# I. Introduction: Legislation, Agency Problems, and Execution

**A.** To this point we have assumed that "governance" takes place mechanically and automatically.

i. That is to say, if the electorate votes for a referendum, a legislature enacts a policy, or a court makes a decision, we assume that those policy decisions are actually implemented.

ii. This assumption is often made in models that analyze the effects of electoral processes and other institutions, such as dictatorship, on public policy.

iii. However, policy decisions are rarely implemented by those making the decisions.
- Rather, policies are implemented by relatively large groups of **unelected**, and largely invisible, people working within government agencies, namely **bureaucrats**.

iv. The question we address in today's lecture is whether this has any systematic effects on public policy.

**B.** There are two related questions that we need to answer.

i. First, can bureaucrats affect public policy in some way.
- For example, do they have **discretion** over the manner in which policies will be interpreted, administered, and applied?
- Do bureaucrats **influence** the types of policies that are actually chosen by politicians?

ii. Second, if bureaucrat's can affect policy, do they actually do so?
- Clearly, if bureaucrats simply attempted to implement the median voter's preferred policy, they would have little effect on policy beyond unavoidable errors in estimating the median voter's preferences.
- On the other hand, if they do not simply advance the interests of voters (or pivotal voters), then they might use their discretion and influence to shift policy away from that preferred by the majority of voters.

**C.** Bureaucrats have **discretion over the implementation of policies for several reasons.**

i. First, discretion is a consequence of imperfect monitoring by elected officials (and voters).
- a. 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.

- b. In many cases, no one outside the bureaucracy 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.

ii. Bureaus are often explicitly granted discretion to *interpret and implement* "policy."
- a. Legislatures may do so, because of bureaucratic **expertise** in a policy area of interest (law enforcement, highway safety, etc.), although limits on discretion are also normally part of the delegation of authority to the agency.
- b. Politicians may also delegate decisions to the bureaucracy to **avoid responsibility** for the policies that are ultimately adopted.
  - Such efforts to "de-politicize" some areas of policy (as with EU fiscal and monetary policies) may have beneficial effects.

iii. In any of these cases, discretion may generate **agency problems**, insofar as bureaucratic and voter interests are not identical.

**D.** Do bureaucrats simply implement the directives given them by the "median voter" and her elected representatives? or do bureaucrats act on their own interests and adopt policies that advance their own interests instead?

i. Bureaucrats would have little reason to go against the wishes of voters if they expected voters to be able to perfectly monitor and sanction the bureaucracy (or elected officials, who would then have incentives, themselves, to more carefully monitor the bureaucracy).
- a. If voters were able to monitor government activities perfectly, they would punish elected politicians for not perfectly monitoring the bureaucracy.
- b. However, such perfect monitoring is obviously too costly for typical voters to manage.

ii. In practice, voters can only use what some theorists call a "fire alarm" systems of monitoring (Hopenhayn and Lohmann, *JLEO* 1996).
- a. Under a fire alarm monitoring of monitoring, some major problems are discovered by the press, and reported to voters, who can then punish **elected** officials for failing to do a proper job of monitoring.
- b. Since not all problems are found and punished, the bureaucracy can advance its agenda to some extent.
  - Namely they can deviate from policy mandates up to the point where their expected gains from doing so equal their expected costs.
  - Depict this decision using MB and $MC^e$ curves.

iii. The extent to which such "**agency problems**" exists, thus, is partly a matter of the marginal benefits that bureaucrats can obtain by "violating policy mandates" and partly a matter of the expected costs of doing so--which are determined in part by the probability of being caught and in part by the punishment meted out.

iv. **Student puzzle**: are there any circumstances in which voters would prefer that the bureaucracy be "protected" from the influence of elected officials? Explain.

## II. Agency Problems

**A.** All organizations face many similar kinds of agency problems.

i. All "workers" prefer higher salaries, shorter workweeks, and better facilities than their "boss'" does.

ii. Many organizations have employees that work less hard when not monitored than when they are, or who reduce the productivity of other team members.

iii. These are normal problems associated with team production, are in large part the reason why organizations are required in the first place.

iv. Organizations normally reduce agency problems in a variety of ways:
   ▪ Shirking can be reduced through conditional wage and promotion schemes.
   ▪ In many cases, they are backed up with threats of dismissal.
   ▪ Shirking can also be reduced by selecting the "right" people for the job, that is those who have a work ethic or "care" about the organization's mission.

