1 Introduction

There exists by now a large consensus among political scientists and economists on the fact that political decision-makers are best viewed as facing a fragmented front of political stimuli emanating from *multiple principals*. This pluralistic view of politics, which was touched upon earlier on by Bentley (1908) and Truman (1951) and certainly culminated in the work of Dahl (1961), applies at various layers of the overall decision-making process.

To illustrate, Congress and the Presidency might have different preferences on policy goals. Yet, both the Legislative and the Executive branches of the government influence how bureaucratic agencies run and implement various regulations (Epstein and O'Halloran, 1997, 1999; Snyder and Weingast, 2000). Similarly, Legislators are generally responsive to several interest groups that offer campaign contributions or even bribes in exchange of their services in the political arena (Grossman and Helpman, 1994, 2001; Spiller and Urbiztondo, 1994). Finally, the multiprincipal nature of the government trickles down to the mere implementation of regulatory policies. There, oversight by multiple agencies is indeed the rule rather than the exception (Moe, 1981, 1989; Baron, 1985; Wilson, 1989; Dixit, 1996; Martimort, 1996).

A Brief Critical Overview of Common Agency Models and Politics

Following the seminal work of Bernheim and Whinston (1986a, 1986b), those situations have been modeled as *common agency games*. In a nutshell, a common agency model works as follows. Several principals (interest groups, public bodies) noncooperatively design contribution schedules to influence a single policy-maker. This common agent chooses which offers to accept and which decision should be taken. The decision may be a vector of regulated prices on domestic and international markets or whether a particular reform should be implemented or not. The schedule offered by each principal stipulates how much that principal is ready to pay for a given decision. Bernheim and Whinston (1986b) demonstrated that the set of equilibria of this three-stage game may be quite large. To refine within this equilibrium set, they observed that each principal has always in his best-response correspondence a *truthful* contribution schedule. A *truthful* contribution schedule perfectly reflects the principal's preferences over alternative actions.[1] Truthful contributions make de facto the

[1] Technically, truthful contributions as defined by Bernheim (1986b) either perfectly reflect the principal's preferences among actions or stipulate a null contribution to the agent. Yet, the subsequent literature has generally focused on the first meaning, which conveys most of the economic intuitions at play.

policy decision-maker *residual claimant* for the decision made. As it is so for all principals, the agent fully internalizes the whole welfare of principals at any *truthful equilibrium*. The public decision maximizes the aggregate payoff of the grand coalition formed by the contributing principals and the common agent and thus ends up being always efficient. Although different truthful equilibria may entail different distributions of the overall surplus among the principals and their common agent, the policy chosen is welfare maximizing and thus essentially unique under weak conditions of strict concavity.

This model of the political process yields a striking and, in a sense, quite surprising result. According to this so-called *Pluralistic View of Politics*, the political process is *frictionless*. This *Chicago-like* approach of politics thus suggests that free entry in the political arena together with some form of perfect competition among interest groups would definitively ensure social-welfare maximization. And this even if policy decision-makers are not subject to any formal constraint on behavior and conduct.

This conclusion is clearly at odds with reality for at least three reasons. First, because it does not generate transaction costs of any sort, the standard common agency approach cannot explain why some groups form and are active players in the political arena, whereas others remain inactive.

Second, and for the same reason, the paradigm is silent on the boundaries of interest groups. Indeed, the common agency approach leaves no room for active groups to build coalition or even merge to leverage their influence (unless such merger allows to better extract the agent's rent). Indeed, in any case, the decision implemented is always efficient and thus remains unchanged. By the same token, the paradigm fails to explain why individual players should ever join groups instead of acting as separate principals on their own; a point forcefully emphasized by Mallard (2014) and Martimort (2018). In other words, the paradigm has been developed without any consideration for the free-riding problem that Olson (1965) stressed as a key determinant of collective action problems. As a model of political economy, this weakness is actually a serious blow.

Third, the common agency model also treats separately redistributive and allocative issues. Again, because the decision chosen by the common agent is always efficient, the distribution of welfare among interest groups has no impact whatsoever on this decision and vice versa. As a model of political economy, this feature is at best unpleasant. If anything, political economy should precisely be concerned by the link between the policies chosen on the one hand and the payoff distribution they induce among stakeholders on the other hand. Indeed, the common agency model under complete information beautifully derives the feasible redistributions of the surplus among the interest

groups which are assumed to actively influence the policy-maker, but, again, this redistribution has no impact on the decision which ends up being taken.

