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The Vote Motive

GORDON TULLOCK

Hobart Paperback

with a British Commentary by
MORRIS PERLMAN

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The Vote Motive

GORDON TULLOCK

with a British Commentary by MORRIS PERLMAN

1. The economics of politics applies the techniques of economic analysis (monopoly, competition, information costs, etc.) to political and bureaucratic behaviour.
2. It drops the conventional assumption that politicians and bureaucrats try to serve only 'the public interest' and more realistically assumes that, as elsewhere, they try to serve their own interests by e.g. re-election and empire-building. The vote motive in politics is the profit motive in industry.
3. It analyses techniques ('constraints') in the structure of government to make self-interest more nearly coincide with the public interest, as in a competitive market.
4. A main conclusion is that de-centralised is more efficient than centralised government. A second is that simple majorities are less efficient than 'reinforced majorities' (e.g. two-thirds) for some legislation.
5. In two-party systems the parties tend to approach a consensus, in three- (or more) party systems they seem to diverge but the resulting coalition approaches a similar consensus; and the wings tend to form separate parties.
6. Log-rolling, the exchange of undertakings to support others' favoured policies, is usually concealed but dominates the selection of policy in representative government. It shapes party manifestoes, coalitions and policies, e.g. incomes policy.
7. In bureaucracies self-interest would tend to coincide with the public interest if, as in industry, they disclosed more information and were subject to competition from other bureaucracies and private producers.
8. These reforms in the structure of government should be tried in small-scale experimentation.
9. The economic theory of politics, by elucidating the pressure of trade unions on government, is better than pure monetary theory or cost-push theory in explaining inflation.
10. The new economic theory has, since 1960, been revealing the strengths and 'imperfections' of government as established economic theory since 1776 has revealed the strengths and 'imperfections' of the market. It thus provides a rational explanation for economically irrational policies such as on Concorde, devolution, commuter fares, agricultural subsidies, regional employment, siting of nationalised undertakings.

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THE VOTE MOTIVE

The Vote Motive

AN ESSAY IN THE ECONOMICS OF POLITICS,
WITH APPLICATIONS TO THE BRITISH ECONOMY

Gordon Tullock

Professor of Economics and Public Choice,
Virginia Polytechnic Institute and State University

With a British Commentary by

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London School of Economics and Political Science

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Preface

The *Hobart Paperbacks* were devised as a series of studies of medium length between *Papers* and books in which economists would analyse the relationship between economic thinking and policy, and in particular consider the circumstances which encouraged or inhibited the transformation of one into the other.

The first in the series, the 'theme' volume, was written in 1971 by Professor W. H. Hutt, under the title *Politically Impossible . . .?* Subsequent numbers have analysed the early economic policies of the 1970-74 Government (Samuel Brittan), the apparent conflict between the intention of the Treaty of Rome and the performance of the commissariat in Brussels (Russell Lewis), the Austrian neo-classical thinking of Professor F. A. Hayek from 1931 to 1972, the economics of bureaucracy (Professor W. A. Niskanen), the Cambridge School of economics (Professor Mark Blaug), recent British economic management (Ralph Harris and Brendon Sewill), and the theory and practice of collective bargaining (Professor Hutt). The ninth in the series extends its range and introduces what is for British economic teaching, political debate, and press discussion virtually a new subject.

British universities seem to have ignored a development in the application of economic theory to the activity of government that has been refined in the USA for over 15 years. Although some British economists are interested in it there seem to be no formal university teaching courses, nor established teaching posts. The development goes under various names: the Theory of Public Choice; the Economics of Democracy; and others. It is perhaps best understood if it is thought of as the economics of politics. This is the essence of Hobart Paperback No. 9, in which Professor Gordon Tullock, one of the founders of this theoretical development of economics with Professor J. M. Buchanan, originally at the University of Virginia, outlines its main propositions.

The economics of politics is concerned not with the product of government (defence, welfare, etc) but with its functions, which it analyses in much the same way as it analyses the structure of industry – the way it is organised, the inducements, pressures, incentives and sanctions that influence the people who run it, its general objectives and in particular its 'maximand', the quantity it attempts to maximise, the goal it wants to optimise. Government is thus analysed as a piece of machinery, like the market, that people could use to achieve their purposes. It analyses the motives and activities of politicians, civil servants, government officials, etc, as people with personal interests that may or may not coincide with the interest of the general public they are supposed to serve. It is an analysis of how people behave in the world as it is, not how they should behave, it is behavourist or positive economic theory of what is, not normative economic theory of what should be.

The theory is in its early stages and is still being refined. Economists, political theorists and other social scientists it has attracted have not yet reached settled conclusions. But even at this stage it has yielded insights that illuminate the work of politicians and government and should attract more attention in British universities, among people concerned with government policy, and not least among politicians and government officials themselves.

