

I. Bureaucracy as Another Interest Group: An Overview

- A. We often treat governance in same manner that we look at the production in most economic model of firms: as if governance took place mechanically and automatically. The electorate votes for a referendum, a legislature enacts a policy, a court makes a decision, and whatever is specified actually is adopted as government policy. In the end, **all such policy decisions** are implemented by unelected, and largely invisible, people working within government agencies. What ever "decision" is reached by an electorate, legislature or court, it is "the Bureaucracy" that implements it.
- B. If bureaucrats entirely disinterested in policy and the "decisions" reached by political decision makers always crystal clear and specific, the bureaucracy could be considered a rather uninteresting area of public choice research.
- If neither of these assumptions hold, **bureaus will often exercise considerable discretion in the design and implementation of policy**. Here, analysis of bureaucratic decision making will be required to understand many policy decisions.
 - The public choice literature generally assumes that bureaucrats are no more public spirited than ordinary voters are and just as interested in income and public policies.
 - Among the classic works on Bureaucracy are books by Tullock (1965), Downs (1967), and Niskanen (1971).
 - Of these, Niskanen's approach, as extended and critiqued by Breton and Wintrobe (1975), was by far the most influential.
 - It postulated the "budget maximizing model" of bureaucratic decisionmaking.
 - All three volumes **pioneered** the literature on what later would be called the "**principal-agent**" model a decade or so later.
- C. Bureaucrats will have at least some discretion over the implementation of policies for several reasons.
- First, **monitoring can never be perfect**. That is to say, bureaucrats will possess some discretion over the implementation of policy simply because it is impossible to punish them for every possible error in implementation. (For example, some laws may go unenforced, at least on occasion, because no law

enforcing agent has an incentive to enforce such laws. No one else knows who the guilty parties are or whether any such parties exist. Consequently there are neither specific rewards for performing one's duties nor penalties for malfeasance in many cases.)

- Of course a good deal of discretion over policy is explicitly delegated to the bureaucracy. The bureaucracy often has expertise--at the very least knowledge of time, place and circumstance--which policy makers lack. Because of this bureaus are often granted significant discretion to *interpret and implement* "the policy" in the manner that seems appropriate. In many cases, the actual writing of laws (deciding targets for pesticides and food additives) are delegated to the agencies.
- Politicians may also delegate decisions to the bureaucracy, not because of the bureaucracy's expertise or comparative advantage, but rather to avoid making public commitments on controversial regulations.
 - In the end, all agencies have at least some discretion over the implementation of their assigned duties. In cases where the aims of bureaucrats differ from those of the legislature or electorate, an *agency problem* may be said to exist.
 - That is to say, bureaucrats may decide to exercise their discretion in ways that fail to maximize the net advantage of their "sponsors" (the legislators or electorate).
 - [Figure: Simple Shirking Illustration of a Principal-Agent problem.]
 - [Shirking with monitoring example: $Max U^e = P(L)U(Y, L) + (1-P(L))U(Y-C,L)$]
 - Bureaucratic Inertia and Bias (Congleton, *PC*, 1980) [Figure]
- The modern literature on **principle agent problems and contracts** (which emerged well after the modern literature on bureaucracy) suggests that there are a wide range of contractual means by which agency problems may be addressed.
 - For example, employees (bureaucrats) may be required to post a performance bond which they may redeem upon successful completion of an assigned task. Wages and salaries might be based on output (bridges built, cases handled, money's dispensed appropriately) rather than the quantity of an input (time spent on the job).
 - However, beyond prospects for promotions, such incentives are rarely used within the bureaucracy.
 - Most bureaucrats are paid a straight salary which is largely independent of day to day performance.

- [In fact, you might argue that, given the method of compensation, agency problems in the US and most OECD countries are surprisingly small.]

