Games and Economic Behavior 86 (2014) 282–307

Contents lists available at ScienceDirect

Games and Economic Behavior

www.elsevier.com/locate/geb

Information transmission and inefficient lobbying

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ARTICLE INFO

Article history:
Received 13 April 2011
Available online 13 March 2014

JEL classification:
D82
D72

Keywords:
Lobby
Asymmetric information
Common agency
Political economy

ABSTRACT

In a seminal paper, Grossman and Helpman (1994) introduced a framework to understand how lobbying influences the choice of import/export tariffs. In this paper we extend their analysis and assume that lobbies have private information to analyze the effects of information transmission in a Grossman and Helpman lobby game. Information transmission leads to two agency costs. One refers to the cost of signaling and the other to the cost of screening the lobby's competitiveness. The signaling cost reduces distortions resulting from the screening cost. On the other hand, distortions from the screening cost enhance the signaling cost. The two combined effects generate more distortions in the political game than each effect separately. Tariff protection and lobbies' rents are lower than those found in Grossman and Helpman's truthful equilibrium. Therefore, information transmission may improve welfare through the reduction of rent-seeking activities.

1. Introduction

Lobbying plays a central role in the policy-making process in many fields of economic literature such as trade, taxation and regulation. Yet, there is no consensus about the role of lobbies in the political process. One branch of the literature[2] treats lobbies as groups that have privileged access to information relevant to the decision-making process, but conflict of interest may however prevent the revelation of this information.

Another branch views lobbies as rent-seeking groups that exercise influence through money contributions. Lobbies swing the decision of an influenceable policy maker in their favor at the expense of the society's welfare. Within this literature, Grossman and Helpman (1994) – GH hereinafter – is the seminal paper to capture the importance of lobbying. In their model, the political game takes place in a small economy and lobbies represent productive sectors that offer money contributions to the policy maker in order to receive tariff protection. A fraction of individuals in the economy is not represented by lobbies and does not participate in the political game. The country's trade policy favors the sectors that lobby while the deadweight loss from tariff protection is borne by individuals who do not lobby. GH assume perfect information in the political game.

This paper stands in-between the two branches. We generalize the GH rent-seeking lobbying model by introducing asymmetric information on the competitiveness of productive sectors. There are two lobbies, each one informed only about

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1 Humberto Moreira thanks CNPq of Brazil, grant number 300807/98-8 (NV), for financial support.

2 For example, Potters and Van Winden (1992), Austen-Smith (1995), Austen-Smith and Wright (1992), Krishna and Morgan (2001), and Esteban and Ray (2006).

http://dx.doi.org/10.1016/j.geb.2014.02.010
0899-8256/

its own competitiveness. The policy maker has no private information and does not observe the sectors' competitiveness. Lobbies are rent seekers and have more information regarding the impact of policy instruments.

The political game unfolds as follows. Lobbies simultaneously offer contributions to the policy maker in exchange for tariff protection. The policy maker may accept contributions and grant tariff protection according to the importance he[3] gives to the society's welfare. This common agency game can be analyzed as two bilateral relationships between each lobby and the policy maker. The information asymmetry has two distinct effects in these bilateral relationships. A lobby's bilateral relationship with the policy maker is affected by the lobby's private information because the implications of the policy maker's decision depend on it. A signaling problem then arises from this information asymmetry. The two bilateral relationships also affect each other. The tariff protection negotiated in one relationship has impacts on the utility the policy maker obtains in the other bilateral relationship. As a result, the private information of one lobby is important for the rival lobby's bilateral relationship with the policy maker. As we shall see in more detail, this information transmission problem has the structure of a screening problem.

The first asymmetric information problem arises because the policy maker does not know the lobbies' types. Facing the same tariff protection, more competitive lobbies ("high-types") cause greater deadweight loss than less competitive ones ("low-types"). A costly signaling problem is introduced in the lobby/policy maker relationship. Low-type lobbies must separate themselves from high-type lobbies. Separation allows the policy maker to correctly discern lobbies' types, although low-type policies are distorted. We refer to these distortions as the signaling effect (or cost).

The second asymmetric information problem comes from the fact that goods are substitutes and each lobby does not know the rival's type. Substitutability implies that the society's welfare and the policy maker's preference are not separable functions of the lobbies' policies. The marginal deadweight loss from tariff protection in the market of lobby 1 is a function of the tariff protection in market 2 (and vice versa). When lobby 1 does not observe the tariff protection in market 2, she does not access her true marginal cost of tariff protection because it depends on the private information of lobby 2.

In case contributions are separating, the policy maker endogenously learns the lobbies' types. Lobby 1 is then able to make conditional contributions to screen the rival lobby's information through the policy maker. Screening is costly and generates distortions in the political game. We refer to these distortions as the screening effect (or cost). Both asymmetric information problems constitute what we call the information transmission problem.

The distortions resulting from information transmission reduce the lobbies' influence. The low-type lobby separates herself from the high-type lobby by demanding less tariff protection than she would under perfect information. Screening the rival's type makes the lobby leave informational rents to the policy maker and also demand less tariff protection. Therefore, information transmission allows the policy maker to extract informational rents from the lobbies. We show that in such games, tariff protection decreases, imports increase, and the society's welfare increases when compared with the GH's truthful equilibrium.

Not only the pattern of tariff protection but also the distribution of the political game's surplus significantly differ from those in GH. In their paper, when lobbies are highly concentrated (the case we are considering here) the policy maker gets his reserve utility and lobbies extract all the surplus. With privately informed lobbies, the policy maker has bargaining power against the lobbies, due to the screening effect, and is able to retain some rents. Since tariff protection is also different from the truthful equilibrium, some of the political rents are dissipated. Both effects reduce the lobbies' rents.

Our framework also allows us to evaluate the role of transparency in lobbying activity. Some papers which study the role of information in lobby games focus on issues related to costly signaling or cheap talk.[4] While our paper also features costly signaling, the screening effect is novel in the lobby literature. The screening effect arises because the information transmitted in one bilateral relationship provides the policy maker extra bargaining power to use in his other bilateral relationship. This result raises doubts about the role of the often plagued transparency in the relationship between lobbies and government (policy maker). Making contributions public in our model would decrease the society's welfare because the policy maker would be stripped of an instrument to bargain with lobbies.

This paper also provides a theoretical contribution to the literature. To the best of our knowledge, this is the first model that brings together signaling and screening effects in a common agency game. We are also able to identify how the two information transmission problems interact with each other. We find that increasing the distortions from the screening effect has a significant impact on the separation effort by amplifying the distortions from the signaling effect. More screening distortions lead to more signaling distortions. On the other hand, the signaling effect decreases rents of the political game, which in turn, lowers the informational rent and the distortions from the screening effect. More signaling distortions lead to less screening distortions. The interaction of both information problems generates more distortions in the political game than each problem separately.

In the following subsection we discuss the related literature. Next section presents the economy and the political game, and characterizes the efficient policies as well as the equilibrium of the political game under perfect information. In Section 3, we present the informed lobby problem. We define, prove the existence and characterize the equilibrium of the political game in Section 4. We then compare the equilibrium of the political game with the equilibrium of the game under perfect information. Section 5 provides a discussion of our selected equilibrium. Section 6 concludes. All the proofs are pre-

[3] We will use feminine pronouns to refer to lobbies and masculine pronouns in referring to the policy maker.

[4] See Potters and Van Winden (1992) and Krishna and Morgan (2001).