Professor Tullock writes with a disarming, witty prose-style that makes his text reasonably easy to follow although closely argued. At some points he uses charts which readers who prefer to follow the argument in words can omit, at least on a first reading.

So far the conclusions for the efficiency of voting systems, the effects of the policies in a political system with two or more parties, the relative efficiencies and imperfections of government and market, the role of competition in making bureaucracies more sensitive to consumer preferences, the function of log-rolling (explicit and implicit) and others would seem to shed new light on the working of government and party politics.

The conventional approach to the bureaucracy has been to see it peopled by sea-green incorruptibles concerned only with serving the public interest. The theory of public choice moves attention away from this naive assumption about the motives of public officials to the consequences of their activities. The theory also seems to offer intriguing advice for politicians on how policies in two-party and multi-party systems are best devised to maximise the support of the electorate. Not least revealing is Professor Tullock's discussion of log-rolling in representative government, even when it is implicit as in Cabinet compromises or party manifesto formulae agreed by party leaders without reference to rank-and-file supporters. Cabinet 'leaks' may be a development in this process.

A main conclusion that emerges from Professor Tullock's analysis is that majority decisions are not as good for maximising the public interest as decisions based on majorities nearer two-thirds. Such a principle would reshape the British and US political systems, which tend to be based on simple majorities, although Professor Tullock says that the analysis upon which it is based is becoming accepted doctrine in the study of public finance in the USA.

Much of the analysis may strike the reader as cynical in its severely austere examination of political activity designed to maximise electoral support. But it would seem much more realistic than the common and conventional attitude that draws a distinction between the self-interest of men in industry and the self-less service of men in government.

There may be a reluctance to accept the realism, perhaps because it is disturbing to see public men and public officials analysed as serving their self-interests. But it is an error to suppose that men who serve their self-interests are necessarily in conflict with the public interest. It is an error to suppose that men in industry who maximise profit or that men in government who pursue the motive of maintaining power are necessarily doing so at the expense of the public. What matters for scientific analysis is whether self-interest in industry or government coincides with or conflicts with the public interest. The theory of public choice is designed to discover the circumstances in which there is coincidence or conflict, and the institutions that could increase the prospect of harmony. The theory supposes that men in both industry and government are moved by the same primary motive. This basic assumption leads to more realistic conclusions than the assumptions of earlier economic theories that there was a difference between motives in industry and in government.

To restate Professor Tullock's central theme and illustrate it from developments in the British economy we invited Dr Morris Perlman of the London School of Economics, one of the few academics we know who is interested in the subject, to write a short commentary for the elucidation of British readers. He has done so with telling examples and several telling phrases. We hope it will help to open up the subject to British readers – professional economists and non-economists – who did not know of it.

Some of Dr Perlman's exposition and examples may reinforce the impression of cynicism. The reason may be that we have come to think of politicians and public officials as in a class of their own, apart from the rest of us mere mortals. But he explains that the theory is capable of shedding light on the activities and consequences of government where former economic approaches were much less enlightening. Here perhaps the central example is the difficulty of explaining a wide range of government activities in terms of the economic concepts of 'public goods' or 'externalities' (these and other terms are explained in the Glossary).

Examples from Britain in recent years seem to show that government policy cannot be explained in conventional economic terms without considering the political returns to government in the form of electoral popularity and the prospects of keeping or returning to office. It may seem over-simplified to explain government policy on suburban fares (Labour) or agricultural subsidies (Conservative) in terms of the judgement made by politicians on their effects on General Elections or by-elections. But that is the real world that economics has to examine and explain. The appalling Concorde blunder, which no doubt politicians of all parties will explain away in order to save face, cannot be understood without a theory of the economics of politics and a theory of the economics of bureaucracy.

In discussing the world in which public officials work, Dr Perlman hits on a phrase that may remain remembered for years. As a parallel to an 'invisible hand' that Adam Smith said leads people to serve others by serving themselves, Dr Perlman conceives an 'invisible foot' with which to apply timely admonition to public officials who wander from serving the public.

To indicate the new approach to the analysis of political institutions we invited Doctor Perlman to add 10 questions for the special interest of students and teachers of economics that will also interest observers of the political scene and, not least, politicians themselves.

Some may think there is danger in exposing the activities of people in public life to the rigorous analysis that people in industry have long endured. There would certainly seem to be an element of cant in politicians who explain every policy as efforts to serve 'the public interest' without referring to the personal or political benefits to them.