**B.** None the less, in any large organization, some bureaucrats (agents) will use their discretion to make policies or implement policies in ways that fail to maximize the net advantage of their "sponsors" (the legislators or electorate).

a. [Figure: Simple Work-Shirk Illustration of a Principal-Agent problem. ]

b. [Figure: Shirking with monitoring example: Max $U^e = P(L)U(Y , L) + (1-P(L)) U(Y-C,L)$ ]
   ▪ Note that the probability of detection and punishment, as well as the penalty imposed systematically affect shirking levels.
   ▪ Note also that the larger the benefit, the greater tends to be the shirking undertaken.

c. [Figure: bureaucratic inertia and bias.]

d. [**Student Puzzles**: How would personal norms (honesty) be incorporated into this model? Are there any obvious differences between the solutions to these "common" agency problems in the public and private sector? ]

**C.** The modern literature on contracts (which emerged well after the modern literature on bureaucracy) suggests that there are a wide range of contractual solutions for agency problems.

a. For example, bureaucrats may be required to post a performance bond which they may redeem upon successful completion of an assigned task.

b. 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) or straight salaries.

c. Those who fail to perform their duties may be fired and their reputations may be ruined.

**D.** However, surprisingly few such incentive systems are used, beyond prospects for promotion, in public bureaucracies.

a. Most bureaucrats are paid a straight salary which is largely independent of day to day performance.

b. Many bureaucrats have the equivalent of tenure, which implies that they cannot easily be dismissed for nonperformance of duties.

c. [Given this, you could argue that public sector agency problems are surprisingly small, even if they are not trivial.]

**E.** In cases in which the aims of bureaucrats differ from those of the legislature or electorate, however, there are some unique governmental *agency problems and also some agency solutions.*

i. In many policy areas, bureaucrats are not indifferent about public policies, but in fact chose to be bureaucrats because they hope to affect public policy in some way.

ii. In principle, hiring such persons allows governments to save money on personnel and reduce shirking problems.

iii. But, it also tends to bias the agency's agenda in favor or relatively extreme policies.

iv. [Figure: Agency problems with policy preferences]
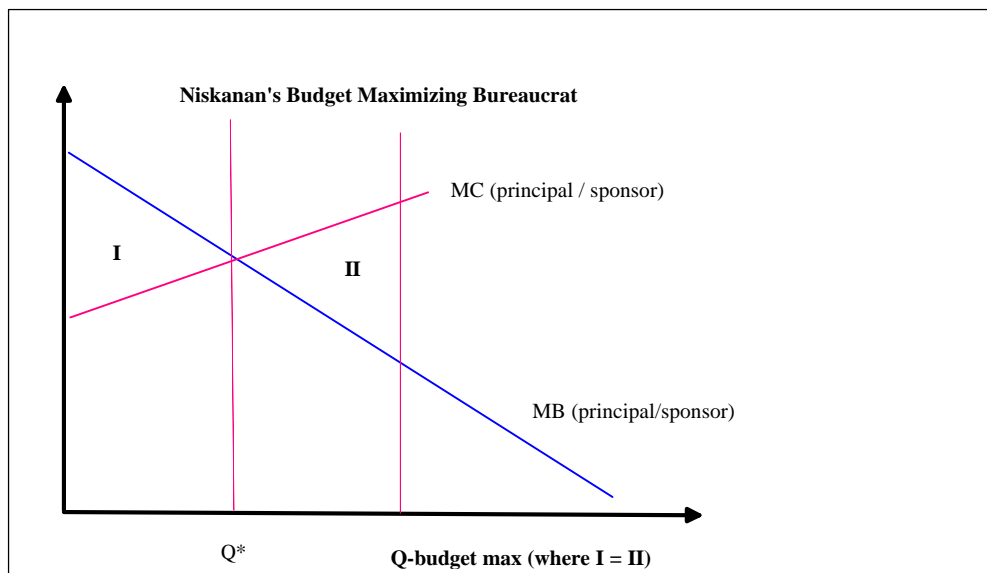
## III. A Simple Model of Bureaucratic Agency Problems: Niskanen's Budget Maximizing Bureaucrat

**A.** About forty years ago, a government efficiency expert named William Niskanen (1968, 1971, 1975) proposed a **Budget Maximizing Model** of bureaucratic behavior.