II. Niskanen (1971, 1975) proposes a Budget Maximizing model of bureaucratic behavior.

A. Why maximize a budget? Niskanen argues that bureaucrats have a direct personal interest in the size of their organization's budget because:

- i. Opportunities for promotion tend to increase, and thereby expected salaries, as budgets increase
- ii. Working conditions tend to improve--computers, office furniture, secretarial support, etc.-- as budgets increase.
- iii. Non-pecuniary compensation tends to increase as resources become available for travel or projects of particular interest to a given bureaucrat.
- iv. Moreover, to the extent that public employees are interested in the mission of their agency or bureau, they will gain additional satisfaction by being better able to advance the agency's mission as their budget increase. (Even very public spirited bureaucrats generally have an interest in larger budgets.)
 - a. Informational Asymmetries. The bureaucratic interest in larger budgets would not be significant, if they had no methods by which they might achieve higher budgets. Niskanen argues that the bureaucrat's superior knowledge of production methods, policy alternatives, (statistical) public demand for specific services, provides them the ability to make all or nothing offers to their sponsors (or oversight committees). In most cases, budgetary requests originate with the bureaucracy.
 - b. Implications. To the extent that bureaus can use all or nothing offers to secure budget increases, they will tend to have budgets that are larger than those which maximize net benefits for their sponsors (ultimately voters or interest groups).
- v. In the case where marginal cost and the demand for the public service under their agency's power are linear, *the maximum budget implies that twice* as much of the service is provided as would maximize net benefits. [FIGURE from lecture]
 - a. There are many critics of the Niskanen model. For example:
 - b. Critiques: Migue and Belanger, 1974 argue that his objective function is too narrow, they suggest discretionary budgets rather than total budgets are maximized.

c. Critiques: Breton and Wintrobe, 1975, note that competition and monitoring limit opportunities to use all-or-nothing offers and reduce opportunities to manipulate information.

d. Critiques: Weingast and Moran, 1983, argue that if budgets are of particular interest to bureaucrats, then conditional budgets can be used to control their behavior. They provide evidence of this for the FTC (federal trade commission).

- [Changes in the political composition of Congress and oversight committees account for about half of the variation in FTC case loads (pg. 796.)
- [<http://www.jstor.org/stable/1837369>]
- The Weingast and xxx based research program on the bureaucracy and relations between the bureaucracy and Congress is quite large and generally supports their hypothesis that oversight works fairly well.
- Although, of course, not all models or empirical work reaches that conclusion.

B. An extension of the Niskanen approach to bargaining with Congress.

- i. One of many extensions of the Niskanen approach was the "Full-Line Forcing" bargaining tactic analyzed by Mackay and Weaver (*QJE*, 1983)
- ii. Mackay and Weaver extend the Niskanen type analysis to a setting in which the bureau produces **multiple outputs**.
 - a. Homogeneous citizens maximize $U_i = u(C_i, X_{1i}, X_{2i})$ where C_i is private consumption by individual i , X_{1i} is consumption of service X_1 by " i ", and X_{2i} is consumption of X_2 by i .
 - b. They are constrained by a budget constraint: $Y_i = C_i + T_i$, where tax payment T_i is a constant share of the total budget spent on government services. Here $T_i = t_i(B_1 + B_2)$.
- iii. Expenditures on government services can be restated in terms of budget share, k , so that $B_1 = kB$ and $B_2 = (1-k)B$ where B is the total budget.
- iv. This allows the voter's choice to be written as: $U_i = u(Y_i - t_i B, kB, (1-k)B)$. (Note that we have implicitly assumed that both government outputs cost one dollar each.)
- v. Differentiating with respect to B and k , we find that the ideal budget level and service mix will satisfy:
 - a. $U_{C(-t)} + kU_{X_1} + (1-k)U_{X_2} = 0$ and $U_{X_2} = U_{X_1}$ simultaneously.
 - [Illustration of first order conditions.]
 - b. These first order conditions are the reference point for the M&W analysis.