The real reasons for government policy are rarely stated with the candour that would enable the public to understand them. Politicians seem to be playing out a public charade in which everything is explained by question-begging terms like 'fair', 'reasonable', 'adequate', 'just', and similar. The ultimate benefits to the public from developing the economics of politics may be that, by helping the public to understand politics and the bureaucracy (national and local) better, it would be enabled to make more rational choices between politicians, parties and policies, and to distinguish the functions that must be left to government and those that are better performed in the market.

An intriguing implication of the theory is not only that it guides party leaders in formulating policies to maximise votes in a given electoral system. By implication it also shows statesmen what changes in party alignment they may have to envisage to make desirable policies more possible. That may have been what Peel did in the 1840s; it may be what is now necessary to introduce policies that would be welcomed by the populace but that seem unlikely given the present arrangement of parties with conflicting wings.

For 200 years economists have studied and examined the activities, achievements and 'imperfections' of the market. The Institute is grateful to Professor Tullock and Dr Perlman for combining from opposite sides of the Atlantic to provide British readers with a text that helps to explain, and should intensify interest in, the activities, achievements and 'imperfections' of government.

The Trustees, Directors and Advisers of the Institute do not necessarily share Professor Tullock's and Dr Perlman's analyses and conclusions but present them to economists and others everywhere for discussion and debate.

July 1976 ARTHUR SELDON

Glossary

(in order of reference in the text)

Public Good: A commodity or service which, if purchased for society, must of necessity be available for consumption by everyone. The classical example is the national defence force, which can hardly defend Smith without also defending his neighbour, Jones.

Median Voter: The voter in the middle, i.e. the voter who has as many voters on either side of him. In multi-dimensional applications, the median voter has to have the same number of voters on either side of him in all directions.

Pareto Optimality: A situation in which it is impossible to benefit one individual without injuring another. Although it seems a very abstract concept, it has turned out to be of great use in formal economic reasoning.

Welfare: A technical term meaning whether or not one has achieved Pareto optimality. The use of the word 'welfare' or 'welfare impact' in this sense may seem misleading to the layman and I do not wish to defend its use, but it is normal in economics.

Bell-shaped Curve: Mathematically, a perfectly symmetrical random process generates a curve which looks rather like the cross-section of a church bell; hence the term 'bell-shaped curve' or 'normal bell-shaped curve'.

Two-dimensional Analogue (of the median preference theorem): The median preference theorem was first proved only in a one-government activity space. The two-dimensional variants shown in Figures 3 and 4 (pp. 20 and 21), however, depend on essentially the same proof, albeit in a much more complicated form. The proof still indicates that the voter who is in the middle of the distribution will control the outcome.

Maximand: Something to be maximised; more broadly, a goal or something the individual wants as much of as is possible.

CONSUMER SURPLUS: The advantage a consumer receives from buying something at less than its maximum value for him: if I would be willing to buy a candy bar at 15 pence but can get it for 10 pence, my consumer surplus is 5 pence.

PRODUCTION FUNCTION: Economists' jargon for a complete schedule of the cost of producing various outputs by any enterprise. The words sound clumsy, but there does not seem to be anything else in the English language which means the same thing and which is as concise.

PERFECTLY DISCRIMINATING MONOPOLIST: A monopolist who can increase his profit by 'discriminating', that is, charging different people different prices for the same product; in the 'perfect' situation, it would mean charging individuals different prices for different units of the product. If I would pay 20 pence for one bar of candy and 15 pence for a second, while Jones would pay 14 pence for one and less than cost for a second, the perfectly discriminating monopolist would charge me 20 pence for my first candy bar, 16 pence for my second, and would charge Jones 14 pence. Needless to say, perfectly discriminating monopolists exist only in theory, but discriminating monopolists as opposed to perfectly discriminating monopolists *do* exist: the British electricity generating industry is an example.

PORK-BARREL: American political term for legislation which benefits local areas. Traditionally, rivers and harbours were the basic area for pork-barrel activity; in recent years the term has been used for a much wider scope of activities.

The Author

GORDON TULLOCK was born in Rockford, Illinois, and educated there and at the University of Chicago, graduating from its law school in 1947 (after interruption for military service). From 1947 to 1956 he served in the US Foreign Service (he was vice-consul in Tientsin, China, when it was seized by the Communists in 1949). After spending 1958-59 as a Post Doctoral Fellow at the Thomas Jefferson Center for Political Economy, University of Virginia, he was appointed Assistant and later Associate Professor in the Department of International Studies at the University of South Carolina (1959-62); 1962-67 Associate Professor of Economics, University of Virginia; 1967-68 Professor of Economics and Political Science, Rice University. From 1968 to 1972 he was Professor of Economics and Public Choice at Virginia Polytechnic Institute and State University, and is now University Distinguished Professor there.

