the model seeks to capture a key difference between political and bureaucratic accountability. The politician is held accountable by the voters who choose whether or not to reelect him, based on their utility. The bureaucrat is held accountable by his professional peers or by the public at large, for how he fulfills the goals of his organization. These different accountability mechanisms induce two behavioral differences between a bureaucrat and a politician. First, the form of the objective function differs: the politician strives to achieve a threshold level of utility for the voters; the bureaucrat wants to maximize his perceived talent. Second, the relevant measure of performance is different: for the politician it is the voters' utility; for the bureaucrat it is whatever goals have been assigned to the bureaucratic organization. In this introductory example only the first difference plays a role, since both voters' utility and bureaucratic performance are measured by the same variable, y. Hence the only behavioral difference between the two types of policymaker is that one maximizes an expected value, the other maximizes a probability, both defined over the same random variable. In the next sections we study richer policy environments, where the difference over the relevant measure of performance plays a central role.

3 Uncertain preferences

3.1 Formal results

We now ask how bureaucrats and politicians allocate effort over multiple tasks. This brings out a key difference in their behavior. Whereas politicians always do whatever is ex-post optimal for the voters, bureaucrats allocate effort to meet the organizational goals. This greater rigidity of bureaucratic behavior creates a trade-off: politicians can better adapt to complex tasks where social preferences cannot be easily defined ex-ante and flexibility is valuable, but bureaucrats can better cope with time inconsistency.

There are two possible policies, that is two different directions in which effort can be devoted to: $y_i = \theta + a_i$, with $i = 1, 2$.[10] With multiple tasks, which will be our focus from now on, one needs to specify a general cost function with multiple arguments, $c = C(a_1, a_2)$. Instead of using the general formulation, we simplify to either an additive case ($c = C(a_1 + a_2)$), where effort in the various tasks is perfectly substitutable in

prospects outside politics. If the value of political office is sufficiently high compared to the expected benefit of a career outside politics, then the main implication of our model would still hold.

[10] For a general discussion of multi task functions in a principal- agent relationship see Holmstrom and Milgrom (1991).

the cost function, or to a separable case ($c = C(a_1) + C(a_2)$), where the marginal cost of effort in one task is totally independent of effort devoted to the other tasks. We choose the simplest formulation that does not produce knife-hedge or "trivial" results. The more general specification of costs generates qualitatively similar results. We begin in this section by considering additive costs, so that $c = C(a_1 + a_2)$.

At the Constitutional Table the (identical) voters are uncertain about their ex post preferences over alternative policies, so that voters utility is now given by the following concave function:

$$U(\lambda y_1 + (1 - \lambda)y_2) \tag{9}$$

where $\lambda = 1$ with probability $q > 1/2$, $\lambda = 0$ with probability $(1 - q)$. Thus, society does not know ex ante what it will like ex post; but there is no disagreement ex post amongst members of society. Disagreements and redistribution will be analyzed below.

The timing is now as follows. First, at the Constitutional Table voters choose whether to assign this policy to a bureaucrat or to a politician. Then nature chooses λ, that is social preferences are determined. Having observed λ, the policymaker chooses $[a_i]$, then nature chooses θ, and finally policy is determined and rewards paid. We assume that λ is not verifiable**.**

Consider bureaucratic delegation first. As discussed in section 2, if the Constitution assigns control rights over policy to the bureaucrat, it also defines a relevant measure of performance with which his ability is evaluated. In that section, social welfare was the natural measure of performance, because it coincided with the only possible measure of performance. But here, at the Constitutional Table social preferences are not yet known, since they depend on the future realization of the random variable λ. Thus, we assume that the bureaucrat can only be assigned an unconditional measure of performance, defined as:

$$x = \delta y_1 + (1 - \delta)y_2 \tag{10}$$

where δ is a parameter specified by the Constitution. This formulation entails two assumptions. First, we assume that the relevant measure of performance assigned to a bureaucrat cannot be ex-post social welfare, u. We can justify this assumption with the argument that social welfare cannot be operationally described ex-ante in an unambiguous way. To do so, we would need specific assumptions about utility functions, technology, and many other unforeseeable but relevant features of the economic environment. Of course, individual welfare can be observed ex-post by polling each individual about the policymaker's performance. But telling

a bureaucrat that his performance would be assessed ex-post through an opinion poll would transform him into a politician, and the theoretical distinction between political and bureaucratic accountability that is at the core of this paper would be lost. The second crucial assumption is that the operational and describable measure of performance that can be assigned to a bureaucrat, and in particular the parameter δ, cannot be contingent on the realization of the random variable λ : the mission for the bureaucrat cannot be contingent on the realization of ex post voters' preferences. This element of contract incompleteness is plausible, and again can be justified with reference to the undescribability or unforseeability of future states of the world.[11]

Under these assumptions, the rewards of the bureaucrat are:

$$R^B(a) = \mathsf{E}(E(\theta \mid x)) = \mathsf{E}(\theta + \delta a_1 + (1-\delta)a_2 - \delta a_1^e - (1-\delta)a_2^e) \quad (11)$$

Given additive costs and $q > 1/2$, it is optimal for society to set $\delta = 1$.[12] The first order conditions for the bureaucrat then imply:

$$a_1^B = C_a^{-1}(1), \qquad a_2^B = 0 \quad (12)$$

That is, the bureaucrat focuses all his effort on the "main" activity of his mandate because that is more helpful in signalling his ability. Thus, the voters' utility in equilibrium is given by:

$$U^B = q\mathsf{E}U(\theta + a_1^B) + (1-q)\mathsf{E}U(\theta) \quad (13)$$

The key here is that by choosing a bureaucrat who is not responsive to the ebb and flows of society's preferences, citizens are "stuck" with the risk that effort is misallocated and the bureaucrat pursues the wrong goals, those that ex-ante seem more likely to be relevant.

Next, suppose that, at the Constitutional Table, society gave control over policy to a politician. To win re-election, the incumbent must show that he is more competent than the opponent, given that voters observe their own utility. This means giving voters a sufficiently high utility. Whatever beliefs the voters entertain about effort allocation, and given that effort is not observed by voters, the politician always finds it in his own interest to put effort in the task preferred ex-post by the voters.

[11] A related structure of contract incompleteness also underlies the models of Constitutional choice by Aghion and Bolton (2003) and Aghion, Alesina, and Trebbi (2004, 2005). See Maskin (2001) for a general discussion and critical evaluation of the assumption of contract incompleteness.