- vi. In their model, the bureau controls the budget mix and the "voter" controls the budget level.
- If voters can take the budgetary mix as given, only the first f. o. c. is relevant, $U_c(-t) + kU_{x_1} + (1-k)U_{x_2} = 0$, and the ideal budget level can be written as:

$$B_i^* = b(k, Y_i)$$
 - The Bureau is assumed to set k to maximize its budget. From the implicit function differentiation rule, we know that $B_i^* k = 0$ when

$$U_{cc}(-t)^2 - 2ktU_{cx_1} - 2t(1-k)U_{cx_2} + U_{x_1} + k^2U_{x_1x_1} - U_{x_2} + (1-k)^2U_{x_2x_2} = 0$$
 - This is very unlikely to be the same point as required to maximize the "sponsor-voter's" welfare.
 - [Illustrating figure with B^* function and k^* functions, based on "Va" above, contrasted with revenue maximizing B and k .]
 - In cases where voters are not homogeneous, the voting rule becomes relevant. Here they must optimize over the win set of the status quo rather than with respect to a single representative (or median) person's welfare. [Figure]
 - Note that most models of agency problems can be applied here. For example, the bureau/bureaucrat may have policy preferences, or different degrees of risk aversion. [add bureaucrats indifference curves to figure drawn for d.]
- vii. M & W clearly demonstrate that the ability of bureaucrats to affect public policy clearly depends upon the range of authority that the institutional and economic environment allows it.

III. Other Analysis of Bureaucratic Agency Problems

- Political Oversight: is limited, because voters (and most interest groups) cannot "afford" to devote very much time to monitoring bureaucracies.
 - Instead, they rely for the most part on "fire alarms" that bring bureaucratic failures to their attention (Lupia and McCubbins 1994, Hopenhayn and Lohmann 1996).
 - Fire alarm models generally imply that the risk of "shirking" being detected is less than 1 and the penalties are often small, so the expected cost of "shirking" tends to be fairly small.
 - Fire alarms constrain but do not eliminate opportunities to exploit information asymmetries between voters, Congress, and the bureaucracy.

- The bureaucracy, like other interest groups, can influence policy outcomes through persuasive campaigns.
 - They have a good deal of power to do so, because government agencies are the principal source of many kinds of information--including economic statistics, environmental quality, terrorist risks, etc...
 - This potentially allows the bureaucracy to manipulate the the demand for their services (Congleton and Fabiano, 1997 working paper).
 - In some policy areas, the bureaucracy directly controls regulations.
 - In other policy areas, the bureaucracy is a direct producer of "private" services and can engage in predatory pricing (Lott, 1990, *J.Pub.E.*)
- There is a neglected form of principal-agent problem that tends to arise when a government attempts to hire the most-qualified person for every job in the public sector.
 - Agents hired under objective productivity standards often have policy interests that differ systematically from those of elected principals and/or the electorate.
 - This tension over policy is an entirely natural consequence of career choices by individuals and hiring decisions within the bureaucracy.
 - Moreover, this tension between agents and principals can be in the interest of a well-functioning government.
 - Agent-principal differences over policy can be a source of significant agency problems in policy areas where agent control problems are severe, as in the case of international treaties. (Congleton, 2002, 2006)
- Overall, the bureaucracy is just one of many interest groups with policy aims that differ from those of the median or average voter.

IV. Empirical Evidence on the Magnitude of Interest Group and Principal-Agent Effects on Public Policy

- The magnitude of interest group effects on public policy relative to those of electoral pressures is itself an empirical question.
 - There is, as a consequence, a fairly large empirical literature on the effects of interest groups on policies.
 - Much of the empirical research reminds me of the story about the economist who has lost his keys.