▪ It is a clever model, and although it does not capture all possible types of agency problems, it provides an understandable and very useful model of an important agency problem that tends to be present in both the public and private sectors.

**B.** Why maximize a budget?

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

   a. Opportunities for promotion tend to increase, and thereby expected salaries, as budgets increase

   b. Working conditions tend to improve--computers, office furniture, secretarial support, etc.-- as budgets increase.

   c. Non-pecuniary compensation tends to increase as resources become available for travel or projects of particular interest to a given bureaucrat.

ii. Moreover, to the extent that public employees are public spirited, they may be personally interested in the mission of their agency or bureau.

   a. Such bureaucrats will gain additional satisfaction by being better able to advance the agency's mission as its budget increases.

   b. (Thus, in most cases, even very "publicly spirited" bureaucrats generally have an interest in larger budgets.)



**Niskanan's Budget Maximizing Bureaucrat**

MC (principal / sponsor)

I

II

MB (principal/sponsor)

Q*                Q-budget max (where I = II)

**C.** Informational Asymmetries.

i.  The bureaucratic interest in larger budgets would not be significant, if they had no methods by which they might achieve higher budgets.

ii. 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" (cabinet ministers or legislative oversight committees).

iii. In most cases, it bears noting that budgetary requests originate with the bureaucracy.

**D.** Implications.

i.  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).

ii. 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.

iii. [See figure above.]

## IV. Other Models of Public Agency Costs

**A.** Bureaucratic Inertia and Bias (Congleton, 1980)  [Figure]

**B.** Full Line Forcing (Mackay and Weaver, 1983): bureaus may chose output mix to maximize their budgets rather than to maximize the interest of their "sponsors."

i.  M and W extend the Niskanen type analysis to a setting where the bureau produces multiple outputs.

ii. 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.   They are constrained by a budget constraint: $Y_i = C_i + T_i$, where tax payment Ti 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:  $U_i = u( Y_i-t_iB, kB, (1-k)B)$.  (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. $U_C(-t) + kU_{X1} + (1-k) U_{X2} = 0$   and $U_{X2} = U_{X1}$  simultaneously.

   b. [Illustration of first order conditions.]

   c. 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.

   a. The Bureau is assumed to set k to maximize its budget.

   b. This is very unlikely to be the same point as required to maximize the "sponsor-voter's" welfare.

   c. [Illustrating figure with B* function and k* functions, based on "Va" above, contrasted with revenue maximizing B and k.]

vii. In any case, M & W 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.

**C.** Predatory Pricing (Lott, 1990, J.Pub.E.): bureaus may under price their services to drive out competition.

**D.** Manipulating the Demand for Bureaucratic services (Congleton and Fabiano, 1997 manuscript): bureaus may attempt to increase the demand for their services.

**E.** There are many **critical extensions** of the Niskanen model. For example:

i. Migue and Belanger, 1974: who argue that the objective function is too narrow

ii. Breton and Wintrobe, 1975: who argue that competition and monitoring possibilities reduce budgets below the Niskanen level.

iii. Weingast and Moran, 1983: who argue that budget maximizing behavior allows budgets, themselves, to be used as a method of bureaucratic control (they include empirical results from FTC, $R^2 = .50$)

## V. Rational Ignorance, Framing, and the informational importance of the bureaucracy [Analysis]

i. Consider environmental, nuclear, medical, or defense policies?

ii. How important has information provided by the bureaucracies been to the public policy debates?

iii. How important have actual policy proposals been? [US policies in Iraq?]

## VI. Political Oversight: How good can it be?   [Discussion]

i. How much time can a typical voter spend monitoring bureaucratic outputs?

ii. To what extent can interest groups provide useful fire alarms?

iii. Are there incentive compatible contractual solutions to this agency problem?

iv. Does the existence of **contractual solutions** (even if unused) imply that any problems that remain must be Pareto efficient, or even more moderately, efficient from the point of view of the typical voter or member of government?