Chapter The Making of Policy

Otto H. Swank

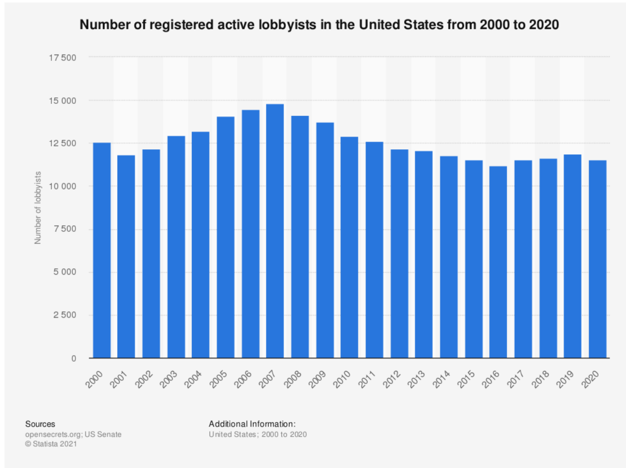
1 Introduction

In the chapters on redistribution and political accountability, policy was represented by a single variable. This approach enabled us to focus on three roles of elections: aggregating preferences, selection and disciplining. In practice, however, once elected, politicians are responsible for thousands of decisions in a wide variety of fields. This simple fact has two important consequences. First, if politicians were to make all these decisions themselves, they would be overloaded with work. Second, it is impossible for politicians to be well informed about all activities for which they are responsible. The analysis of the consequences of most decisions is beyond their expertise.

Against this background, it is not surprising that besides politicians, other people are involved in making policy. Perhaps it is a bit more surprising *how many* people are involved. To get an idea, in the United States, there are more than 1000 federal advisory committees, ranging from the Advisory Council of Historic Preservation to the Women's Bureau.[1] Each of these committees advises on a specific policy domain. A well-known advisory committee is the Council of Economic Advisors (CEA), which advises the President on economic policy.

Advisory committees work for politicians. By providing information, these committees influence ultimate decisions. In this chapter, we investigate the interactions between politicians and advisors. We examine when politicians follow advice and when they do not. We show that when the preferences of an advisor and a politician are closely aligned, the politician follows advice. Potentially, advisors have enormous power. This does not mean that politicians have no power. In many cases,

[1] For a list of all advisory committees, see the Federal Advisory Committee Act database.



chairs of advisory committees are political appointments.[2] This raises the question of who do politicians choose as advisors?

Politicians do not only receive information about policy consequences by their advisors. Another important source of information are interest groups. Figure 1 shows that between 2000 and 2020 there were more than 11,000 registered active lobbyists in the United States. These lobbyists work for Special Interest Groups, like the American Federation of Teachers and the National Rifle Association. Of course, lobbying is not limited to the United States. The European Parliament and the European Commision have a joint *transparency register* to allow people to acquire information about lobbying activities. On the fifth of December 2021, there were 13,270 lobbyists in the register.

What do Lobbyists do? Anecdotal evidence and surveys show that lobbyists seek contact with politicians to get their support. Why would politicians listen to lobbyists who clearly serve special interests? Do lobbyists improve policy making? We develop simple models that help answering these kinds of questions.

In Chapter 4, we emphasized that in practice, democracy often means representative democracy. Politicians rather than citizens are responsible for the design and implementation of policies. Delegation has often been motivated by specialization. Professional politicians have the time and abilities to make good decisions. This chapter draws a more nuanced picture. It is natural to assume that politicians are

[2] For example, in 2021, President Biden appointed Cecilia Rouse as chair of the CEA. As many of her predecessors, she is a successful academic, who has published in top economic journals.

better informed about many policies than voters. However, the consequences of policies are too complex to be fully understood by politicians. Politicians must seek for information. One difficulty is that those who possess information about policy consequences are often "interested" parties with a stake in the ultimate decision. Potentially, this leads to socially sub-optimal decision making.

In this chapter, we investigate advisors and interest groups as providers of information for politician. The common feature of models of advice and models of informational lobbying is that the politician is the uninformed party who wants to learn about policy consequences. An important difference between the two types of models is that in models of advice, politicians typically take the initiative and might be willing to pay for information. By contrast, in models of informational lobbying, the interest group typically takes the initiative and might be willing to pay for access to the politician.

In the models of this section, we assume that the politician wants to make good decisions, that is, decisions from which society as a whole benefit. In this respect, the nature of the model differs from the models in the previous chapters. The reason for assuming that politicians want to make good decisions is that under this assumption, any deviation of good decisions can be attributed to other factors like incomplete information or the influences of advisors and lobbyists.

2 A Simple Informational Lobbying Model (ILM)

Consider a politician, P, who has to make a decision on a project x. As to this project, there are two alternatives: implementation ($x = 1$) and maintaining status quo ($x = 0$). The consequences of the project are uncertain. We model this by the state of the world, μ. Implementation yields a utility, $U_P(x)$, to P equal to

$$U_P(1) = p + \mu, \tag{1}$$

where p is the politician's predisposition towards the project. We assume that μ is uniformly distributed on the interval $[-h, h]$. By normalization, maintaining the

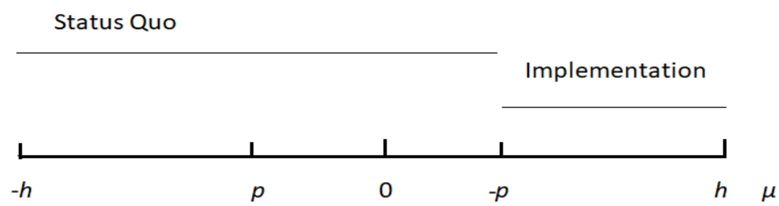


Figure 1: What the politician should do.

status quo yields a utility to the politician equal to zero:

$$U_P(0) = 0. \tag{2}$$

The politician does not observe μ. In the absence of information about μ, the politician chooses $x = 1$ if $p \geq 0$ and chooses $x = 0$ if $p < 0$. Clearly, the politician should implement the project only if $p + \mu \geq 0$, that is if $\mu \geq -p$. If $h > |p|$, without further information about μ, the politician runs the risk of making the wrong decision about μ. To ensure that the model focuses on an interesting situation, we assume that $h > |p|$. Figure 1 describes a situation where $-h < p < 0$. Without information about μ, P chooses $x = 0$. However, if $\mu > -p$, he should have chosen $x = 1$.