- A passerby notices an economist looking for something under a street light and asks if he can help, the economist accepts the offer, and the passerby asks where exactly he lost his keys. The economist replies over there by the car. I am looking over here *because the light is so much better*.
 - Much of the empirical literature does not clearly distinguish between electoral and interest group effects on public policy.
 - And much of it provides only indirect evidence of interest group effects.
- b. A good survey of the first two decades of empirical work on the effects of interest groups is Potters and Sloof (1996, *EJPE*).
- ii. Much of the empirical literature focuses on campaign contributions:
- whether campaign contributions from interest groups affects their probability of being elected,
 - and whether it subsequently appears to affect the voting behavior of elected candidates to office.
 - Most studies use data about US Congressional elections, although there are a few other studies.
- a. These papers generally find:
- (i) that incumbents raise more money than challengers.
 - (ii) that incumbents win most races for office
 - (iii) that the marginal productivity of campaign resources tends to be higher for challengers than incumbents
 - (iv) that interest groups tend to support incumbents over challengers.
- b. There is, however, considerable debate over whether the policy positions of candidates are affected by contributions and whether those winning office vote in a manner that runs against their district-state interests.
- c. See, for example, Stratmann (1991, 1992, 1995, 2006), Kroszner and Stratmann (AER 1998), Jacobson (1980, 1985, 2000), Potters, Sloof, and Van Winden (1997).
- See Morton and Comeron (1992) for an early survey of the election finance literature.
- iii. The first case in which a change in voting behavior was identified statistically was Dennis Coates (PEEP 1996, U Mich Press), although in this case the votes that were switched by campaign contributions did not affect the legislative outcome.
- B. There are also a few papers that analyze methods through which interest groups may affect Congressional decisions.
- i. Here, anecdotes are more common than statistical evidence.
- Senior bureaucrats are often invited to testify in Congress and participate in executive decisionmaking which allows them to “frame” policy debates and strategically supply information.
 - Senior bureaucrats often play a critical role in producing and disseminating the information in environmental, health care, energy, nuclear, and defense policies.
 - The information provided by the bureaucracies often appear to play an important (direct and indirect) role in public policy debates and thereby national and state elections
- ii. There are also a few fairly clear statistical evidence of effects
- a. Statistically significant effects of interest groups on regulations are found, for example in:
- Cropper, Evans, Berardi, Ducla-Soares, and Portney (JPE 1992)[
<http://www.jstor.org/stable/2138811>]
 - Balla and Wright (AJPS 2001) [<http://www.jstor.org/stable/2669325>]
- b. There are also a few papers that conduct international analysis of the effects of interest groups.
- Knack, S. (PC 2003) “Groups, Growth, and Trust: Cross-Country Evidence on the Olson and Putnam Hypotheses”
 - Coates and Heckelman (PC 2003) [<http://www.jstor.org/stable/30025909>]
- c. We’ll take a close look at a few of these papers in this lecture, in part to see what the results look like and in part to get a sense of the “craftmanship” of solid empirical papers.
- iii. **“The Determinants of Pesticide Regulation: A Statistical Analysis of EPA Decision Making,”** Maureen L. Cropper, William N. Evans, Stephen J. Berardi, Maria M. Ducla-Soares, Paul R. Portney *The Journal of Political Economy*, Vol. 100, No. 1 (Feb., 1992): 175-197.
- This is a well-crafted paper that explores the extent to which interest bureaus maximize net benefits (or at least take costs and benefits into account), the influence of interest groups on regulatory decisions, and the extent to which “institutionally induced preferences” trump the ideological inclinations of senior bureaucrats.
 - Their results support the first two hypotheses but not the last.