[12] If costs were separable, then the optimal δ would be increasing with q, at a rate that is decreasing with the curvature of $U(.)$ for obvious reason having to do with risk aversion. The qualitative nature of our result would not change.

Thus, if $\lambda = 1$, then the politician sets $a_2 = 0$; and viceversa he sets $a_1 = 0$ if $\lambda = 0$. Effort in the chosen task is then determined by a first order condition similar to (8) above.

This is what differentiates the politician from the bureaucrat. The politician's goals always depend on the realization of λ (i.e., on the ex-post preferences of the voters). The bureaucrat instead must be told what to do and in some cases he will be assigned the wrong mission. The following proposition follows.

Proposition 1 *The politician, unlike the bureaucrat, always chooses the right task from the voters' perspective. This advantage of the politician is more important the more risk averse are the voters and the more uncertain are their ex-post preferences.*

3.2 Discussion

Delegation to a bureaucrat is safe when society's preferences are well known and stable. But when they change, the "rigidity" of a bureaucrat's behavior makes the latter much less attractive. This helps us to understand why monetary policy is often delegated to an independent central bank, while foreign policy is typically under the control of politicians. Few would disagree with the statement that the appropriate goal for monetary policy is to keep inflation under control with some room for stabilization policy; and this goal is unlikely to change over time. But preferences regarding foreign policy are unlikely to be stable and unchanged, and as a result an appropriate simple bureaucratic goal cannot be stated once and for all[13].

There is a case in which ex post flexibility is in fact a disadvantage, however. When society's preferences are time inconsistent, the benefit of flexibility associated with political delegation has a cost. Politicians are much more likely to fall in the trap of time inconsistency, compared to bureaucrats since the goals of a politician are unavoidably linked to the ex-post welfare of voters. The rigidity of bureaucratic control, instead, offers protection against time inconsistency.

A related issue has to do with the time profile of costs and benefits of policy choices. Bureaucrats tend to care more about the long run consequences of policies, compared to politicians, for two reasons. First, often bureaucrats are appointed for longer than electoral cycles, precisely to avoid short-termist policies. Second, even when bureaucrats have

[13] Hart, Shleifer and Vishny (1997) and Wilson (1989) make a similar argument to clarify why it would be close to impossible to privatize foreign policy or to delegate it fully to a non-political agency.

short terms of office, the blame for myopic policies may reach them and hurt them later on. The reason is that bureaucrats care about their professional reputation in the eyes of their peers. This gives bureaucrats a strong incentive to focus on the long term goal.[14]

In some situations, a combination of politicians and bureaucrats could be welfare improving. In fact, a natural remedy to the "narrow-mindedness" of bureaucrats pursuing the wrong task is to let the politician decide the mission of the bureaucrat. Specifically, the constitution could prescribe that policy be delegated to a bureaucrat, but the bureaucrat's mission (the parameter δ in (10) above) be chosen by a politician. If the politician observes the contingency λ and if he is held accountable by the voters as described in the previous section, he would always choose the socially optimal mission for the bureaucrat. This division of tasks (the politician assigns the bureaucrat some goals and the latter chooses the instruments with which to pursue them) is observed in a variety of real world arrangements. Of course, the precision and frequency with which bureaucratic goals are defined can vary from case to case, and determines the extent to which an independent bureaucrat is really in charge of policy decisions (rather than taking orders from the politician). In the limit, however, if the politician can change the goals of the bureaucratic organization at will, then all the benefits of bureaucratic delegation to cope with time-inconsistency or short-termism would be lost.

4 Compensation of losers

A critical task of politicians is to form coalitions in favor of certain policies, compensating losers either with direct transfers or by bundling several policies into one package. To illustrate this point, we need a conflict of interest between voters (or groups of voters) and the possibility of side payments and of bundling policies with complementarities.

Voters' utility now depends on the policy outcome and a transfer (positive or negative) received by the government. We have two voters (or homogeneous groups of voters of equal size) with strictly concave utility defined over private consumption, $U(c_i)$, $i = 1, 2$ where:

[14] A previous version of this paper discusses more formally the benefits of bureaucratic delegation in controlling time inconsistency or shor-termism in the context of this career-concerns model. A large literature, surveyed in Persson and Tabellini (2000), models myopic electoral cycles in monetary and fiscal policy with rational voters. Besley and Coate (2003) find evidence that, in US states, elected regulators tend to keep lower electricity prices compared to appointed regulators. If, as likely, lower prices come at the expenses of lower investments, this finding is consistent with the prediction of short-termism by elected (as opposed to appointed) regulators.

$$c_1 = y_1 + t, \qquad c_2 = y_2 - t, \qquad y_2 \geq t \geq -y_1 \tag{14}$$

Therefore t is a direct lump sum transfer between voters and the government budget is balanced. Each group benefits from different tasks requiring specific and uncorrelated abilities, θ_i, $i = 1, 2$. Let the distribution of θ_i have the same densities $n(.)$ and cumulative distributions $N(.)$. There are random negative spillovers between the two tasks, such that:

$$y_1 = \theta_1 + a_1 - \lambda\kappa a_2, \qquad y_2 = \theta_2 + a_2 - (1-\lambda)\kappa a_1 \tag{15}$$

The parameter $0 < \kappa < 1$ denotes the strength of the negative spillover effects. Who is hurt by the spillovers is ex ante uncertain. Thus, λ is a random variable that can equal 1 or 0 with equal probabilities. As in section 3, we assume that λ is observable ex-post, but it is not describable ex-ante, so that the bureaucrat's mission cannot be defined contingent on λ. The policymaker maximizes its usual payoffs, with different rewards for the two types of policymakers, except that now we assume that the cost function is additive in the two efforts:

$$R(a_1, a_2) - C(a_1) - C(a_2) \tag{16}$$

Timing has the usual structure. First nature sets λ and this determines which group is hurt by the spillover effect. Then the policymaker chooses a_i and t, nature sets θ_i and rewards are paid.

Consider the politician first. He maximizes reelection probabilities, which means that he has to win the favor of a strict majority of voters. Here this means winning the votes of both groups (as it will be clear below, nothing of substance hinges on the fact that in this simple example reelection requires pleasing all voters). Therefore:

$$R^P(a_1, a_2) = \Pr ob(U(c_1) \geqslant W_1) * \Pr ob(U(c_2) \geqslant W_2) \tag{17}$$

where W_i is the reservation utility of group i.