The second player in the model is an interest group, I. The interest group is concerned about the decision on x. Moreover, it possesses information about μ. The interest group's preferences are represented by the utility function, $U_I(x, s)$, with

$$U_I(1, s) = i + \mu - s \cdot c \tag{3}$$

and

$$U_I(0, s) = -s \cdot c \tag{4}$$

where i denotes I's predisposition towards the project, and $s \in \{0, 1\}$ represents the interest group's decision to seek contact with the politician or not, with $s = 1$ denoting "seek contact" and $s = 0$ denoting "do not seek contact". The parameter

c represents the cost of seeking contact.

If $s = 0$, the interest group does not have not the opportunity to send a message to P. If $s = 1$, the interest group can reveal her information about μ. We model this as follows. We assume that I can send two *messages*: first, $m = m^g$, meaning "the project should be implemented", and second, $m = m^b$, meaning "the status quo should be maintained." We assume that the politician cannot verify I's message. We say: "information is soft." If information were hard, the politician could verify whether I lied or told the truth. The extent to which information is soft or hard depends, among other things, on (i) the time I can spend on explaining things to P; (ii) the time P spends on trying to understand the message (Dewatripont and Tirole, 2005); and (iii) the extent to which P and I have the same expertise.

Our assumption that information is soft thus suggests that we focus on situations, in which the politician is not an expert on the topic, and has little time to analyze the interest group's message. As discussed in the introduction, as politicians have to make decisions on a wide variety of topics, they cannot have expertise in all policy domains. Furthermore, since politicians have to make numerous decisions, they lack the time for carefully analyzing each message. The assumption of soft information seems therefore very plausible.

Table 1 summarizes the ILM.

Table 1 The Informational Lobbying Model

Players: P and I

Timing:

- Nature draws μ from the uniform distribution on $[-h, h]$. I observes μ, P does not.

- I chooses $s \in \{0, 1\}$.

- If $s = 1$, I sends a message $m \in \left\{m^b, m^g\right\}$ to P.

- On the basis of s and m, P updates her belief about μ according to Bayes' rule, $\hat{\mu}(s, m) = E(\mu | s, m)$.

- P makes a decision about $x = \{0, 1\}$.

Utility Functions:

- $U_P(1) = p + \mu$ and $U_P(0) = 0$.
- $U_I(1, s) = i + \mu - s \cdot c$ and $U_I(0, s) = -s \cdot c$.

We solve the model for perfect Bayesian equilibria (PBE). In an PBE, given I's strategy, P updates his belief about μ according to Bayesian rule. He chooses $x = 1$ if and only if $p + \hat{\mu}(s, m) > 0$, where $\hat{\mu}(s, m)$ is the updated belief about μ, conditional on s and m. Anticipating P's strategy, when $s = 1$, I sends $m = m^g$ if and only if m^g yields a higher utility than m^b. Moreover, at the beginning of the game I chooses $s = 1$ if $s = 1$ yields a higher expected utility than $s = 0$.

In the next section, we focus on the case that $-h < p < 0$. This means that in the absence of information about μ, the politician chooses $x = 0$. The analysis of the opposite case that $h > p > 0$ is analogous. Finally, we assume that P and I speak the same language in which $m = m^b$ is a recommendation for $x = 0$, and m^g is a recommendation for $x = 1$.[3]

2.1 Equilibria of the Informational Lobbying Model

Suppose that the interest group sought contact with the politician, $s = 1$. What does I tell P? Given that I and P speak the same language, it is natural to assume that $m = m^b$ never leads to a higher probability than $m = m^g$ that P chooses $x = 1$. The implication is that a negative recommendation never induces the politician to implement the project: m^b reinforces P's bias *against* the project. Does P follow a positive recommendation? I wants P to choose $x = 1$ if $\mu > -i$. Therefore suppose that I sends $m = m^g$ if $\mu > -i$ and $m = m^b$ if $\mu \leq -i$. What can P learn from $m = m^g$? Given I's strategy, he learns that $\mu > -p$. As μ is uniformly distributed, the expected value of μ given that $\mu > -i$ equals $\frac{1}{2}(h - i)$. Hence, given I's strategy, it is optimal for P to follow I's positive recommendation if

$$p + E(\mu | m = m^g, s = 1) = p + \frac{1}{2}(h - i) > 0. \tag{5}$$

[3] We could also have assumed that $m = m^g$ is a recommendation for $x = 0$ and $m = m^b$ is a recommendation for $x = 1$. In models like the ILM, it is not important which language players speak. It is important that players share a language.

If (5) is violated, P will ignore a positive recommendation. He will choose $x = 0$ regardless what I tells her.

Lemma 1 *Suppose $s = 1$. It is a dominant strategy of I to send $m = m^g$ if $\mu > -i$, and $m = m^b$ if $\mu \leq -i$. If $p + \frac{1}{2}(h - i) > 0$, P follows I's recommendation. If $p + \frac{1}{2}(h - i) < 0$, P chooses $x = 0$ irrespective of m.*

Now consider I's decision about s. I anticipates how P will respond to her recommendation if she seeks contact, $s = 1$. Assume that if the interest group does not seek contact, $s = 0$, the politician chooses $x = 0$. Below, we check the validity of this assumption. Under this assumption, its is not possible that in equilibrium $m = m^b$ induces P to choose $x = 0$. The reason is that I can also induce $x = 0$ by $s = 0$ which saves cost c. Hence, $s = 1$ leads to $x = 1$. I receives a higher utility from $s = 1$ than $s = 0$ if

$$i + \mu - c > 0 \rightarrow \mu > -i + c. \tag{6}$$

Notice that the condition for seeking contact is more restrictive than the condition for $m = m^g$, given that contact was sought. This means that, if $s = 1$, the interest group always recommends the project. From $s = 1$, the politician infers that $\mu > -i + c$. Updating μ according to Bayes' rule yields $\hat{\mu}(s, m) = \frac{1}{2}(h - i + c)$. Hence, it is optimal for the politician to choose $x = 1$ when $s = 1$ if $p + \frac{1}{2}(h - i + c) > 0$. We have assumed that if I chooses $s = 0$, P chooses $x = 0$. Clearly, this is an optimal response: $s = 0$ indicates a low value of μ, meaning $\hat{\mu}(0, m) < 0$. As $p < 0$, it is optimal for P to choose $x = 0$ if $s = 0$.