- Benefits and costs are taken into account, but interest groups affect the regulatory outcomes, and the marginal cost of lives saved tends to be very high and somewhat inconsistent across chemicals.
- a. **Abstract:**
- **This paper examines the EPA's decision to cancel or continue the registrations of cancer-causing pesticides that went through the special review process between 1975 and 1989.**
 - **Despite claims to the contrary, our analysis indicates that the EPA indeed balanced risks against benefits in regulating pesticides: Risks to human health or the environment increased the likelihood that a particular pesticide use was canceled by the EPA; at the same time, the larger the benefits associated with a particular use, the lower was the likelihood of cancellation.**
 - **Intervention by special-interest groups was also important in the regulatory process. Comments by grower organizations significantly reduced the probability of cancellation, whereas comments by environmental advocacy groups increased the probability of cancellation.**
 - **Our analysis suggests that the EPA is fully capable of weighing benefits and costs when regulating environmental hazards; however, the implicit value placed on health risks—\$35 million per applicator cancer case avoided—may be considered high by some persons.**
- b. The first third of the paper discusses the EPA's regulatory mandate and practices.
- c. Page 183 summarizes the models that Cropper et. al. will use to determine the effects of cost-benefit analysis and interest groups.
- There is also mention of some of the “clever” data sources that they will use.
 - (pg 186) risk and benefit data are published for each substance challenged.
 - losses to producers from canceling a particular pesticide are also published (but not reduce consumer surplus from higher prices).
 - Comments on recommendation and decisions are also collected and their authors can be classified by occupation.
 - There is also a dummy variable for a particular controversial EPA head (pg 187).
- d. Page 188-9 provides a table of their main estimates:
- They find that cost and benefits matter and have the expected sign,
 - Comments by pro-regulation academics and environmentalists also matter and have the expected sign.
- e. Given that the EPA appears to take account of risks and benefits, they next attempt to determine the extent to which they do this and the factors that seem to influence their decisions.
- (pg 191) “the ratio of its coefficient (cancer risks, suitably scaled) to that of producer benefits implies a **value per statistical cancer case avoided of roughly \$35 million** (1986 dollars).”
 - “By contrast, risks to mixers are **insignificant** in determining the probability of cancellation, and dietary risks are significant at conventional levels only in column 3. The **value per cancer case avoided implied by this coefficient, however, is only \$60,000.**”
- f. Interest groups seem to quite influential: (pg 192) “**The dramatic increase in the log of the likelihood function when interest group variables are added to the model attests to the importance of interveners in the regulatory process.**”
- They also note (pg 192-3) that the probability that interest groups comment on proposed regulations (cancellation of a pesticide) increases for “pesticides that pose a danger to marine life.”
 - (Indeed, more so than for reproductive effects, see estimates on pg 193.)
- iv. “**Interest Groups, Advisory Committees, and Congressional Control of the Bureaucracy.**” Steven J. Balla and John R. Wright, *American Journal of Political Science*, 45, No. 4 (Oct., 2001):799-812.
- This is an interesting paper, because it identifies and analyzes a fairly subtle channel through which Congress and interest groups can influence regulators (the bureaucracy), namely by influencing appointments.
 - They paper analyzes a fairly narrow example of appointments to an advisory committee of the EPA.
 - Again part of the purpose of focusing on the paper is to get a sense of the craftsmanship and state of the art in the empirical papers on this subject.
 - (Obviously, much more work could be done on this.)
- a. **Abstract:**
- We propose that Congress controls the flow and content of information to the bureaucracy by creating federal advisory committees with membership rights for general categories of interests.
 - We use data on the appointment of members to the National Drinking Water Advisory Council (NDWAC), an advisory committee within the Environmental Protection Agency to test whether the active interest in the legislative debate over drinking water are represented on the advisory committee,