Suppose for concreteness that $\lambda = 1$. If the two reservation utilities are equal, then the politician sets transfers t so that:

$$\frac{n(z_1)}{1 - N(z_1)} = \frac{n(z_2)}{1 - N(z_2)} \tag{18}$$

where $z_1 = U^{-1}(W) - t - a_1 + \kappa a_2$ and $z_2 = U^{-1}(W) + t - a_2$ and W is the equilibrium reservation utility demanded by both groups of voters. That is, the politician equalizes the "hazard rates" of losing votes from either group. In this context, the hazard rate measures the elasticity of the probability of winning with respect to transfers. Thus, this

optimality condition is similar to the Ramsey rule of optimal taxation: transfers are allocated between groups so as to equalize this elasticity across groups. If the hazard rate is monotonically increasing in z, and given the assumption of the same distribution for θ_i, $i = 1, 2$, equation (18) implies $c_1 = c_2$.[15] That is, the politician implements full insurance, fully compensating the losers from the negative externality.

Exploiting (18), the optimality conditions for the allocation of effort to the two tasks imply:

$$\begin{aligned} n(z_1)(1 - N(z_2)) &= C_a(a_1^P) \\ n(z_2)(1 - N(z_1))(1 - \kappa) &= C_a(a_2^P) \end{aligned} \tag{19}$$

Thus, the politician allocates effort "correctly", in the sense of devoting more effort to the task that does not have negative spillovers: $a_1^P > a_2^P$ if $\lambda = 1$. Comparing (19) with (8) in section 2, however, we see that the politician is induced to put less effort in both tasks, including the one without a negative externality (task 1), relative to the simple case of only one task. The reason is that bundling of two tasks requiring different abilities weakens his incentives. His likelihood of reelection now depends on his success in both tasks. Even if he puts a lot of effort in task 1, he could still loose the election because he happens to be unable in task 2. His awareness of this risk (captured by the term $(1 - N(z)) < 1$ on the left hand side of (19)), dilutes his incentives.[16]

Let's now turn to the bureaucrat. As in section 4, we assume that the measure of performance that he is assigned at the Constitutional Table (and on the basis of which his career-incentives are determined) cannot be contingent on λ and cannot be formulated in terms of social welfare ($U(c_1) + U(c_2)$) because it is too vague a concept, or cannot be observed by outsiders to infer the bureaucrats' talent. With this restriction, the natural measure of performance in this context is total output, $x = (y_1 + y_2)$. If given this goal, the bureaucrat allocates effort efficiently, taking the negative externality into account:

$$\begin{aligned} 1 &= C_a(a_1^B) \\ 1 - \kappa &= C_a(a_2^B) \end{aligned} \tag{20}$$

Comparing (20) with (19), we see that the bureaucrat tends to put in more effort than the politician, since his incentives are not diluted by the risk of losing the election (the terms $(1 - N(z))$ are missing from (20)). Nevertheless, compensating transfers are set to zero.

[15] A uniform distribution of θ satisfies the assumption of a monotonically increasing hazard rate, for instance.

[16] Persson and Tabellini (2000) and Seabright (1996) make a similar point in comparing centralized vs decentralized arrangements.

Comparing the politician and the bureaucrat, we thus have:

Proposition 2 *The politician provides side payment to compensate losers, whereas the bureaucrat does not. But the politician's incentives are weakened by bundling of policy tasks, whereas the bureaucrat's incentives are not diluted.*

This result follows from the assumption that bureaucrats cannot be given state contingent missions. If their goal is formulated in terms of aggregate efficiency, they will neglect the distributional consequences of their actions. A politician instead can take advantage of relatively complex and evolving spillovers between issues and build majorities with complex side payments schemes. Compensating the losers makes it easier to pass legislation while at the same time providing insurance against bad luck. Imagine a policy that favors a large majority, say a badly needed highway, but that creates losers, say the property owners. Under democratic choice, the losers might be able to block the project. But the politician can put together a package of compensation for the property owners, with large benefit for the majority. In a sense this is almost what describes the job of a politician. Instead, it is hard to imagine how a bureaucrat might do that. How can one write on paper what a bureaucrat is allowed to do or not do, to create bundling and compensation? A bureaucrat can be delegated the task of building the best possible highway and he may potentially do a better job than the politician; but he does not have the ability, interest or authority to provide compensation to the local owners.

5 Lobbying and bribing

In this section we consider the case of lobbies that can influence the choice of policies with bribes or campaign contributions. Both the politician and the bureaucrat can be captured by the interest group, but with different mechanisms.

As in section 3, there are two tasks, $y_i = \theta + a_i$, $i = 1, 2$ and the cost of effort is non-separable: $c = C(a_1 + a_2)$. Here ability is assumed to be the same for both tasks. Task 1 benefits the voters at large, while task 2 only benefits a small but organized interest group. Voters influence policy only through elections. The organized interest group is small and its vote is irrelevant; but he can influence policy through bribes, b, or campaign contributions, f. Thus, the preferences of voters are just y_1, while those of the interest group can be written as:

$$(1 + \gamma)y_2 - b - f \tag{21}$$

where γ is a parameter capturing the intensity of the group's preferences for task 2.

Bribes can be offered to both the politician and the bureaucrat, but are illegal. Thus, if a policymaker accepts a bribe, with some exogenous probability q he is caught and pays a fine Z (the interest group is not fined). Campaign contributions are legal and can only be offered to the politician. The effect of campaign contributions is to increase the incumbent's chances of winning the elections. We model this by saying that the voters' reservation utility is a decreasing function of the campaign contributions collected by the incumbent:

$$W = \bar{\theta} + a_1^e - H(f) \tag{22}$$

where the function $H(.)$ captures the effect of campaign contributions. It is natural to assume that $H(0) = 0$, $H_f > 0$, $H_{ff} < 0$. At the Constitutional Table the lobby has no influence, so if the bureaucrat is given control rights over policy, his assigned measure of performance coincides with the task that benefits voters at large ($x = y_1$).Under these assumptions, we can write the policymaker's preferences as:

$$R(y_1, y_2) - C(a_1 + a_2) + b - qZ \tag{23}$$

where $R(y_1, y_2)$ are the policymaker's rewards ($R^B(y_1, y_2) = E(\theta/y_1)$ for the bureaucrat, $R^P(y_1, y_2) = \Pr(y_1 \geq W)$ for the politician). The policymaker's effort devoted to task 2 is observable by the interest group, so that bribes and campaign contributions can be contingent upon the policymaker effort: $b = B(a_2)$, $f = F(a_2)$. The timing of events is as follows. First the Constitution allocates control rights over policies. Then the organized group commits to bribes and/or campaign contributions, as a function of effort. Next, the policymaker allocates effort between the two tasks. Nature then chooses a realization of θ. Finally, rewards are paid.