Proposition 1 summarizes the above discussion.

Proposition 1 *If $p + \frac{1}{2}(h + c - i) > 0$, the Informational Lobbying Model has an equilibrium in which*

1. The interest group chooses $s = 0$ if $\mu \leq c - i$ and chooses $s = 1$ if $\mu > c - i$;

2. The politician chooses $x = 0$ if $s = 0$ and $x = 1$ if $s = 1$;

3. The interest group always sends $m = m^g$;

4. Posterior probabilities are $\hat{\mu}(1, m^g) = \frac{1}{2}(h + c - i)$ and $\hat{\mu}(0, m) = -\frac{1}{2}(h + i - c)$.

If $p + \frac{1}{2}(h + c - i) < 0$, the Informational Lobbying Model has an equilibrium in *which the interest group always chooses* $s = 0$*, the politician always chooses* $x = 0$*, and* $\hat{\mu}(0, m) = 0$*.*

Proposition 1 describes two equilibria, one in which lobbying occurs and influences the decision on x, and one in which lobbying does not take place. In the equilibrium in which lobbying occurs, the decision on s contains information about the project. The act of seeking contact makes words, m, superfluous. The interest group always sends $m = m^g$. This equilibrium requires that $p + \frac{1}{2}(h + c - i) > 0$. This condition ensures that the politician implements the project if the interest group seeks contact. The condition shows that the interest group should not be too biased towards implementation. The intuition is that a strongly biased interest group has strong incentives to seek contact. She thus seeks contact for a wide range of μ. Consequently, $s = 1$ does not contain much information about μ. It follows that $\hat{\mu}(1, m^g)$ depends negatively on i.

As interesting is that $\hat{\mu}(1, m^g)$ depends positively on the cost of seeking contact, c. This result is also intuitive. If the cost of seeking contact is high, the interest group is only willing to seek contact if μ is sufficiently large. Hence, from $s = 1$ the politician infers that μ is high.

In the ILM, the politician has the *formal* authority to make a decision about the project. However, in the equilibrium where lobbying takes place, the interest group has the effective control over the decision, that is, she has *real* authority (Aghion and Tirole, 1997). Is this bad for society? To answer this question, suppose that the politician's preferences reflect what is good for society. In heaven, a place where the politician observes μ, the project is implemented if $\mu > -p$, not if $\mu > c - i$. In heaven, interest groups are ignored. However, we live on earth, not in heaven. Politicians have neither the time nor the expertise to learn μ. As a result, without lobbying, the politician always chooses $x = 0$, leading to an *ex ante* expected utility equal to zero. With lobbying, $x = 1$ if $\mu > c - i$ and $x = 0$ otherwise. Then, the politician's expected utility equals

$$\begin{aligned} E(U_P) &= \Pr(\mu > c - i)\left[p + E(\mu | p = 1)\right] + \Pr(\mu < c - i)\, 0 \\ &= \frac{h + i - c}{2h}\left[p + \frac{1}{2}(h + c - i)\right] \geq 0. \end{aligned} \tag{7}$$

Since $h + i - c \geq 0$, lobbying benefits society if the term in squared brackets in (7) is greater than zero. Note that this is the condition for the Lobbying equilibrium to exist. So, in expected terms, if informational lobbying occurs, it makes society better off. The reason is that decisions are based on more information.

Equation (7) can also be used to think about the optimal value of c. One interpretation of c is how approachable the politician is. Maximizing (7) with respect to c yields $c = c^o = i - p$. To understand this result, suppose that relative to the politician, the interest group is biased towards implementation $i > p$. Then, if $p < \mu < i$, $x = 1$ benefits the interest group but hurts the politician. From P's point of view, I has too strong incentives to choose $s = 1$. As discussed above, a higher value of c discourages the interest group from choosing $s = 1$. If $c = i - p$, the interest group chooses $s = 1$ if $\mu > -p$. The politician wants to the project to be implemented if $\mu > -p$. Hence, if $c = i - p$, the politician exactly gets the information he needs.

In some situations, the politician can influence the value of c. As discussed in the introduction, most politicians have to make decisions in many policy domains. Each domain has its own interest groups. In some domains, interest groups have extreme preferences. In others, the interest groups are relatively moderate. Our result that $c^o = i - p$ shows that the politician chooses to be approachable by interest groups for whom i is equal or just higher than p but chooses to be less approachable for more extreme interest groups.

Exercise 1 *Take the first equilibrium presented in Proposition 1. Discuss under which condition the politician wants to pay the lobbyist for information.*

Exercise 2 *Determine the conditions under which an equilibrium exists in which the politician chooses $x = 1$ if $s = 0$ and $x = 0$ if $s = 1$. Discuss the plausibility of this equilibrium relative to the plausibility of the equilibrium presented in Proposition 1. If P and L could coordinate on one of these equilibria, on which one would they coordinate?*

3 A Model of Advice

In the previous section, an informed interest group tried to influence the politician's decision about a project. There are numerous examples of such situations. However, in other situations, politicians actively seek for advice. Many governments have departments, a department for domestic affairs, foreign affairs, for health, education, etc. Ministers are the political heads of those departments. In those departments, civil servants assist their ministers in making decisions. Politicians do not only take advise from civil servants. They themselves approach interest groups for information or hire consultants.

In this section, we modify the Informational Lobbying Model to get a Model of Advice. There are two players: the politician and an advisor, A. The politician does not observe the state of the world. He can consult an advisor who does observe it. Table 2 presents the Model of Advice.

Table 2 The Model of Advice

Players: P and A

Timing:

- Nature draws μ from the uniform distribution with range $[-h, h]$. A observes μ, P does not.
- At cost c, P can ask A for advice, $r \in \{0, 1\}$.
- If $r = 0$, P makes a decision about $x \in \{0, 1\}$.
- If $r = 1$, A sends a message $m \in \left\{m^b, m^g\right\}$ to P.
- P makes a decision about $x \in \{0, 1\}$.

$U_P(r, x)$ gives the politician's utility and $U_A(x)$ gives the advisor's utility :

- $U_P(r, 1) = p + \mu - rc$ and $U_P(r, 0) = -rc$.
- $U_A(1) = a + \mu$ and $U_A(0) = 0$.