Professor Tullock has been a member of the board and secretary of the Public Choice Society since its foundation, and is editor of *Public Choice.* Co-author with Professor James M. Buchanan of *The Calculus of Consent* (1962); his other books include *The Politics of Bureaucracy* (1965) and *Private Wants, Public Means* (1970). He has contributed widely to learned journals.

I. Economics and Politics

The economic view of politics has usually been associated with Marxist thinking. This *Paper* uses a totally different method of analysis. Section I is a brief introduction to and summary of work done long after Marx, the bulk since 1960, to apply essentially economic tools to the analysis of political behaviour.

Adam Smith, the founder of scientific economics, was a philosopher by profession and interested in many subjects. Although his great contribution was in what we now call economics, he taught in other subjects, including politics. During the 19th century, however, the interest of his followers and economists generally narrowed, and until very recently they largely confined themselves to the study of what is now generally referred to as economics, the analysis of the system of production and distribution. Most economists thus studied the functioning of the market. But there were exceptions: some were interested in the functioning of a centrally-planned economy. Others were concerned with the government as a provider of goods and services, and as a tax collector. Characteristically, their branch of economics was referred to as public finance, and, in practice, until very recently, it concerned itself mainly with problems of taxation.

Most people think the largest single use of traditional economics in the public sector is 'macro-economics' – the economics of unemployment and inflation on a national scale. Although economists were to some extent interested in macro-economics from the very beginning, there was a very large concentration of interest in it from about 1940 to about 1970. In recent years there has also been a lot of application of economics to detailed studies of individual government policies. It seems that economists can provide a good deal of guidance, although seldom final decisions, for such problems as the optimal mix of fighter planes, the number and distribution of hospital beds, etc. This *Paper* is not relevant to any of these traditional concerns of economics. In a way it is antagonistic to them.

The benevolent despot – and the end of illusion

In all such applications of economics, the economist has been concerned with determining an optimal government policy, granted certain objectives, for example, low unemployment, moderate inflation, or defence at the lowest cost. The new economics approach to politics, which was substantially developed in the University of Virginia in Charlottesville, Virginia, is the analysis of the functioning of government itself, i.e. the process by which government makes decisions. In a sense, the traditional economists had what might be called the 'benevolent despot' model of the political order. They have thought their duty was to determine the optimal policy and recommend it to the government, which would adopt it and faithfully carry it out.

Economists in the USA and lately in Europe who are now analysing politics, and indeed the political scientists now rapidly learning economics in order to apply the same tools, have no such illusions. They are characteristically interested in improving the efficiency of the government and have no objections to advising on, say, the internal organisation of the post office; but their primary research is the internal working of government itself, not its output. Government is seen as an apparatus, like the market, by which people attempt to achieve their goals. Instead of assuming that government aims at some particular goal – say, the most health per pound of expenditure – and then calculating how it should be achieved, students in this newly established economics of politics assume that all the individuals in government aim at raising their own utility, that is, serve their own interests within certain institutional limits, and then inquire what policies they can be expected to pursue.

Insofar as the new economists suggest improvements, they are normally structural improvements in government. Most of the students in the subject would, for example, favour a much more decentralised government. Although in a small minority, I favour a two-thirds rather than a simple majority in Parliament for most legislation. Forms of government and voting systems were not the kind of problem with which traditional economists dealt. A few years ago they would have been very doubtful whether economic tools could be used to analyse either the functions of government or electoral systems.

Enter the political scientists

Although the new approach to politics originated among economists, before it was very old it also attracted political scientists. Both groups found it was necessary for them to do a good deal of study in the other discipline in order to use economic methods on traditionally political problems. The intellectual retooling was perhaps a little more severe for the political scientists than for the economists, but both had much to learn.

As the editor of *Public Choice*,[1] the journal of the 'movement', I can testify that about 45 per cent of the members of the Public Choice Society are economists, about 45 per cent political scientists, and the remainder are drawn from other subjects such as philosophy and sociology.[2] Today it is not possible to tell whether the author of an article using economic tools in political science was originally an economist or a political scientist. Indeed, economists from the Virginia Polytechnic Institute or political scientists from the University of Rochester in the State of New York (the two strongest centres of the new work) may study from much the same books, although with a different concentration. Most, however, are scholars who started out in one of the two subjects and have been attracted into the inter-disciplinary work by what they (and I) see as a better explanation of politics than can be obtained from either economics or political science alone.

To date, the work has been theoretical and there has been relatively little empirical testing. This does not reflect an aversion to empirical work. Theories must be invented before they can be tested, and new theories frequently are hard to test. The appropriate data have not yet been collected, and in some cases new statistical methods are necessary. Yet there has been enough empirical testing to confirm the general structure of the new theory.