This is a common agency game, with two types of principals: the interest group and the representative voter. The interest group has all the commitment power and can either influence the agent directly (through bribes), or indirectly (through campaign contributions). The distinction between the politician and the bureaucrat is that the latter can only be influenced by the interest group through bribes. We want to know whether the voters are better off with the bureaucrat or with the politician, and what influences this comparison.

5.1 Bribing the bureaucrat

If the constitution gave control rights to the bureaucrat we would have a standard common agency game, with a single active lobby. If bribes are

positive, then the equilibrium must be jointly optimal for the organized group and the politician. This immediately implies:

$$a_1^B = 0, \qquad a_2^B = C_a^{-1}(1+\gamma) \tag{24}$$

Moreover, restricting attention to truthful contribution (here bribing) schedules, the equilibrium bribing schedule has the following simple form:[17]

$$B(a_2) = \bar{B} + (1+\gamma)a_2 \tag{25}$$

where the constant $\bar{B}$ is chosen by the organized group so as to leave the bureaucrat indifferent between accepting or rejecting the bribe. Given the bureaucrat's preferences, this implies:

$$\bar{B} = C(a_2^B) - C(\hat{a}_1^B) + \hat{a}_1^B - (1+\gamma)a_2^B + qZ \tag{26}$$

where $\hat{a}_1^B = C_a^{-1}(1)$ denotes the equilibrium policy if no bribe is accepted.

Finally, the organized group must also prefer to pay the bribe rather than be passive. This in turn puts an upper bound on the constant $\bar{B}$ that the organized interest group is willing to pay. Taking into account (26), an equilibrium with positive bribes exists only if the following condition is satisfied:

$$(1+\gamma)a_2^B - \left[C(a_2^B) - C(a_1^B) + a_1^B\right] \geq qZ \tag{27}$$

If instead this condition is violated, then bribing does not take place and the equilibrium with the bureaucrat delivers the optimal policy for the voters. Equation (27) makes it clear that an equilibrium in which the bureaucrat is bribed is more likely if the stakes for the organized group are high (γ is large), or if the legal system works poorly (qZ is small).

5.2 Lobbying the politicians

Next, suppose that the politician is in charge of policy. A condition similar to (27) above determines the existence of an equilibrium with bribes (the expression is not identical because the politician's reward occurs through reappointment). In particular, it remains true that bribes would be zero if the legal system is strong, so that the probability of being caught is high. But now, besides bribes, the organized interest group can also resort to campaign contributions. He chooses to do so if campaign contributions are sufficiently effective in swaying the voters.

Specifically, in an equilibrium with campaign contributions, the allocation of effort must be jointly optimal for the politician and the organized group, given voters' expectations. In particular, the outcome

[17] See Grossman and Helpman (2001).

must be optimal for the lobby, subject to the constraint of leaving the politician indifferent between accepting the campaign contribution and pleasing the lobby, or refusing the campaign contribution and allocating effort as optimal for the politician, given voters' expectations. Let $\bar{V}$ denote the politician's utility if it refuses the campaign contributions, given voters' expectations. Then the equilibrium must solve the following optimization problem by choice of $a_{1,}a_2$ and f, subject to non-negativity constraints on the three choice variables, and taking voters' expectations a_1^e as given:

$$Max\{\ (1+\gamma)a_2 - f\}\ \ s.to : \Pr(\theta \geq \bar{\theta} + a_1^e - a_1 - H(f)) - C(\ a_1 + a_2) \geq \bar{V} \tag{28}$$

The appendix describes the full equilibrium. Its properties depend on how effective are campaign contributions in swaying the voters - i.e. on the slope of the function $H(f)$. If $H_f(0)(1+\gamma) < 1$, then the equilibrium has zero lobbying ($f = 0$) and the outcome is optimal for the voters ($a_2^P = 0$). In this case, campaign contributions cannot be productive enough, and the organized group will not seek to influence the politician: the group's stakes are too low relative to how much he would have to pay into the electoral campaign of the politician.

The opposite extreme occurs if $H_f(f^*)(1+\gamma) > 1$, where f^* denotes equilibrium campaign contributions. In this case, campaign contributions are very effective at the margin. Effort is allocated entirely to please the organized group only ($a_1 = 0$), and it is determined jointly with equilibrium campaign contributions, by the requirement that the politician is indifferent between accepting or not the contributions and by the following optimality condition:

$$n(\bar{\theta} - H(f^*)) \cdot H_f(f^*)(1+\gamma) = C_a(a_2^P) \tag{29}$$

where $n(z)$ is the density of θ evaluated at the point z. For this to be an equilibrium, the organized group must benefit relative to the option of not lobbying at all, and this also requires: $(1+\gamma)a_2^P \geq f^*$.

For intermediate properties of the slope $H_f(.)$, the equilibrium could entail positive effort by the politician on both tasks. Note that in this case too, voters are hurt by lobbying: given our formulation of the cost function, effort devoted to please the lobby (a_2) reduces effort devoted to please voters (a_1).

We summarize this discussion in the following:

Proposition 3 *Political lobbying can be an equilibrium, even if bribes to the bureaucrat are not. This is more likely if campaign contributions are effective in influencing the voters, but the legal system is strong and effective in discouraging bribes.*

Thus, politically appointed policymakers are more easily captured by organized interests compared to bureaucrats, particularly in advanced democracies with a well functioning legal system. The reason is that, to influence a bureaucrat, the organized group needs to engage in illegal activities and fight against possibly deeply entrenched professional goals and standards of a technical bureaucracy. To influence a politician, instead, the interest group has an additional instrument: he needs to convince the voters that the politician is doing a good job and deserves to be reelected. The politician will then automatically respond with policy favors to the interest group, since this will help his chances of reelection. Thus, policies where the stakes for organized interests are very high, or where redistributive conflicts concern small but powerful vested interests against the voters at large, are more safely left in the hands of the bureaucrat. The regulation of public utilities is a typical example: the interests of consumers are easy to identify and protect through regulation, while the stakes for the utilities' supplier are very high and a politician may be easily captured.[18]

Note that this result points to an important difference between advanced and less advanced societies. In advanced societies with a well functioning judicial system, it is relatively easy to enforce the no bribe equilibrium, but campaign contributions may still be very effective at buying policies; hence, bureaucratic delegation works well. In developing countries, instead, stopping bribes might be close to impossible and politicians are likely to do as good a job as bureaucrats.[19]

6 Positive analysis

So far we asked what is the optimal task allocation from the voters' point of view. We now turn to the positive question of how tasks are likely to be allocated in practice. Bureaucratic institutions, although stable over time, are not typically spelled out in the constitution. They are chosen in the course of the regular legislative process by the politicians in office. Hence, criteria of political expediency dominate this choice. Thus, we now let the politicians choose what to delegate and what not. In reality, bureaucracies themselves "fight" for more and more autonomy, and sometimes are successful even against the will of politicians.