In the ILM, the interest group takes the intiative to seek contact. In the Model of Advice, the politician takes the initiative, $r \in \{0, 1\}$, where $r = 1$ denotes that at cost c, P consults an advisor and $r = 0$ denotes that he does not. If P chooses $r = 0$, he makes a decision without advice. If P asks for advice, A sends a message $m \in \left\{m^b, m^g\right\}$ to P. This message is a nonverifiable claim about μ. Thus, as in the ILM, information is soft. The advisor's utility function reflects that A is concerned about the outcome of the project. Importantly, her predisposition, a, may deviate from p. One might argue that civil servants, or other advisors, should be neutral, that their advises should not be driven by private motives. However, one plausible reason for why civil servants care about outcomes is that they are intrinsically motivated. A civil servant working in the Department of Health might have chosen this job because he wanted to use his expertise for enhancing national health. Another reason why advisors are concerned about outcomes is that their future careers depend on them. For example, $x = 1$ may lead to new consults.

To solve the Model of Advice, we identify perfect Bayesian equilibria, in which (i) P's decisions on r and x maximize his utility, given his beliefs and A's strategy; (ii) A sends a message that maximizes her utility, given P's beliefs and P's strategy; and (iii) P updates his beliefs about μ according to Bayes' rule, $\hat{\mu}(r, m) = E(\mu|r, x)$. As in the Informational Lobbying Model, we assume that the politician is biased against implementation, $p < 0$. Furthermore, to ensure that the model describes an interesting situation, we assume that $p < |h|$. These inequality ensure that if $r = 0$, P may make an incorrect decision about x.

The Model of Advice has multiple equilibria. Proposition 2 presents the interesting one.[4]

Proposition 2 *A perfect Bayesian equilibrium of the Model of Advice with $p < 0$ exists in which*

[4] Apart from the equilibrium presented in Proposition 1, another perfect Bayesian equilibrium exists. It is called a "babbling" equilibrium, where A's sends a message that does not contain information about μ, A babbles. Given that m does not contain information, it is optimal for P to ignore m, and to choose $x = 0$. Anticipating that no information will be exchanged, P chooses $r = 0$ at the beginning of the game. In the extensions of the Model of Advise presented below, babbling equibria always exist. However, we will focus on equilibria in which m may affect P's decision on x.

(i) P chooses $r=1$ if and only if

$$c < \frac{1}{2h}(h+a)\left[p+\frac{1}{2}(h-a)\right]$$

(ii) A sends $m=m^g$ if $\mu>-a$, and $m=m^b$ if $\mu\leq -a$;

(iii) P chooses $X=1$ if $m=m^g$, and chooses $X=0$ if $r=0$ or $m=m^b$;

(iv) $\hat{\mu}(1,m^g)=\frac{1}{2}(h-a)$, $\hat{\mu}\left(1,m^b\right)=-\frac{1}{2}(h+a)$, $\hat{\mu}(0,m)=0$.

Proof. Suppose that $r=0$. Then, $\hat{\mu}(0,m)=0$. As $p<0$, it is optimal for P to choose $x=0$. Now suppose that $r=1$, and $m=m^g$ only if $\mu>-a$. Then, the posteriors, $\hat{\mu}(1,m)$, resulting from Bayes' rule, are $\hat{\mu}(1,m^g)=\frac{1}{2}(h-a)$ and $\hat{\mu}\left(1,m^b\right)=-\frac{1}{2}(h+a)$. Note that as P follows the advisor's message, P's decision on x is always in A's interest. Therefore, A's strategy is an optimal response to P's strategy. Now consider P's decision on x. Suppose that $m=m^g$. Then, $U_P(1,1|m^g)>U(1,0|m^g)$ if $p+\frac{1}{2}(h-a)>0$. Now suppose that $m=m^b$. Then, $U_P\left(1,0|m^b\right)>U\left(1,1|m^b\right)$ if $p-\frac{1}{2}(h+a)<0$. As $p<0$, this inequality always holds. Finally, consider P's decision on consulting an advisor. Clearly, $U_P(0,0)=0$. Consulting, $r=1$ yields an expected utility

$$\Pr(m=m^g)\left[p+E\left(\mu|m>m^g\right)\right]=\frac{1}{2h}(h+a)\left[p+\frac{1}{2}(h-a)\right] \tag{8}$$

Hence, only if this expression is higher than c, P chooses $r=1$.□

Proposition 2 states that if c is smaller than the expression in (8), an equilibrium of the Model of Advice exists, in which the politician consults an advisor and follows her recommendation. The ultimate decision on x is in line with the advisor's interest. As in the Informational Lobbying Model, the politician has the formal authority to make a decision on x but the advisor may have the real authority (Aghion and Tirole, 1997). The advisor derives her authority from her superior information.

A necessary, but not sufficient, condition for this equilibrium is that $a<2p+h$. This condition ensures that the politician benefits from following a positive advice. As $p<0$, a negative recommendation, $m=m^b$, always leads to $x=0$ (P is biased towards $x=0$ and A's advice is negative and thus also favors $x=0$). $a<2p+h$ shows that the advisor should not be too biased towards implementation. If a is large, A sends $m = m^g$ for a wide range of μ. As a result, the politician attributes a positive advice to a, not to μ.

Equation (8) gives the expected benefit of advice. Note that the expression is positive only if $a < 2p + h$. If the cost of advice, c, is smaller than (8), consulting an advisor pays. This comparison yields the sufficient condition for the equilibrium presented in Proposition 2 to exist.