To give but a few examples, recent issues of *Public Choice* have included articles on 'A Clear Test of Rational Voting', 'Information and Voting: An Empirical Note', 'An Economic Analysis of Government Ownership and Regulation: Theory and the Evidence

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[1] Subscriptions to *Public Choice* are $11 per year, including membership of the Public Choice Society; student subscriptions are $5·50 and institutional subscriptions $25·00. Foreign subscribers should add $1·50. *Public Choice* is for the specialist reader.

[2] The current president is a sociologist; previous presidents have been split about evenly between economics and political science.

from the Electric Power Industry', and 'A Description and Explanation of Citizen Participation in the Canadian Municipality'.[1]

Ethics in political conduct

It is unfortunate but true that the economic approach to politics raises ethical issues. Much of traditional political science was devoted to determining the morally correct policy to be followed in a given inquiry. This kind of issue will not be much discussed here, not because I object to morally correct policies, or even that I do not have views on what policies are morally correct, but because people differ about what is morally correct. And some 2,000 years of debate in the Christian era does not seem to have had much effect on this difference. It does not follow, of course, that the morally correct policies cannot be produced, but it does indicate that, on the whole, we are not likely in the near future to reach general agreement on the morality of egalitarian policies, or the death penalty for murder, or 'just' war versus pacificism, etc. It therefore seems sensible to at least try another approach. Economics has sometimes been claimed to be amoral, although its defenders normally say that giving people what they want seems morally right. The new economic approach to political science can be subjected to the same criticism and defended in the same way.

The economic approach to political problems – like the economic approach to the more traditional economic problems – is not in any sense immoral in itself. Democratic political structures are examined in terms of how well they can be expected to get for the people what they really want. Some social scientists regard this as a low objective, and feel that government should give the people what they *should* want. Normally academics or politicians who hold this view are quite willing to lay down exactly what the people should have. I frequently feel that other people would be better off if, instead of doing as they wished, they followed my

[1] Jeffrey W. Smith, 'A Clear Test of Rational Voting', *Public Choice*, No. 23, Fall 1975, pp. 55–67; Robert Tollison, Mark Crain and Paul Pautler, 'Information and Voting: An Empirical Note', *Public Choice*, No. 24, Winter 1975, pp. 43–50; Louis De Alessi, 'An Economic Analysis of Government Ownership and Regulation: Theory and Evidence from the Electric Power Industry', *Public Choice*, No. 19, Fall 1974, pp. 1–42; and Mark Sproule-Jones, 'A Description and Explanation of Citizen Participation in a Canadian Municipality', *Public Choice*, No. 17, Spring 1974, pp. 73–83.

advice; but in a democracy there is not much we can do about imposing our view upon the people. They will vote to obtain what they want, not what we think they should want.

Voters and customers: choosing the best bargain

Voters and customers are essentially the same people. Mr Smith buys and votes; he is the same man in the supermarket and in the voting booth. There is no strong reason to believe his behaviour is radically different in the two environments. We assume that in both he will choose the product or candidate he thinks is the best bargain for him.

Although it seems very modest, this indeed is a very radical – even if obvious – assumption. For decades, the bulk of political science has been based on the assumption that government aims at higher goals than individuals aim at in the market. The voter is sometimes assumed to be aiming at achieving 'the public interest', the man in the shop his 'private interest'. Is this true? Is he Jekyll and Hyde?

The private market provides all sorts of opportunities for people who wish to sacrifice their well-being for the benefit of others. There is an immense collection of private charities to which they can contribute money or time.[1] But they do not put a very large part of their income, time, etc., into them. People are interested in the well-being of others, but, except for the immediate members of their families, less intensely than in their own well-being. As a result of empirical research, I once concluded that the average human being is about 95 per cent selfish in the narrow meaning of the term. Of course, many are less selfish (and many are more).

Talking and acting: academics and grocers

There is a sharp contrast between the way people act and the way they talk. It is particularly striking among academics, where discussion of the desirability of making sacrifices for others, striving for abstract moral goals, and in general living a highly virtuous life, is combined with behaviour which is not one whit less selfish than that of the average grocer.

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[1] *The Economics of Charity*, Readings No. 12, IEA, 1974, discusses charitable giving in Britain and the USA. My contribution there analysed the functioning in practice of government redistribution in a democracy.