[18] This normative argument in favor of bureaucrats is mitigated if they are easier to bribe than the politician, however. And bureaucrats with technical expertise may be more easily bribed than politicians through a "revolving door policy" - i.e. at the end of their public services policymakers are offered lucrative jobs in the private sector.

[19] Glaser and Shleifer (2003) reach a similar conclusion, using a different analytical framework.

(Carpenter 2001). But the determination of politicians to retain control varies across tasks. Our results help us understand why politicians are more willing to fight for some tasks than for others.

6.1 When do politicians delegate?

6.2 The basic model

We start by asking what are the general criteria that induce politicians to delegate tasks to independent agencies. To preserve comparability with the previous normative results, we retain the same theoretical framework. Specifically, suppose that there are two tasks, $i = 1, 2$, requiring task specific abilities (θ_i) and efforts (a_i) :

$$y_i = \theta_i + a_i$$

The two task-specific abilities, (θ_1, θ_2), are independently and identically distributed. For concreteness, throughout this section we assume a normal distribution, with mean $\bar{\theta}$ and variance σ_θ^2. The costs of effort are additively separable $(C(a_1) + C(a_2))$ and there are no spillover effects, so that voters' utility is $U(y_1 + y_2)$. We start with the simpler case of risk neutral voters: $U(y_1 + y_2) = y_1 + y_2$ - this assumption is relaxed below. Remember that we can interpret the effort costs identically as the utility of rents with a simple redefinition of variables.

The timing of events is as usual: first tasks are allocated at a constitutional stage, then the policymaker in charge chooses effort (without knowing his own abilities), then performance is observed, rewards are paid and elections take place. The only difference is that now task allocation is chosen by the politician rather than by a benevolent planner; therefore the term "constitutional stage" is not quite appropriate in this case, but we retain it for the sake of a clear comparison with the normative analysis. For simplicity, and without loss of generality, we assume that, the politician faces a binary choice: either he delegates task 2 to an independent bureaucrat, or he keeps it for himself; task 1 is instead restricted to always remain with the politician.

The voters' behavior is a crucial determinant of the constitutional choices. This in turn depends on what the voters know. We assume throughout that voters observe the constitution and fully understand its implications (alternative assumptions are discussed below). Thus, constitutional choice is equivalent to a choice amongst equilibria, except that the perspective is that of the politician rather than the voters. With rational voters, we also need to spell out whether the constitution is expected to remain in place only in the current period, or also in the

future. In line with the observation that bureaucratic institutions can be changed through ordinary legislation, we assume no constitutional commitment: the constitution in place today could be changed after the elections. Thus, an equilibrium constitution is defined as a task allocation that meets two requirements: first, it is optimal for the incumbent politician at the constitutional stage, given the voters' expectation of the constitution in place after the elections. Second, the voters' expectations are fulfilled.

Section 2 of the appendix proves that:

Proposition 4 *If voters are risk neutral, then in equilibrium the probability of reelecting the incumbent politician is always 1/2, irrespective of the constitutional choice. Hence, the politician chooses the constitution that minimizes his equilibrium costs - or more generally, that maximizes the equilibrium rents from being in office.*

This Proposition makes clear that electoral concerns do not drive constitutional choice in this framework with risk neutral voters. The reason is that voters condition re-election on policy performance, but not on constitution design. This in turn follows from the assumption that voters are rational and understand the implications of alternative constitutions, while they are imperfectly informed about the policymaker's ability in carrying out his policy tasks. Given this assumption, policy (but not constitutional choice) reveals the policymaker's ability. Given that the probability of re-election is always 1/2 irrespective of the constitutional arrangement, the only criteria governing constitutional choice by the politician concern the costs of effort (or more generally the rents associated with each task). Specifically, if performing task 2 according to the voters' expectations is costly, then the politician prefers to delegate it away. If instead retaining control of task 2 allows the politician to grab political rents in equilibrium, then he prefers to retain it under his control.

6.2.1 Extensions

This general insight (that tasks entailing costly effort are delegated away, while tasks entailing rent extraction are retained) can be further refined on the basis of more specific details. First, it is possible to show that the politician has generally weaker incentives to please the voters if he retains two tasks rather than with a single one. Thus, equilibrium effort by the politician in each task is lower (rents are higher) if he retains two tasks. The intuitive reason is that the politician is less accountable if he holds both tasks: as discussed in section 4, with two tasks there is a "bundling" problem, and voters cannot punish poor performance in

only one of the two tasks. Since ex-ante the politician is uncertain about his abilities in both tasks, his incentives to please the voters are weaker than if he has control of only one task. To put it another way, with two tasks the politician faces more uncertainty about whether or not his random abilities will be enough to please the voters. And, as shown in Alesina and Tabellini (2006), more uncertainty dilutes the politicians' incentives. This creates a general political bias against delegation: for instance, the politician may refrain to delegate task 2, even if it is costly to perform, so as to get away with less effort (or more rents) in task 1.[20]

Second, this bias against delegation is stronger if the two tasks require similar abilities. Specifically, suppose that, if the politician retains both tasks, the random abilities that determine his performance, θ_1 and θ_2, are positively correlated. Then uncertainty about re-election prospects is larger, the more so the greater is the correlation between these two random variables. More uncertainty dilutes the politicians' incentives, and this increases his willingness to retain both tasks. Thus, coeteris paribus the politician is more willing to retain a bundle of similar tasks, such as foreign policy and foreign aid, or immigration policy and security, while he is more likely to delegate tasks that require very different sorts of skills from the core tasks that he retains.[21]

Third, in his choice of whether or not to delegate, the politician will also pay attention to the presence of positive or negative externalities in performing both tasks. Specifically, suppose that performance in task 2 is also affected by effort devoted in task 1, as follows:

$$y_2 = \theta_2 + a_2 + \gamma a_1$$

where $\gamma > 0$ (< 0) denotes the presence of a positive (negative) externality. If the politician retains both tasks, then his choice of effort in task 1 will reflect the presence of the externality. Accordingly, effort in task 1 will be greater with a positive externality ($\gamma > 0$), smaller with a negative externality ($\gamma < 0$).[22] Delegation induces the politician to neglect the externality (positive or negative), since his re-election will now

[20] When the politician retains both tasks, the optimality condition for effort in task i can still be written as in (8), for $i = 1, 2$, except that now the density $n(.)$ on the left hand side of (8) refers to the distribution of $\theta_1 + \theta_2$, evaluated at his mean. If θ_i are jointly normally distributed, then $n(2\bar{\theta}) = 1/(2\sigma_\theta\sqrt{\pi}) < 1/(\sigma_\theta\sqrt{2\pi}) = n(\bar{\theta})$. By the optimality condition (8), lower equilbrium densities imply lower effort (or larger rents).