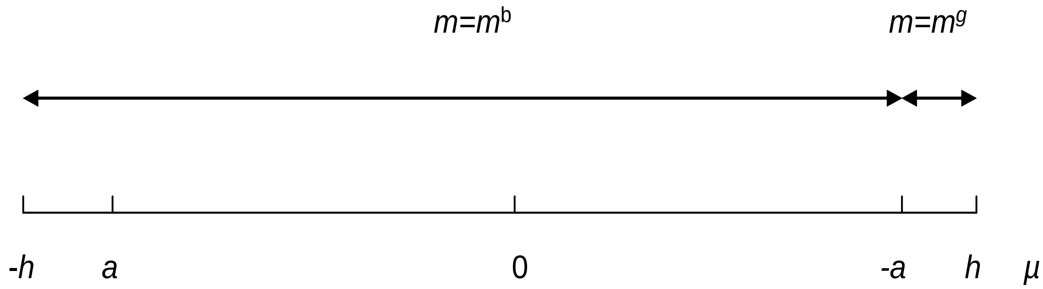
Exercise 3 *Consider the Model of Policy Advice and assume that $p > 0$. Derive the sufficient condition for an equilibrium in which P always follows A's recommendation. Discuss the difference between the derived expression and (8).*

3.1 Unexpected Recommendations

History contains several examples of policy shifts being initiated by people whose predispositions were against such shifts. A prominent example is President Nixon who improved the relationship between the United States and China by visiting Mao in 1972. The world was stunned, especially because President Nixon had an anti-communist reputation. Cukierman and Tomassi (1998) give an explanation for controversial policy shifts, initiated by unexpected persons that ultimately receive broad support. The key feature of their argument is asymmetric information. The idea is as follows. Important policy decisions, like improving the long-run relationship between countries, require broad support. American voters must be convinced that a policy shift is in the interest of the United States. Ordinary people, however, are less informed about the costs and benefits of policy shifts than politicians. When people observe a policy shift, they infer information about the costs and benefits from the predisposition of the responsible politician. Because of Nixon's anti-communist reputation, the people could be confident when *Nixon* visited Mao that the benefits of improving the relationship with China were substantial.

The key feature of Cukierman and Tomassi's explanation can be illustrated by the Model of Advice. As Nixon is the informed agent, think of Nixon as the advisor. The policy decision, visiting China, is the recommendation, $m = m^g$. American voters infer information about μ from $m = m^g$ and Nixon's predisposition against China. Figure 1 depicts the situation. The line describes the possible values of μ. The higher is μ, the higher are the benefits of improving the relationship with China.

Figure 2: Surprising messages contain much information



On this line, the point a represents Nixon's predisposition towards visiting China. As it is negative, μ must be large to lead Nixon to go to China ($\mu > -a$).

Figure 1 illustrates that A rarely recommends the project. The range of μ for which $m = m^g$ is small. However, if A recommends $X = 1$, μ must be very high: the public infers from $m = m^g$ that $E(\mu \mid m = m^g) = \frac{1}{2}(h - a)$. As a is close to $-h$, $E(\mu \mid m = m^g)$ is very high. Thus, Nixon's visit to China therefore signaled huge benefits from it.

Example 1 *Argue whether a visit by a Democratic president to China in 1972 would also receive broad support from voters.*

The counterpart of unexpected messages containing precise information is that expected messages contain little information on μ. Suppose that A recommends $X = 0$. Then, μ can lie anywhere between $-h$ and $-a$. The expected value of μ conditional on $m = m^b$ ($E(\mu \mid m = m^g)$) is close to zero.

3.2 The Ally Principle

So far, the results derived in this chapter differ dramatically from the results derived in Chapter 3. In Chapter 3, we have argued that to understand policy decisions, you should know the median voter's preferences or the preferences of the politicians who compete for office. In the present chapter, it seems that politicians or voters do not matter. Interest groups and advisors have real authority, politicians only have formal authority.

In this section, we draw a more nuanced picture. In the previous sections, there was one supplier of information, an interest group or an advisor. In the real world, there might be multiple interest groups or advisors on an issue. This raises new questions.

Exercise 4 *Consider the Model of Advice. Suppose that there are two advisors, whose predispositions are given by a_1 and a_2. Both advisors observe μ and send a message about μ to the politician. Show if an equilibrium exists in which the messages of both advisors may affect the politician's decision on x.*

In this section, we assume that there is a continuum of advisors in terms of μ. We address the question of what kind of advisor, in terms of her preferences, the politician hires? To answer this question, we add a new stage to the Model of Advise. Specifically, we assume that at the beginning of the game, the politician can choose the preferences of his advisor, a. The idea is that P selects A on the basis of her predisposition a. Once P has selected A, the Advisor Game as presented in Table 2 is played.

The optimal advisor from P's point of view can be derived in two ways: a direct, but somewhat informal, way, and an indirect more formal way. Let us first follow the direct way. We have seen that P wants the project to be implemented if and only if $\mu > -p$. He anticipates that by relying on an advisor the project will be implemented if and only if $\mu > -a$. It directly follows that by choosing $a = p$, P ensures that the decision on the project will always be in line with his interest. Therefore, an advisor with $a = p$ is the optimal advisor.

Let us now derive the optimal value of a (from P's perspective) in a more formal way. When choosing a, the expected utility of the politician equals[5]

$$\Pr(\mu > -a)(p + E(\mu \mid \mu > -a) = \frac{1}{2h}(h+a)\left[p + \frac{1}{2}(h-a)\right] \tag{9}$$

Maximizing (9) with respect to a yields $a = p$. Hence, an advisor with $a = p$ maximizes the politician's utility. This brings us to the following proposition.

[5]Notice that you saw the same expression in Proposition 2.

Proposition 3 *Consider the Model of Advice in which at the beginning of the game the politician chooses a. Suppose that $c < \frac{1}{4h}(h+p)^2$. Then, the politician appoints an advisor whose preferences are equal to his own preferences, $a = p$.*

The result presented in Proposition 3 that politicians tend to consult advisors whose preferences are similar to their own preferences is called the *ally principle*. According to Bendor, Glazer and Hammond (2001, p. 236) this principle is part of an ancient wisdom and was old before Rome. Later in this chapter we show that the principle breaks down if the politician uses an advisor not only to acquire information but also to gain support for his policies.

In all the cases that the ally principle holds, the distinction between formal and real authority is not very relevant. The person who has real authority makes the same decisions that the person with formal authority wants to make.

3.3 Uncertainty about the Advisor's Preferences.

An important assumption of the Model of Advice is that the politician knows his advisor's preferences, a. Sometimes, an advisor's intentions are not clear. A notorious example is Grigori Rasputin, one of the advisors of Tsar Nicolas II during World War I. Following Rasputin's advice, Tsar Nicolas went to the front and took command of the Russian army (a rather unsuccessful endeavour). During the Tsar's absence, Rasputin used his influence over the Tsaritsa to put a stamp on Russian's policy. This irritated anti-monarchist and revolutionary forces and contributed to the eventual collapse of the Tsar.