The intellectual history of this fascinating subject is that up to about 250 years ago most discussion of economics was based on the assumption that businessmen were, or at least should be, trying to do their 'social' duty: there was 'the just price' and various moral duties the business community was supposed to perform. One of the great achievements of the late English Enlightenment (in particular of Adam Smith) was the realisation that we in economics did not have to make this assumption. Accepting that most in business are there most of the time to make money, even if they then give part of it to charity, permits more accurate analysis of their behaviour than supposing they are attempting to achieve 'the just price'. Further, in practice the behaviour of the businessman is morally quite respectable, if not saintly. In the course of the pursuit of his private profit, he produces values for other people and, with improved institutions, can be led to produce even more.

Politicians/civil servants and lesser mortals

On the whole, we would hope the same would be true with politics. There is certainly not much difference between politicians and civil servants on the one hand and the rest of us. A businessman who has been very successful as head of a large firm may change his job to head of a Department of government, but there is no reason to believe his basic character has changed. The conditions under which he operates change, and this should have led to some change in his behaviour, but he was essentially the same man.

In addition to being a US government employee as a university professor at a state institution, I am also on the board of directors of a small company in Iowa.[1] As far as I can see introspectively, there is no difference in my character when sitting with my fellow directors and when carrying out my duties as a university professor. The conditions under which I operate are, of course, somewhat different, and hence my behaviour is not identical; but basically I am the same man.

Both the market and democratic government are institutional structures through which the bulk of us, as customers or as voters, try to achieve our goals. The bulk of us also, as producers, find ourselves employed either in the private or the government sector;

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[1] Dodger Products, Eldora, Iowa: we have about 150 employees.

and most of us in both are also primarily seeking personal goals. As a general proposition, we shall achieve the well-being of society for the most part only if there is some private benefit for us in taking action to that end. Once again, let me emphasise that almost everyone is to some extent interested in the well-being of others and in various abstract goals, like the 'public interest'. Almost everyone is, in practice, willing to make some (usually rather modest) sacrifices to those ends. This is true, however, just as much of people in private as in government employment.

The difference between government and private employment is simply that the limitations within which the individual operates differ. In general the constraints put upon people's behaviour in the market are more 'efficient' than those in government, with the result that individuals in the market are more likely to serve someone else's well-being when they seek to serve their own than they are in government (pp. 27-28). Indeed, one of the objects of the economic approach to politics is to invent reforms that would raise the 'efficiency' of government closer to that of the private market.

This short *Paper*, written mainly for the newcomer to economics and the general reader, cannot cover the entire work of a large number of scholars who have been working in the subject for 10 years or more. My outline sketch of the basic argument assumes that if the reader is interested he will turn to the 'Note on Reading' (p. 57) for a guide to further material. I shall try to avoid the mathematics which is a prominent feature of the new work. My object is to introduce the subject to people who are not familiar with it. I hope specialists who read the *Paper* will recommend it to their students and to their colleagues in other subjects as an introduction to a still relatively new but rapidly developing branch of economics that is yielding new insights into the working of government.

II. Why Government?

Among modern social scientists there are devout believers in a centrally-controlled economy who would regard the title of this section as expressing bias. They feel that it is the market, not the government, that must be justified. I should, therefore, say at once that I propose to demonstrate that part of society should be left to the market and part dealt with by government. Since this *Paper* deals with the economics of government rather than the market, it seems sensible to explain why some functions should be controlled by government rather than why some should be controlled by the market; but this is merely a matter of style and not of substance. Readers who wish to assume that government is the norm and the market should be adopted only when there are special reasons for it will find the reasoning fits this approach.[1]

The dawn of 'externalities'

David Hume began the discussion of 'externalities'. As an example he used a meadow[2] which was badly drained and the value of which could be increased by drainage by much more than the cost. If the meadow is owned by one man, there is no problem. He drains it and takes the profit. If the meadow happens to lie across the property of two people, they can agree between themselves about the division of the cost and profit of drainage. If many people own pieces of the meadow, agreement becomes extremely difficult. Each person is aware that if he does not contribute to the drainage, his abstention only very slightly reduces the resources available. Further, he will get his share of the benefit at no cost. Individuals are therefore

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[1] In London in the 1930s there was a debate between Professors William Hutt and Abba Lerner on capitalism *versus* socialism. Hutt argued that everything should be done by the market except those activities which are better handled by government. Lerner argued that everything should be done by government except those activities better done by the market. The approaches were from the opposite extremes, but both indicated much the same policies in the government/market mix.

[2] David Hume, *A Treatise of Human Nature* (1740), ed. L. A. Selby-Bigge, Clarendon Press, Oxford, 1960, p. 538.

sensible to engage in hard bargaining about their participation in the project but even so no agreement may be reached and the meadow may remain undrained.