[21] If tasks 1 and 2 require correlated abilities, then the density $n(.)$ on the left hand side of (8) evaluated at the mean is $n(2\bar{\theta}) = 1/[2\sigma_\theta\sqrt{\pi(1+\rho)}]$, where ρ is the correlation coeficient. Hence, a larger ρ reduces the density and weakens incentives.

[22] This result follows easily from adapting the politician's optimization problem discribed in section 4 to this richer set up.

depend on his performance in task 1 only. This in turn implies that the politician is more willing to delegate task 2 in the presence of positive externalities ($\gamma > 0$), and less likely to delegate it in the presence of negative externalities ($\gamma < 0$). Intuitively, positive externalities increase equilibrium effort, and this is precisely what the politician dislikes. Note that this is exactly the reverse of what would be socially optimal from the voters' perspective.

6.2.2 Discussion

All these results point in the same direction. When the choice of delegation is made by opportunistic politicians, there is nothing that insures that the outcome will be socially optimal. On the contrary, politicians will choose arrangements that weaken their incentives and reduce their accountability - exactly the opposite of what would be socially optimal. The implications of Proposition 1 are striking: if the choice of task allocation does not influence the election outcome, then voters' welfare is not a relevant determinant of this choice. Politicians will delegate tasks that require attention and costly effort, while they will retain tasks that allow them to grab political rents. The issue of what is in the voters' interests simply does not enter the political calculus of costs and benefits.

6.3 Redistribution and lobbying

Many policies have redistributive implications: would politicians delegate those? Suppose that there are only two tasks and the politician is constrained to keep one task for himself and to delegate the other one to an independent bureaucrat; but he gets to choose which task to retain and which one to delegate. Task 1 is a simple task, that gives all voters the same utility: $y_1 = \theta_1 + a_1$. Task 2 also gives the policymaker the ability to choose the allocation of benefits among three groups of voters indexed by J. Thus voter J utility from this task is c_J, and the policymaker is constrained to set $\sum_J c_J = \theta_2 + a_2$.

Alesina and Tabellini (2006) study how the politician behaves in the "cake splitting" example corresponding to task 2. They show that redistributive tasks generally entail low equilibrium effort and an incumbency advantage (i.e. in equilibrium the incumbent is re-elected with a probability greater than 1/2). The intuitive reason is that the incumbent redistributive policies allow him to build winning coalitions of voters and provide information about how he would redistribute in the future if re-elected; an opponent can make promises while out of office, but he does not have the same credibility. In other words, it is enough for the politicians to produce enough cake to please two out of three voters completely ignoring the third one. This is why, as shown in Alesina and

Tabellini (2006), delegation to a "fair" bureaucrat that gives 1/3 of the pie to everyone is ex ante preferable for the voters at the Constitutional Table.

Here we ask which of these two tasks is kept by the politician, and which one is delegated. As in the previous subsection, we assume that voters know the constitution and hold the politician accountable only for the policy task under his control. Clearly, the politician will never delegate redistribution, since it entails both an incumbency advantage and lower equilibrium effort. This squares well with what we observe. Unlike monetary policy or aspects of regulatory policies, where bureaucratic delegation is often exploited, fiscal policy is always under the direct control of political representatives. While both monetary policy and regulatory policy entail redistribution, fiscal policy is eminently more redistributive than any other policy task.

What about tasks that touch the interests of organized groups, such as those discussed in section 5? Whether the politician wants to delegate these tasks or not depends on the bargaining power of the lobby vs the politician. In section 5 we assumed that there was only one lobby and that it had all the bargaining power. Hence, in equilibrium the politician was left indifferent in its allocation of effort between the two tasks. Here, this would also imply that the politician has nothing to gain in retaining control of the policy tasks that are relevant for the lobby, and that he might be willing to delegate such tasks to an independent bureaucrat. If instead the policymaker in charge has bargaining power against the lobby (for instance because there are several lobbies competing against each other), then delegation is less likely, since the politician can grab rents for himself. The general prediction, therefore, is that we are likely to see delegation of policies towards special interest when the lobby is very strong, and instead we are likely to see political control when the organized interests fight against each other to obtain policy favors. Trade policy is a good example of a policy area that is often very politicized (i.e. not delegated), because it can generate massive campaign contribution from competing industries that demand protection. Regulation of a single industry, instead, is more likely to give rise to bureaucratic delegation, since here the special interests do not fight each other but all demand the same policy, and thus are more likely to have strong bargaining power against the policymaker in charge.

6.4 Risk

We now investigate whether the politician is more keen to delegate "risky" or "safe" tasks. The former is one in which the outcome is determined not only by talent and effort deterministically, but also by

random elements, force of nature, luck, etc. In order to make this issue interesting we need to have risk averse voters, otherwise risk would be irrelevant for them. Therefore now we assume that the utility function of the voters is separable in both tasks and strictly concave in each of them:

$$u = U(y_1) + U(y_2)$$

Task 1 is "safe" and its outcome is determined as before by talent and effort only: $y_1 = \theta_1 + a_1$. Task 2 is "risky", in that performance (and thus voters' utility) also depends on a random exogenous component:

$$y_2 = \theta_2 + a_2 + \varepsilon; \tag{30}$$

where ε is random variable with mean zero and variance σ_ε; voters only observe y_1 and y_2, but do not observe ε.