Moral Hazard as a Source of Contractual Frictions

In this Element, we take stock of the lessons of the existing common agency literature but modify this basic framework in a crucial direction. We explicitly introduce an agency problem between political principals and the policy-maker under the form of moral hazard. Moral hazard is a quite natural assumption in the framework of political delegation as it has been argued forcefully by several political scientists.[2]

Our running example throughout the Element has a decision-maker exerting a nonobservable effort that affects the probability that a reform be passed. Interest groups can favor or oppose the reform. Interest groups aim at influencing the decision-maker by means of contribution schedules that stipulate a payment to the decision-maker for each possible outcome: typically, whether the reform passes or fails. Although the principals' contributions can be made contingent on outcomes, they cannot depend explicitly on the action taken by the decision-maker. For example, contribution schedules cannot depend on whether the policy-maker in charge has worked hard or not to convince other politicians or the rest of citizens of the benefits of his decision.

This agency problem potentially may generate contractual frictions. Those frictions shape the interest groups' incentives to become active or not and, if active, to engage in coalition building with other groups if it helps leveraging collective influence. In other words, contractual frictions are key not only to explain the landscape of active interest groups but also to provide the missing link between the redistributive and the allocative sides of the political process that the previous complete information literature unfortunately failed to recognize.

Moral Hazard Might Not Always Suffice to Generate Contractual Frictions

Our analysis of moral hazard in common agency lobbying games starts by considering the most general set of feasible contributions given the informational constraint faced by interest groups. In this most unrestricted contracting scenario, each of those principals is able to offer payments contingent for

[2] For instance, Kiewiet and McCubbins (1991) argue that delegation of political decision-making from elected political majorities to standing committees and subcommittees within each chamber creates a conflict between what those majorities want and the policies that end up being implemented.

all possible outcomes of the political process. For instance, payments to the decision-maker only depend on whether a reform passes or fails. In this unrestricted contracting environment, making a risk-neutral decision-maker residual claimant for the interest group's benefits of the chosen policy is always a best response for this principal whatever contributions other competing groups are actually offering. This well-known result from the principal-agent literature carries thus over in a noncooperative context where groups compete for influence. At equilibrium, contribution schedules align each group's preferences over alternatives with those of the common agent. Contributions are again *truthful* in this moral hazard scenario.

However, the meaning of *truthfulness* slightly differs from what is commonly understood in the complete information scenario. In contrast with Bernheim and Whinston (1986b)'s original work, contributions now perfectly reflect the principals' relative preferences among *outcomes* and not among the actions that the agent could entertain. In a moral hazard environment with a standard *full support* assumption, all outcomes are feasible with some probability whatever the common agent's action. To illustrate, a reform can pass or fail with some probability and although this probability may change with the policy-maker's effort, there always remains uncertainty on final outcomes. From a technical viewpoint, the issue of extending the contribution schedules for outcomes which are not reached on the equilibrium path thus disappears in our framework. It is not necessary to impose any equilibrium refinement to justify truthfulness. Equilibrium schedules *must* satisfy this property. Compared with the case of complete information, the introduction of moral hazard significantly increases the predictive power of the common agency model.

Yet, even in a moral hazard environment, the main lesson of the common agency literature pertains. The risk-neutral decision-maker again ends up being made residual claimant by all principals for all consequences of his or her action. Accordingly, all interest groups are active at equilibrium, and the agent chooses an action which maximizes the payoff of the grand coalition he or she forms with those active principals. The political process remains frictionless; thereby confirming the main takeaway of the *Pluralistic Approach of Politics*. Moral hazard alone is not enough to challenge this efficiency view of competition in politics.

Nonnegative Contributions and Frictions

To get some meaningful contractual frictions, we have to consider a more restricted contracting environment where interest groups can no longer make the agent residual claimant for their own objectives. In fact, the residual

claimancy argument relies on the possibility for the policy-maker to compensate the interest group in case it is hurt by the decision taken: an unpalatable conclusion. The policy-maker could indeed always have the option to renege on an earlier agreement with an interest group and he will certainly do so whenever asked to compensate the group if some political outcome that hurts this group realizes.