There are only 20 people or so in Hume's meadow; in government activities there may be millions. Until the Second World War, London was noted for its pea-soup fogs and pulmonary disease. The cause was soft-coal fires. If everyone switched to other fuels, everyone would benefit; but no individual could benefit *himself* noticeably by stopping, because the reduction in the total amount of coal smoke put into the atmosphere when *he* switched to electric or gas fires was insignificant. A private agreement in which everybody stopped using coal fires would therefore have been impossible.

Hume recommended, in these circumstances, the use of government.[1] Even if the individuals could not agree among themselves on who was to put up what sum of money for draining the meadow and who was to get what parts of the profit, they might have been able to agree to let this decision be made in a more or less automatic way or by an agency thought to be 'impartial'. The agency would not have perfect knowledge about the situation of the individuals, and hence its decisions would be, in a sense, inferior to those from bargaining *if* it worked perfectly.

The decision to adopt a collective method would not be because the outcome is thought superior but because it guarantees an outcome at all. The collectivity can *coerce* the individuals into giving up their private bargaining strategies and accepting an imposed solution, which, although not perfect, could be better than no solution at all. This reasoning is particularly obvious in the London coal-fire problem. Clearly nothing could be done by purely private action; the only alternative was a collective solution through government. It should be noted, however, that the government solution was by no means perfectly fitted to the desires of various individuals. Thus, there was inefficiency in the government solution, although much less than if the problem had been left unsolved.

'Externalities' and government

These effects are called 'externalities' in economics. We may have a set of property institutions such that some of the effects of the activity (or inactivity) of a few people are apt to fall on many. The

[1] David Hume, *ibid.*

smoking chimney is a classic example. In these circumstances, the people normally cannot come together to bargain on the methods and costs of abatement of the smoke, drainage of the meadow, or the innumerable other objects which governments satisfy. They therefore turn to a collective instrument which performs the function with some (although not impressive) efficiency.

There is nothing in the analysis so far about the 'public interest'. Some governmental activities (such as an adequate police force) are so broadly beneficial that one can reasonably refer to them as being 'in the public interest'. But even here 'the public interest' is simply the sum of the private interests. I would rather not be burgled, mugged, murdered, or subject to embezzlement and fraud, and I presume the same is true of the reader. These desires are just as 'selfish' as my wish for a pay rise.

There is no reason to believe that government reaches perfect solutions either. The number of cases where economists have argued that the market is imperfect and *therefore* recommended that government should deal with the problem is very large. The British economist A. C. Pigou and the American Professor Paul Samuelson both made this error. They *assumed* that government reaches a perfect solution.[1] No one really believes this, but economists frequently recommend government action simply because the private market creates externalities, and hence is not likely to function perfectly. This is clearly a mistake; we should compare the likely errors of both in the real world and use the institution which will cause less inefficiency, whether government or the market.

Where there are large externalities we would anticipate that the private market would not do well. This is called 'market failure' in the technical-economic literature. We must then consider whether the governmental process will do better, or less imperfectly. There is a legend of a Roman emperor who, being asked to judge a contest between two singers, heard only the first and gave the prize to the second, assuming he could not be worse. This is not an optimal selection procedure. We must ask: what are the defects *in practice* of the governmental process compared with the defects of the market?

[1] A. C. Pigou, *The Economics of Welfare,* 4th Edn., Macmillan, London, 1938; Paul A. Samuelson, *Economics: An Introductory Analysis*, 3rd Edn., McGraw-Hill, New York, 1955, pp. 271-72.

Defects of government: public goods – all or nothing

The defects (and the advantages) of government provision are discussed later. A few can be dealt with here. The first defect is simply that government, of necessity, buys a single quantity of any 'public good'.* When I buy something in the private marketplace, I can decide *how much* of it I want. If I club together with my neighbours to buy a public service, I have to accept the quantity decided upon by the majority (or other) rule in the collective decision process of representative democracy.

I may prefer to pay somewhat higher taxes and have a larger police force with the concomitant lower crime rate; you may prefer a lower tax rate, a smaller police force, and a higher crime rate. If it were possible to buy police efficiently in the private market[1] (I do not believe it is), we could each have our optimal quantity. If it must be bought collectively, however, we have to reach a compromise, which may be your optimum, my optimum, or in between; but in any event we will not have our individual optimum, as we would if we bought in the private market.

A second disadvantage is that some people simply dislike uniformity, regardless of quantity or quality. They would not wish to receive the same quantity or quality of services as other people, even if by coincidence it happened to be that which they would choose themselves. This may be a fairly small cost, but it is not negligible.