As before, the politician must delegate one task away, but he gets to choose which one. Suppose that the politician retains the safe task and delegates the risky one. His ability θ is then fully revealed to the voters when they observe y_1. At the election, the voters thus anticipate that re-electing the incumbent gives them utility $U(\theta + a^e)$. Voting for the unknown opponent, instead, gives the voters an expected utility of $EU(\theta + a^e)$, where the expectations operator is over the random variable θ. The equilibrium probability of re-appointment is thus:

$$\Pr\left[U(\theta + a^e) \geq EU(\theta + a^e)\right] \tag{31}$$

where now the probability refers to the random variable θ (since the incumbent still ignores his own ability when setting policy and when choosing the task allocation). The probability in (31) is clearly above $1/2$, because of strict concavity of $U(.)$, the more so the greater is the uncertainty over θ and the more concave is the utility function.[23] In other words, when voters are risk averse, the incumbent enjoys an electoral advantage. The reason is that the voters know more about the incumbent than about the opponent, and this makes them more reluctant to switch.[24]

The size of the incumbency advantage depends on which tasks are retained by the politician, however. Specifically, suppose that the politician delegates the safe task and retains the risky one. Now, the voters can no longer infer the incumbent ability from their observation of y_2. Reappointing the incumbent thus gives the voters an expected utility of

[23] This can be seen by noting that $\Pr\left[U(\theta + a^e) \geq U(\bar{\theta} + a^e)\right] = 1/2$, and that $EU(\theta + a^e) < U(\bar{\theta} + a^e)$ by strict concavity of $U(.)$.

[24] This result is related to Shepsle (1972).

$E(U(\theta + a^e) \mid \theta + \varepsilon)$, where the expectations operator refers to the expectation over θ, conditional upon observing $\theta + \varepsilon$. The expected utility of voting for the opponent, instead, is unchanged (by the assumption that there is no commitment and after the election the politician retains the safe task for himself). Hence, the equilibrium probability of reappointment is:

$$\Pr\left[E(U(\theta + a^e) \mid \theta + \varepsilon) \geq EU(\theta + a^e)\right] \tag{32}$$

where now the probability refers to the random variable $\theta_2 + \varepsilon$. By strict concavity of $U(.)$, and since the unconditional mean of ε is 0, we have that $U(\theta + a^e) > E(U(\theta + a^e) \mid \theta + \varepsilon)$ for all values of θ. Thus, the probability in (32) is strictly smaller than that in (31) - i.e. the incumbency advantage is smaller if the politician retains the risky task rather than the safe one.

We cannot conclude from this comparison that the politician prefers to retain the safe task for himself, however. The reason is that, as shown by Alesina and Tabellini (2006), equilibrium effort is generally higher under the safe task: since the politician faces less uncertainty, he finds it optimal to put more effort into the safe task than in the risky one. The idea is that, with imperfect monitoring, equilibrium effort is lower since voters are less sure of how much the final outcome can be explained by effort, ability or luck. On the other hand, when voters can perfectly disentangle effort and ability (since there is no luck involved) the politician finds it optimal to put in more effort to be reelected.

We summarize the foregoing discussion in the following:

Proposition 5 *The choice between the safe and the risky task entails a trade-off between votes and rents (or effort). By keeping the safe task and delegating the risky one, the politician increases his incumbency advantage but decreases equilibrium rents (increases equilibrium effort).*

Thus, voters' risk aversion makes the politician more willing to delegate risky tasks. Intuitively, the politician is aware that risk averse voters punish bad luck more harshly than they reward good luck. He thus prefers to leave this risk to the bureaucrat. In some sense, the bureaucrat acts as a "scapegoat" for the politician, as suggested by Fiorina (1977), or to be more precise as a risk taker for the politician. This incentive is tempered by the opposite considerations concerning rents (or effort), however, since more risky tasks are also associated with greater rents.

This result is also relevant for other institutional choices besides delegation, and in particular for the design of more or less transparent procedures for policy formation. Transparency of public policy is an

important dimension of institutions and it is ultimately a choice variable. Politicians can make a policy process more or less transparent, and in this choice they face a trade-off similar to that summarized in Proposition 5. More transparency has the benefit of increasing the incumbency advantage, because the voters are better able to assess the qualities of the incumbent, while they know less about the opponent. But more transparency is also likely to reduce equilibrium rents, because the punishment for rent extraction is more severe. Depending on which incentives are likely to prevail, politicians will choose more or less transparent procedures. An interesting application of this idea is to the budget process. In many countries the government budget is very non transparent and this is considered a "problem" from the point of view of optimality of institutions. But the degree of budget transparency is entirely endogenous and it is the result of politicians' strategic choices. In fact the government budget is the primary source of rents broadly defined for politicians. Otherwise there would be no reason not to simplify the budget documents and the budget process.[25]

7 Conclusions

From a normative perspective, what policy tasks should be left in the hands of politicians, which ones should be delegated to independent agencies? Consider first policies with few redistributive implications, such as monetary policy or foreign policy. Bureaucrats are likely to be better than politicians if the criteria for good performance can be easily described ex-ante and are stable over time, and if political incentives are distorted by time inconsistency or short-termism. Monetary policy indeed fulfills many of these conditions, and the practice of delegating it to an independent agency accords well with some of these normative results. Foreign policy does not, because the criteria for good performance are unstable and more vague, and the benefit of insulating policy from the political process are smaller.

Next, consider policies that have redistributive implications, such as trade policy, regulation, or fiscal policy. Here, bureaucrats perform well if the policy consequences touch narrowly defined interest groups, if criteria of good performance can be easily formulated and assessed in terms of efficiency, and if the legal system is strong. Politicians instead are better if the policy has far reaching redistributive implications so that compensation of losers is important, if criteria of aggregate efficiency

[25] See Alesina and Perotti (1999) for a survey of the literature on budget institution and of transparency. Alesina and Cukierman (1991) discuss a different model in which also the degree of transparency can be chosen endogenously by politicians who would not always choose the maximum level of this variable.

do not easily pin down the optimal policy, and if there are interactions across different policy domains (so that a single measure of performance is affected by several policy instruments and policy packaging or evaluating controversial trade-offs is required to build consensus or achieve efficiency). Regulation of public utilities or of specific industries are examples of policies that lend themselves to bureaucratic delegation, since they pit special interests against those of consumers as a whole, do not have large spillover effects, and policy performance can be evaluated on the basis of efficiency or other semi-technical criteria. Trade policy might fall in this category too, although here the redistributive implications are more pronounced. There are other specific aspects of fiscal policy that would certainly meet our normative criteria for bureaucratic delegation: for instance, detailed tax policy provisions, or intertemporal fiscal policy choices where time inconsistency or political myopia is an obvious issue, as suggested by Blinder (1997).

Overall, the normative analysis suggests that there is ample scope for bureaucratic delegation to improve over political delegation, particularly if politicians remain in charge of defining and correcting the general mission of independent agencies.