A contrario, consider thus the scenario where interest groups only pay for the outcome that pleases them the most. Imposing this additional condition that transfers should be nonnegative generates meaningful agency frictions that render the picture of the game of influence much more realistic. To study in fine details these frictions, we distinguish two cases. In the first one, all principals have *congruent preferences* and are pleased when the reform succeeds. To illustrate, two interest groups are congruent if they want to push toward the adoption of the reform. In the second scenario, the groups have *conflicting* preferences and compete head-to-head for the policy-maker's services.

With congruent preferences, all interest groups prefer that the policy-maker exerts more effort toward implementing the reform. This effort becomes thus a *public good* and interest groups contribute to its provision by independently rewarding the common agent. Now, each principal enjoys only form a fraction of the aggregate benefit of a reform but, under a noncooperative behavior, has to pay for the full agency cost (as it resorts from the analysis) of implementing it. Because principals are not cooperating in designing contributions, *free riding* in the provision of incentives follows. This leads to a familiar under-provision of the agent's effort and the likelihood of a reform decreases accordingly.

This negative externality provides the key ingredient to explain entry into the political process. When an interest group's valuation for the reform is less than the corresponding agency cost it bears from its relationship with the decision-maker, its equilibrium contribution is null. Those principals do not contribute and remain out of the political process. The policy chosen by the common agent in equilibrium reflects thus only the preferences of the principals who are the most willing to intervene. This effect is crucial. It gives us a link between the *allocative efficiency* of the policy choice, the *endogenous structure* of active groups, and the *distribution of surplus* across those groups.

Importantly, heterogeneity is key to explain that some interest groups do not act. If all congruent interest groups are alike, they all intervene even though the political outcome still reflects the existing *free riding* among them and the likelihood of a reform is inefficiently low. This shows that redistribution of the benefits of the reform among interest groups has a *nonneutral* impact on the policy chosen.

The extent of the free-riding problem and its determinants, namely, the size of a group and the heterogeneity among its members, is now a fundamental driver of the game of influence. While adding new members to a group, by increasing the aggregate valuation, strengthens this group's influence, size in itself decreases a group's ability to exert influence. That is, for a given aggregate valuation, smaller groups will be more efficient than larger ones. In addition, groups with more homogeneous members tend to be more effective than groups whose members are more diversely affected by the policy.

Those frictions in the interaction among principals also modify the scope for coalition building among groups. Under unrestricted contracting, all the collective gains are exhausted via groups' competition. Coalition building can only be valuable when it helps in reducing the rent the agent can extract from groups' competition, while it has no impact on the policy decision. By contrast, free riding provides groups with an incentive to merge in order to cooperatively design their contributions. Such a joint design of contribution not only affects the distribution of the collective gains, but also the eventual decision and therefore the collective gain achieved from the policy process.

In the case of conflicting principals, most of the aforementioned features carry over although details change. In particular, conflicting principals may face different agency costs and evaluate in quite different ways the cost of entering the political arena. The result is that head-to-head competition between conflicting groups is more likely to induce a very asymmetric political landscape; the weaker group remaining outside the political arena.

Organization of the Element

Section 2 reviews the relevant literature. Section 3 presents our model of a political process leading to adopting or not a reform. This problem is viewed as a delegated common agency game under moral hazard. In Section 4, we derive the properties of equilibria when principals are unrestricted in the contribution schedules they may use. In Section 5, we introduce the nonnegativity constraints on payments. We analyze two important benchmarks for the rest of the analysis: the cooperative outcome and the scenario of *intrinsic common agency game*. We deduce from there the moral hazard frictions that affect the political process. Section 6 develops the case of congruent principals, whereas Section 7 deals with the scenario of conflicting interests. Section 8 analyzes the incentives of interest groups to merge to leverage their common influence. Section 9 briefly concludes. Proofs are relegated to Appendix A. In addition, Appendix B develops etc. an alternative scenario where the source of the agency frictions is the agent's risk aversion.

2 Literature Review

This Element has both a political economy and a methodological motivation. Our review of the extant literature reflects those two concerns and we now cover each in turn, although sometimes where we set the boundary between the two is a matter of tastes.