To study the effect of uncertainty about the advisor's preferences on the scope of advice giving, we relax the assumption that P knows A's preferences. Instead we assume that a can take two values, $a \in \{a^e - z, a^e + z\}$ with $z > 0$ and a^e denoting the expected value of a. At the beginning of the game, nature chooses a with $\Pr(a = a^e - z) = \Pr(a = a^e + z) = \frac{1}{2}$. The parameter z is a measure of uncertainty about A's predisposition.

Uncertainty about a complicates the interpretation of the advisor's message. In the Model of Advice, the advisor's message only contains information on μ. In the present model, the message also contains information on the advisor's type. The higher is z, the less information the advisor's message contains about μ, and the more information it contains about the type of advisor. To see this, suppose that $a^e = 0$ and $z = h$. In that case, the advisor's message fully reveals the advisor's type, but does not contain any information on μ: $\Pr(a = a^e - z \mid m = m^b) = 1$, $\Pr(a = a^e + z \mid m = m^g) = 1$, and $E(\mu \mid m = m^g) = 0$. This example indicates that when forming an expectation about μ on the basis of m, the decision maker must first form a belief about the type of advisor. On the basis of this belief, the expected value of μ conditional on a positive message can be determined:

$$\begin{aligned} E(\mu \mid m^g) &= \Pr(a = a^e + z \mid m^g) E(\mu \mid m^g, a^e + z) + \\ &\quad \Pr(a = a^e - z \mid m^g) E(\mu \mid m^g, a^e - z) \end{aligned} \tag{10}$$

where

$$\begin{aligned} \Pr(a = a^e + z \mid m^g) &= \frac{\Pr(m^g | a = a^e + z)\frac{1}{2}}{\Pr(m^g | a = a^e + z)\frac{1}{2} + \Pr(m^g | a = a^e - z)\frac{1}{2}} \\ &= \frac{(h + a^e + z)}{2(h + a^e)} \end{aligned}$$

$$\Pr(a = a^e - z \mid m^g) = \frac{(h + a^e - z)}{2(h + a^e)}$$

$$E(\mu \mid m^g, a^e + z) = \frac{1}{2}(h - a^e - z)$$

$$E(\mu \mid m^g, a^e - z) = \frac{1}{2}(h - a^e + z)$$

Substituting these four expressions into (10) leads after some straightforward algebra to

$$E(\mu \mid m^g) = \frac{h^2 - (a^e)^2 - z^2}{2a^e + 2h} \tag{11}$$

Equation (11) confirms our previous claim that the higher is uncertainty about the advisor's type (z), the less information $m = m^g$ contains on μ.

Does the politician follow his advisor's recommendation? We already know that because $p < 0$, he follows a negative advice. He follows a positive advice if

$$p + \frac{h^2 - (a^e)^2 - z^2}{2a^e + 2h} > 0 \tag{12}$$

Clearly, the lower is z, the wider is the range of parameters for which the politician follows a positive advice. The intuition is clear. The higher is z, the more information m contains about the politician's type and the less information it contains about μ.

Now suppose that condition (12) holds. How much is the politician willing to pay for advice? As before, if P does not consult an advisor, he chooses $x = 0$, yielding a utility equal to zero. If P consults a advisor his expected utility equals

$$\frac{h + a^e}{2h}\left(p + \frac{h^2 - (a^e)^2 - z^2}{4h}\right) - c$$

which clearly decreases in z. Hence, more uncertainty also reduces a politician's willingness to consult an advisor.

Proposition 4 *Suppose the model of advice with uncertain a. Then, more uncertainty about a reduces the scope for information transmission between the advisor and the decision maker.*

Proof. Immediate from (12).□

4 External Lobbyists

In practice, two types of lobbyists can be distinguished: *in-house* lobbyists who work for the organization for which they lobby, and *out-house lobbyists* who work for a lobbying firm. In the model of Section 2.1, no distinction is made between the lobbyist and the interest group. That model describes in-house lobbyists.

There are two main reasons why an interest group would hire an out-house lobbyist. First, an out-house lobbyists may have better access to politicians. In the US, many out-house lobbyists are former politicians or have experience in the White House, Congress or the Senate. It is not only important what lobbyists know. It is also important whom they know. Contacts matter. Second, the message of an out-house lobbyist might be more credible than a message from an in-house lobbyists. In the ILM, lobbying affects outcomes if $i \leq 2p + h + c$, that is, if the interest group is not too strongly biased towards $x = 1$. However, many interests groups have (very) strong biases. One reason is the common-pool problem discussed in Chapter 1. For example, teachers want the government to allocate high budgets to teaching, as the benefits are concentrated while the costs are spread over all tax-payers. The common-pool problem gives strong incentives to interest groups to lobby for high budgets. If $i > 2p + h + c$, P ignores m^g. One way to make claims about μ credible is to delegate lobbying to an out-house lobbyist who has more moderate preferences and thus weaker incentives to demand high budgets.

In this section, we modify the ILM in two ways. First, we allow for out-house lobbyists. We describe an environment where the interest group always wants the politician to choose $x = 1$, $i > h$. As a result, an in-house lobbyist cannot convince the politician to choose $x = 1$. At the beginning of the game but after I observes μ, the interest group hires a lobbyist, L, who is characterized by her predisposition l. L also observed μ. She sends a message about μ to the politician. We assume that the lobbyist has free access to the politician, $c = 0$.

Second, we integrate the advisor and lobbying model. After L has sent a message to the politician, at cost c_A, P can learn if $\mu > -p$ or $\mu \leq -p$. This is a short-cut for a model in which P can hire an advisor and chooses $a = p$ (see Proposition 3). We denote by $s_A = 1$ that P chooses to learn if $\mu > -p$, and by $s_A = 0$ that he does not. Through c_A, we can examine how the scope for advice affects the interest group's power to influence P's decision on x. Table 3 presents the Extended Informational Lobbying Model.

Table 3 The Extended Informational Lobbying Model (EILM)

Players: I, P and L

Timing:

- Nature draws μ from the uniform distribution on $[-h, h]$. I observes μ.
- I chooses L's predisposition, l. L observes μ. P observes l but not μ.
- L sends a message $m \in \{m^b, m^g\}$ to P.
- On the basis of l and m, P updates her belief about μ according to Bayes' rule, $\hat{\mu}(l, m) = E(\mu | l, m)$.
- At cost c_A, P can learn if $\mu > -p$, $s_A = 1$, or not $s_A = 0$.

- P makes a decision about $x \in \{0, 1\}$.