Are these normative conclusions likely to be reflected in observed institutional arrangements? As discussed in the last section of this paper, opportunistic politicians do not internalize these normative criteria. Actual institutions are more likely to be designed so as to deliver maximal rents at the lowest risk for the incumbent politician. This argues for retaining under political control policy tools that are useful to build winning coalitions or to generate campaign contributions by several competing lobbies, such as trade policy or much of fiscal policy. It also means that politicians might want to get rid of tasks that expose them to risk, such as monetary policy. But this "risk shielding" requires that bureaucratic delegation be complete, so that the blame for policy failure lies fully with the independent agency and does not reach the politician. This last point, although not fully captured by our theoretical model, might also explain why it is politically so difficult to exploit delegation to independent agencies in fiscal policy. Full bureaucratic delegation of fiscal policy is inconceivable, for normative and positive reasons. But partial delegation of narrowly defined technical tasks in fiscal policy may be politically unfeasible, no matter how desirable. The reason is that voters would still hold the politician accountable, as long as he retains some control (i.e. unless the delegation is complete). And if he is held responsible, then the politician loses any incentive to delegate control.

Appendix

1. Lobbying

As stated in the text, the equilibrium with campaign contributions must solve the following optimization problem by choice of $a_{1,}a_2$ and f, subject to non-negativity constraints on the three choice variables, and taking voters' expectations a_1^e as given.

$$Max\,[(1+\gamma)a_2 - f] \text{ s. to } \Pr(\theta \geq \bar{\theta} + a_1^e - a_1 - H(f)) - C(a_1 + a_2) \geq \bar{V} \tag{33}$$

where $\bar{V} = \Pr(\theta \geq \bar{\theta} + a_1^e - \hat{a}_1) - C(\hat{a}_1)$ is the politician's utility if he refuses the campaign contributions and unexpectedly devotes effort to please the voters (given that voters' expectations a_1^e are consistent with the equilibrium outcome). The out-of-equilibrium level of effort $\hat{a}_1$ is defined implicitly by the optimality condition: $C_a(\hat{a}_1) = n(\bar{\theta} + a_1^e - \hat{a}_1)$, and also depends on voters expectations of the equilibrium outcome. In equilibrium, voters expectations must be consistent with the task allocation chosen by the politician.

Letting μ denote the Lagrange multiplier of the constraint that the politician is indifferent between accepting or refusing the campaign contributions, the optimality condition of the lobby's optimization problem imply:

$$n(\bar{\theta} - H(f)) - C_a(a_1 + a_2) \leq 0 \tag{34}$$

$$1 + \gamma - \mu C_a(a_1 + a_2) \leq 0 \tag{35}$$

$$\mu n(\bar{\theta} - H(f))H_f(f) - 1 \leq 0 \tag{36}$$

where a strict inequality implies respectively: $a_1 = 0$, $a_2 = 0$, $f = 0$.

Consider first the case $H_f(0) < 1/(1+\gamma)$. Since $H_{ff} < 0$, lobbying is inefficient and the first order conditions can only be satisfied if $f = a_2 = 0$ and a_1 is at an interior optimum defined by $n(\bar{\theta}) - C_a(a_1) = 0$.

Next, consider the case $H_f(f^*) > 1/(1+\gamma)$. This is the opposite extreme, in which lobbying is very effective. In this case $a_1 = 0$ and a_2 and f are at an interior optimum defined jointly by

$$C_a(a_2^P) = (1+\gamma)H_f(f^*)n(\bar{\theta} - H(f^*))$$

and by the politician's indifference condition (with $\bar{V}$ evaluated at the point $a_1^e = 0$), namely:

$$\Pr(\theta \geq \bar{\theta} - H(f^*)) - C(a_2^P) = \bar{V} \tag{37}$$

In the intermediate case, in which $H_f(0) > 1/(1+\gamma)$ but the returns to campaign contributions fall rapidly, we could also have an equilibrium

with positive campaign contributions but where the politicians devotes effort to both tasks. In this case the equilibrium outcome is defined implicitly by the politicians's indifference condition (37), and by the optimality conditions evaluated at an interior optimum for all three choice variables, which implies:

$$(1+\gamma)H_f(f^*) = 1$$
$$n(\bar{\theta} - H(f)) = C_a(a_1^P + a_2^P)$$

In the last two cases, the lobby must also be better off than in the absence of campaign contributions, i.e. $(1+\gamma)a_2^P \geq f^*$. Voters are always made worse off by positive campaign contributions, since they reduce effort in the preferred task a_1.

2. Proof of Proposition 4

Consider four cases: delegation vs no-delegation today, given that the voters expect no-delegation after the elections; and delegation vs no-delegation today, given that voters expect delegation after the elections.

Suppose that the voters expect that, after the election, the politician will retain both tasks. Consider each of the two possible constitutional arrangements for the current period. Under bureaucratic delegation (i.e.. the politician is in charge of task 1 while the bureaucrat is in charge of task 2), the probability of reappointment is: $Pr(y_1 \geq W)$ (since the ability of the incumbent politician in the second task is unknown, it cannot influence the election outcome). If voters are rational and fully understand the institutions in place, then their reservation utility is: $W = \bar{\theta} + a^e$. The equilibrium is then exactly as in section 2 above. In particular, the probability of reappointment is: $Pr(\theta_1 + a_1^P \geq \bar{\theta} + a_1^e) = 1/2$. If instead the politician keeps the second task for himself, and given that the voters understand it, the probability of reappointment is: $Pr(y_1 + y_2 \geq W) = Pr(\theta_1 + \theta_2 \geq W - a_1 - a_2)$, where the reservation utility is now given by: $W = 2\bar{\theta} + a_1^e + a_2^e$. In equilibrium (i.e., with $a_i^P = a_i^e$, $i = 1, 2$), the probability of reappointment is thus: $Pr(\theta_1 + \theta_2 \geq 2\bar{\theta}) = 1/2$.

Now suppose that the voters expect that, after the election, the politician will delegate task 2 and only retain task 1. Here, the relevant reservation threshold imposed by rational voters is: $W = \bar{\theta} + a_1^e$, since voters know that task 2 will not be controlled by the politician after the elections. Hence, the equilibrium probability of reappointment is $Pr(y_1 \geq W) = Pr(\theta_1 \geq \bar{\theta}) = 1/2$, irrespective of whether the politician delegates or not before the elections.[26]

[26]Note that we have implicitly assumed that voters separately observe y_1 and

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y_2; but this does not matter. If this was not the case, and in the case of no-delegation voters only observed y_1+y_2, then the equilibrium probability of reappointment under no-delegation would be $Pr(\frac{\theta_1+\theta_2}{2} \geq \bar{\theta})$, which is still equal to 1/2.

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