On the Political Economy Front

Over the past few decades, applications of the common agency model to various political economy contexts have flourished as exemplified by the work of Aidt (1998), Dixit, Grossman, and Helpman (1997), Rama and Tabellini (1998), Besley and Coate (2001), Grossman and Helpman (1994, 2001), Helpman and Persson (2001), and Yu (2005), among many others. Mallard (2014) and Martimort (2018) have written extensive surveys of this literature but have also stressed some of the limits of this approach. As the common agency model became extensively used as a description of political influence, getting a more realistic picture of the political process has been high on the research agenda.

In an attempt to reconcile redistributive and efficiency concerns, Dixit, Grossman, and Helpman (1997) have departed from the quasi-linear world inherited from Bernheim and Whinston (1986b) by introducing income effects. Unfortunately, the efficiency property of the truthful equilibria of the corresponding common agency games is preserved. In other words, redistributive concerns alone are unable to generate any frictions in the political process.

A key aspect of realism is certainly asymmetric information. Assuming asymmetric information on the agent's side and ex post contracting, Laussel and Le Breton (1998b), Le Breton and Salanié (2003), Martimort (2007b, 2008), and Martimort (2018) have also analyzed, as we do hereafter, the magnitude of the free-riding problem among interest groups. Putting an agency problem at the core of the analysis, be it induced by hidden information or hidden action, gives a fresh look at the Olsonian program of finding the determinants of groups' collective action.[3] Olson identified free riding among actors

[3] In this Element, as in Olson (1965) and most of the literature on collective action, the vocable *group* applies as well to a set of individuals with some common interest, and to some organized structure able to develop its own strategy of political influence. The way these concepts overlap or not depends arguably on the size of the group. In a small group, each member could as well act on his own. But in a larger group, and especially when dealing with contracts made to a policy-maker, organization seems a prerequisite of any action. This second aspect is best referred to as the *formation* of groups, while when all groups (or members of a group) are assumed to be already able do device their own contract, as in this Element, the situation is better described in terms of *interactions*.

with similar preferences as a major impediment to collective action. We will argue in Section 6 that this free-riding problem can be endogenized as coming from a contractual externality among contributors. Moreover, *free riding* is not enough *alone* to justify that an interest group fails to intervene. This failure is also linked to the existence of other competing groups. The whole landscape of competitors of an interest group matters to determine whether the latter intervenes or not.

In this respect, Lefebvre and Martimort (2020) have offered a model that explicitly integrates a group-formation stage in the analysis of the lobbying process. Forming an active group is actually a collective action problem that is made difficult by the fact that individual members have private information on their own marginal benefit of the group's influence on policy. Such private information is the source of a free-riding problem which now bites within groups. This free riding might undermine their influence in the political process, sometimes up to the point of eschewing any influence at all.[4] Asymmetric information on the principals' side in common agency model has also been studied by Martimort and Moreira (2010) and Lima and Moreira (2014) who argue that it is a major source of inefficiency.

Still assuming that decision-makers hold private information, Martimort and Stole (2018) have also shown that, if the principals' preferences are close to each other, all principals contribute in equilibrium; confirming thereby one of our results in corollary 1 in Section 6. This latter paper can indeed be viewed as the adverse selection version of the present work, with many results mirroring those found in this Element, especially in Section 6, under moral hazard. There also, an interest group intervenes if its benefit of doing so exceeds the corresponding agency costs. Of course, with asymmetric information, agency costs are of a different nature. As a result, marginal contributions are no longer truthful. Contributions offered by a group have to be discounted below its (marginal) willingness to pay to reflect the group's difficulty in solving the asymmetric information problem vis-à-vis the policy-maker. This point was made in various contexts by Martimort and Semenov (2007b, 2008) and Martimort and Stole (2018).

In the standard Chicago view of the political process pushed forward by Peltzman (1976) and later on by Becker (1983, 1985), the influence function which describes how interest groups exert pressure on a policy-maker is ad hoc and given at the outset. In Becker (1983, 1985), for instance, this function may not only depend on whether a group favors or not more spending, but also on the group size. The common agency approach makes progress on that front

[4] See also Leaver and Makris (2006) for a model with similar intuitions.