Utility Functions, $U_P(x, s_A)$ and $U_J(x)$ with $J \in \{I, L\}$:

- $U_P(1, s_A) = p + \mu - s_A c_A$ and $U_P(0, s_A) = -s_A c_A$.
- $U_I(1) = i + \mu$ and $U_I(0) = 0$.
- $U_L(1) = l + \mu$ and $U_L(0) = 0$

Proposition 5 presents a perfect Bayesian equilibrium of the EILM.

Proposition 5 *A perfect Bayesian equilibrium of the EILM exists in which*
(i) I chooses $l = \min\left\{p + 2\sqrt{hc}, 2p + h\right\}$;
(ii) L chooses $m = m^g$ if $\mu > -l$ and $m = m^b$ if $\mu \leq -l$;
(iii) P chooses $s_A = 0$. P chooses $x = 1$ if and only if $m = m^g$;
(iv) Posterior probabilities are $\hat{\mu}(m^g) = \frac{1}{2}(h - l)$ and $\hat{\mu}\left(m^b\right) = -(h + l)$.

Proof: First consider P's decision on x. Since $l = \min\left\{p + 2\sqrt{hc}, 2p + h\right\}$, $p + \hat{\mu}(m^g) \geq 0$. As $p + \hat{\mu}\left(m^b\right) < 0$, it is optimal for P to follow L's message. Next consider P's decision on s_A. From Proposition 3, we know that $s_A = 1$ yields a payoff $\frac{1}{4h}(h + p)^2 - c_A$. $s_A = 0$ yields a payoff $\frac{1}{2h}(h + l)\left(p + \frac{1}{2}(h - l)\right)$. $s_A = 1$ yields a higher payoff than $s_A = 0$ if $l > p + 2\sqrt{hc}$. Finally, consider I's decision on l. As $i > h$, I always wants $x = 1$. It is constrained by the condition that P chooses $s_A = 1$ if $l \leq p + 2\sqrt{hc}$, and the condition that P follows L's recommendation, $l < 2p + h$. I chooses l such that the most binding condition exactly holds, that is $l = \min\left\{p + 2\sqrt{hc}, 2p + h\right\}$. Then, P chooses $s_A = 0$ and follows L's recommendation in equilibrium. The choice of l maximizes the probability that $x = 1$.□

Proposition 5 shows that when choosing a lobbyist, the interest group faces two constraints. First, the lobbyist's preferences should be sufficiently aligned with the politician's preferences. Otherwise, the politician ignores the lobbyist. Second, the lobbyist should prevent the politician from hiring her own advisor. The importance of the second constraint depends on the cost of getting advice, c. If advice is cheap, the interest group must hire a lobbyist whose predisposition is close to p. The second constraint is binding. If advice is expensive, the interest group hires a lobbyist who is just sufficiently convincing for the politician.

Note that in equilibrium, P never consults an advisor. Note that this does not mean that the opportunity to hire one is irrelevant. If c is small enough, the politician's opportunity to consult an advisor forces the interest group to hire a lobbyist whose predisposition is closer to that of the politician. The model demonstrates that if a phenomenon does not occur in reality, here consulting an advisor, the possibility to do so is relevant.

5 Multiple Lobbies

Neither in the EILM nor in the ILM there is scope for multiple lobbies. If in either model, there were multiple lobbies, the politician would follow the lobbyist whose preferences are closest to her own preferences. In reality, however, we often observe that multiple interest groups lobbying. One reason for this phenomenon is that a decision has multiple consequences and that different interest groups have information about different aspects of a decision. One role of interest groups is to point to unanticipated consequences of a policy.

In 2020, the world was a hit by the Covid pandemic. In many countries, politicians erected health committees of virologists and doctors for getting advice on how to control hospital and intensive-care admissions. On the basis of their advises, several governments opted for historically strict lockdowns. Obviously, the consequences of lockdowns for several sectors were detrimental. Some of them were easily anticipated such as the consequences of the lockdown for bars and restaurants. Other consequences were less anticipated. In the Netherlands, primary schools had been closed for weeks. Parents were supposed to teach their children. Soon it became clear that the lockdown increased inequality in schooling. Home teaching was especially bad for children lagging behind. Not surprisingly, the Dutch government was more reluctant to close primary schools when later hospital admissions increased again.

In the Covid example, the role of the advisors was to inform the government about μ as in our model of advice. The interest group, however, did not reveal information about μ. It pointed to another relevant term that had been ignored:

the consequences of the lockdown for inequality in education. This example and many other examples show that the lobbies of interest groups may reveal new type of consequences of policies. I leave it to the reader to model this role of interest groups formally.

6 The Persuasion Motive

In the Model of Advice, the politician consults an adviser with the sole objective of acquiring information. Letterie and Swank (1997) call this the information motive of advice. Sometimes, advisers are used for another purpose. In most democracies, decisions by the administration have to be approved by Parliament. Sometimes this requirement faces a member of the administration, like a minister, with the problem of convincing the members of parliament that his proposal is also in their interest. The minister then needs an adviser who can convince himself as well as the majority of the members of Parliament. In those cases, advice also serves a *persuasion* motive.

In this section we extend the Model of Advice to highlight the information and persuasion motive when choosing an advisor. At the beginning of the game, the politician chooses an advisor. As before, we model this by letting P choose A's predisposition a. At the end of the game, the decision on x must be approved by parliament. When P chooses a, the predisposition of the decisive voter in parliament, V, towards the project is uncertain. We model this as follows. V's preferences are represented by the utility function, $U_V(x)$:

$$\begin{aligned} U_V(1) &= v + \mu \\ U_V(0) &= 0 \end{aligned}$$

where v is uniformly distributed on the interval $[v^e - z, v^e + z]$. Let $x_V \in \{0, 1\}$ denote the decision on x by parliament. If $x_V = 1$, parliament approves and the project is implemented, $x = 1$. If $x_V = 0$, parliament rejects P's proposal so that $x = 0$. In the present section, we assume that $h > p > 0$. In the context of a model where the politician has to convince parliament that the project should be implemented, this assumption seems more natural. Note that under this assumption, P wants to learn μ. We allow for both the possibility that V is more biased towards implementation than the politician, $v^e + z > p$ and the possibility that V is more biased towards status quo than the politician, $v^e - z < p$.

Table 2 The Extended Model of Advice

Players: P, A and V.