- and thus in the EPA's policymaking process.
 - Although agency officials are responsible for appointing members of NDWAC, we find that public endorsements by interest groups are influential in the agency's selection process.
 - These groups provide reliable information to Congress about the applicant's true policy preferences.
- b. [Here it bears noting that the authors seem to use "control" when they actually mean "influence." Agencies will normally have information available to them beyond that provided by advisory committees.]
- What attracted my attention to the paper was the rather subtle avenue through which interest groups are able to influence agency outcomes--through recommending persons to advisory boards--and their effort to estimate this influence.
 - They note that there are **currently about 1000 advisory committees** in operation (pg 802).
 - They also note (pg 803) that "which legislative interests are represented on advisory boards depends critically on the appointment process."
- c. Their test is fairly extreme.
- They argue that past research (Gilligan and Krebiel 1989, Austin-Smith, 1992, Epstein and O'Halloran 1995) suggests that advisory committees are more informative if they represent (all) opposing interests.
 - They test to see whether Congress biases the information available to the EPA by selecting members of advisory boards that systematically under-represent some interests (pg 803).
 - [Although a short model is proposed, most of their paper concerns the institutions of advisory agencies and the NDWAC in particular.]
- d. Table 1 lists the 8 political active interest groups that testify in Congress on drinking water issues (re SDWA amendments) and classify the interests represented (pg 806).
- Table 2 lists endorsement of particular members of the NDWAC advisory committee by those groups (pg 807).
 - (pg 808) "All the interests that actively participated in the development of the SDWA amendments were represented on NDWAC."
 - (E.g. every member was endorsed by at least one of those groups.)
 - The attempt to assess the relative influence of the interest groups with statistical methods and report the results in table 4 (pg 810).
- This influence varied somewhat (indeed some had negative effects) which suggests that not all interests were given equal weight.
- e. Some of their conclusions do not seem to fit their results, but they regard the influence of interests group as benign in this case, because opposing views were evidently well represented (pg 811)
- v. **"Growth and Trust: Cross-Country Evidence on the Olson and Putnam Hypotheses"**, Stephen Knack, *Public Choice* 117 (Dec., 2003): 341-355.
- This is an interesting paper on interest groups in that it explores the effects of both "nasty" interest groups (Olsonian groups) and "benevolent" interest groups (Putnam groups).
 - Knack is an Olson student and is widely cited in the development-growth literature, for his empirical work that introduced institutions, trust, and social capital into growth models.
 - It is a paper that shows good craftsmanship and addresses an interesting question.
 - The paper provides nice overviews of interest group-based analysis of economic development, the trust-social capital literature, and of the available international data that tries to measure some relevant variables.
 - The data is not the best (as is common for international studies) and the results are not as strong as normal for published papers, but are none the less quite interesting.
 - (Publication of such results was probably easier in this case, because it was included in a special volume of *Public Choice* devoted to reflections and analyses of Mancur Olson's work.)
- a. Abstract:
- Olson (1982) and Putnam (1993) provide sharply conflicting perspectives on the impact of private associations on economic well-being and social conflict.
 - Olson (1982) emphasized their propensity to act as special interest groups that lobby for preferential policies, imposing disproportionate costs on the rest of society.
 - Putnam (1993) viewed memberships in horizontal associations as a source of generalized trust and social ties conducive to governmental efficiency and economic performance.
 - Using cross-country data, this paper investigates the impact of associational memberships on generalized trust and economic performance, finding little

support for Olson's view of the impact of groups, and only mixed support for the Putnam perspective.

b. The empirical analysis undertakes cross-country investment and growth regressions, augmented by various measures of interest group activities (pg 348).

- Knack finds only weak support for interest group effects on investment, but none on growth.
- Surprisingly, “Putnam groups” had negative effects (or at least correlations) with investment during 1980-1999.
- Property rights and the initial value of per capita income were more important determinants of growth and investment.
- Education had statistically significant effects on investment but not growth.
- R-squares range from .54-.35.

c. [It bears noting that the empirical research on growth is enormous, and although Knack (especially with Kiefer) has done a good deal of work in this area, the results vary quite a bit among studies.]

- The estimation strategy is very straight forward and does not try to account for interdependencies among the variables focused on.
- The sample of countries for which sufficient data was available was fairly small, which evidently limited one’s choice of estimation techniques.

vi. **“Interest Groups and Investment: A Further Test of the Olson Hypothesis,”** Dennis Coates and Jac C. Heckelman *Public Choice*, Vol. 117, (Dec., 2003):333-340.

a. This paper is essentially a quick comment on the Knack piece by other Olson students.

b. It shows provides evidence that Olsonian groups matter.

- The paper is interesting both as an example of friendly disagreements among academics and because it explores systematic differences between OECD and nonOECD nations.
- Although the paper does not really explain why, their results suggest that institutions matter.

c. **Abstract:**

- Mancur Olson's institutional sclerosis hypothesis may be evident in the effects of interest groups on investment in physical capital.

- To test this proposition, we use cross sectional data on 42 countries for which information on the number of interest groups is available to estimate the effect of those groups on the share of GDP that goes into physical investment.
- The results indicate that interest groups have a different effect on physical investment in OECD and non-OECD countries.
- In the OECD countries, we find support for the hypothesis that interest groups harm investment in physical capital.
- In developing countries, interest groups either have no effect on physical investment or they have a slight beneficial impact.