Timing:

- P hires A. P chooses a.
- Nature draws μ from the uniform distribution on $[-h, h]$, and v from the uniform distribution on $[v^e - z, v^e + z]$. A observes μ, P and V do not. V observes v, P and A do not.
- A sends a (public) message about μ, $m \in \{m^b, m^g\}$ to P and V.
- P makes a decision to submit x for approval to V, $x_P \in \{0, 1\}$. If $x_P = 0$, then $x = 0$, and the game ends.
- If $x_P = 1$, V makes the ultimate decision on $x \in \{0, 1\}$.

$U_J(x)$ gives J's utility, with $J \in \{P, A, V\}$:

- $U_P(1) = p + \mu$ and $U_P(0) = 0$.
- $U_A(1) = a + \mu$ and $U_A(0) = 0$.
- $U_V(1) = v + \mu$ and $U_V(0) = 0$.

We identify a perfect Bayesian equilibrium of the Extended Model of Advice, in which P submits x for approval to parliament only if $m = m^g$. If in this equilibrium $m = m^b$, P chooses $x_P = 0$ and the game ends. When does parliament approve a proposal for implementation of the project? Given that $m = m^g$, $x = 1$ yields a higher utility to V than $x = 0$ if $v > -\frac{1}{2}(h-a)$. Hence, P's expected utility when choosing a equals

$$\begin{aligned} U_P(a) &= \Pr(\mu > -a)\Pr\left[v > -\frac{1}{2}(h-a)\right]\left[p + \frac{1}{2}(h-a)\right] \\ & \frac{(h+a)\left[v^e + z + \frac{1}{2}(h-a)\right]\left[p + \frac{1}{2}(h-a)\right]}{4hz} \end{aligned} \tag{13}$$

P's utility is a third-order equation in a. Differentiating (13) with respect to a yields the first-order condition

$$\frac{dU_P(a)}{da} = (v^e + z)p - \frac{1}{4}h^2 - \left(p + v^e + z + \frac{1}{2}h\right)a + \frac{3}{4}a^2 = 0 \tag{14}$$

The second-order condition is

$$-\left(p + v^e + z + \frac{1}{2}h\right) + \frac{3}{2}a = U_P'' < 0. \tag{15}$$

Potentially, there are two possible values of a that maximizes (13). First, the value of a that is consistent with the conditions for a maximum presented above. Let $\bar{a}$ denote this value of a. Second, the highest relevant value of a, $a = h$, yielding a payoff to P equal to

$$E\left[U_P(x|a = h)\right] = \frac{v^e + z}{2z}p$$

First suppose that $E\left[U_P(x|a = \bar{a})\right] > E\left[U_P(x|a = h)\right]$. It is easy to see that this inequality holds for sufficiently low values of p.[6] By applying the implicit function theorem to (14) and using (15), we determine how changes in p, v^e, z and h affect $\bar{a}$.

Proposition 6 *Consider the Extended Model of Advice. Suppose $p > 0$ and p sufficiently small. Then, the equilibrium level of a^* is increasing in p, v^e, z, and decreasing in h.*

Proof: Using (14), the implicit function theorem implies

$$(v^e + z) - \bar{a} + U_P''\frac{\partial \bar{a}}{\partial p} = 0. \tag{16}$$

[6] For $p = 0$, $E\left[U_P(x|a = h)\right] = 0$ and $E\left[U_P(x|a = \bar{a})\right] > 0$.

Using (14), it is straightforward to verify that $\frac{dU(v^e+z)}{da} < 0$. Hence, $\bar{a} < v^e + z$. Then, (16) implies that $\frac{\partial \bar{a}}{\partial p} > 0$. Analogously, you can show the other comparative static results presented in Proposition.□

The comparative static results presented in Proposition 6 are intuitive. When choosing an advisor, the politician faces a trade-off between the information and persuasion motive. For the information motive, the ally principle applies. As discussed in Section 3.2, this principle gives incentives to P to choose $a = p$. Therefore, higher values of p naturally leads to higher values of a. The persuasion motive gives incentives to P to choose an advisor whose predisposition is close to v^e. More uncertainty about the state increases the demand for information about μ. The chosen advisor is less biased.

7 Evidence

There is a lot of anecdotal evidence for the role of advisors and lobbyists in the process of policy making. Every day, newspapers and other media report on the advises of committees and politicians' responses to these advises. Furthermore, the media reports on lobbyists who are active in all the stages of the political process. Sometimes the border between lobbying and corruption seems thin. Unfortunately, systematic evidence of the effects of advisors and lobbyists on policy outcomes is scarce. An important problem is the counterfactual: how would policies look like in the absence of advisors and interest groups?

There is some research on what lobbyists and interest groups do. Scholars have interviewed lobbyists asking them about their main activities. Lobbyists' answers are in line with our models. Lobbyists claim to spend much time on seeking contact, and building relationships. Furthermore, many of their activities involve the dissemination of information. Interest groups and lobbyists also contribute to politicians' campaigns. This raises an important new question: Do campaign contributions buy access or influence? Questions like this one are hard to answer. We already mentioned that the effects of lobbying on policy is hard to establish. The mechanism -why lobbying affects policy- is even more difficult to determine.

Bertrand et al. (2014) empirically investigate the questions to what extent lobbying is about whom you know or what you know? They contrast two views of lobbying. According to one view, lobbyists' main asset is whom they know. This view is best illustrated by a quote of a lobbyist (McGrath, 2007, p. 74): "there are three important things to know about lobbying: contacts, contacts, contacts." According to the second view, lobbyists possess information that may change politicians' stances. This view is consistent with the lobbying models presented in this chapter. It is worth emphasizing that the first view is also consistent with our models. In Section 3.3, we have shown that uncertainty about the preferences of the informed player reduces the information messages contain. Contacts, building relationships, facilitate communication. In Section 4, we have addressed the question why interest groups use external lobbyists to influence politicians. In many cases, the preferences of interest groups and politicians differ too much. The model shows that not only the content of a message is important but also the sender's type is important.

Betrand et al. (2014) presents evidence that a lobbyist's contacts are important. They show that a lobbyist who is connected to a politician switches issues when the politician switches issues. For example, suppose that lobbyist Ann works on health issues in period t and has a connection with politician Bob who participates in a health committee. Then, if in period $t+1$, Bob switches from the health committee to an education committee, Ann is likely to work on education issues in period $t+1$. This kind of patterns suggests that contacts are important.