Since government activity imposes costs in this sense, it does not follow that we should not use the government for some activities. There are also costs in the use of the market process. We must measure and compare the costs in both, and choose the institution which, for the purpose in hand, is the more efficient. To make this decision rationally, we have to consider externalities or other defects in the private market, and the conditions that lead to inefficiency in government provision. We listen to *both* the opera singers and choose the one with the fewer defects. An engineer choosing between a diesel engine and a steam turbine knows that neither of them is perfectly efficient and, for some purposes, one works better

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[1] [In *Theft in the Market*, Hobart Paper 60, IEA, 1974, Dr R. L. Carter argues that *some* police services could be bought privately, e.g. cash-carrying and other manned security services and detailed advice on crime prevention.—ED.]

* Glossary.

than the other. That neither institution is perfect is no argument for not making a choice, but it is an argument for careful calculation of *all* effects, good and bad. The whole point of the new economic analysis of politics is that it makes these calculations easier, more complete and more accurate.

Changing choice between market and government

There is no reason why the choice between government and market should be permanent or unchanging. Technological changes could increase the externalities where they had previously been low or, perhaps, make it easier for government to produce a good solution. In either event, this would argue for transferring a service previously provided through the market to the government. On the other hand, a sharp fall in the externalities, or a development which made it harder for government to make an optimal decision, would both be arguments for transferring an activity from government to the private market. In a well-functioning polity, activities which had been private 100 years ago would not necessarily be private now, and activities which had been conducted by government 100 years ago would not necessarily still be governmental now, except by coincidence.

As the size and general vigour of human civilisation grows, it has more harmful effects on the environment. A small community surrounded by wilderness can afford to dump all its waste into a stream, while collecting all its drinking water upriver from the dumping point. As the population around the stream increases, this procedure becomes costly. Since government's method of dealing with the problem will not be perfect, it is not sensible to introduce government until the pollution in the stream becomes considerable. Eventually we would reach a stage where the potential costs from inept government action would be less than the current cost from the pollution. Governmental control would then become preferable.

I am an avid reader of science fiction. Suppose someone invents a small, compact, and inexpensive household and industrial waste dispenser which will convert all the waste at very low cost into saleable fertiliser. Since this is a superior system, households and industries begin switching to it from their traditional methods of waste disposal. After a while, the continued existence of the (local) government agency for refuse collection will inflict more costs on society than the little pollution that would be dumped into the stream if the agency were abolished. At that time, the activity should be shifted back to the private market.

My waste disposal device may never be produced, but technological improvement may often call for reduced governmental control. Immediately after the Second World War, when new television stations were being started in the United States, there was a strong likelihood that they would interfere with one another; their watching areas overlapped on the same wavelength. The regulatory institution chosen to deal with the problem was the Federal Communications Commission (FCC), which had been performing the same function for radio. It did an outstandingly bad job of allocating and policing the TV wavelengths. The result is that Americans have markedly less choice of TV programmes than they could have, and that choice is warped by the FCC's eccentric ideas of TV programming. Yet, while many would prefer better regulation,[1] no one has argued that broadcast TV should not be regulated.

Another way of propagating a TV signal is by cable. There is no reason whatsoever why it should be regulated nationally, but the FCC does regulate it and there is no doubt that its regulation retarded the rate of growth of cable television. The original application of the FCC to TV wavelength allocation was sensible, if not optimal. With the development of new cable technology, the market should have replaced government. Unfortunately, our institutions have not yet been adapted to the changed conditions. And that in itself–the resistance to winding down government even when it has been made out-of-date – is an aspect of the economics of politics (pp. 26–40).

Once again, this is simply an example. There are many services in which government is less harmful than the market, and many where the market is less harmful than government. We should seek an optimal combination by carefully offsetting the costs in one instrument against those in the other.

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[1] One other regulatory technique would have been simply to sell the wavelengths on the open market.

III. Voting as a Means of Collective Control

(The diagrams and accompanying text may be skipped by readers who prefer to follow the argument in words. The main conclusions are stated at the end of the Chapter, pp. 24–25. – ED.)

We now examine the functioning of government through the eyes of an economist. We deal only with democracy because it is only in democracies that this kind of subject can be studied and because we know more about them than about despotic forms of government. This is not a judgement that democracy is more important than despotic government. Throughout substantially the whole of history the bulk of the world's population has lived under dictatorships of one sort or another. Nevertheless democracy is the system in the UK and the USA, and the only method of obtaining popular control of government that has been tried.[1]

The simplest form of democracy is what we may call the town meeting. It was used by most of the ancient Greek city-states, and it is to this day used by some cantons in Switzerland and by some local governments in the United States.[2] The use of referenda, which are rare in Britain but common in Switzerland and moderately common in the United States, is similar. In most of the democratic countries, the town meeting form of 'direct' government has been replaced by 'indirect' representative democracy – a very complicated system.

The median voter theorem

For simplicity, assume a small community in which the basic decisions are taken by direct vote of the citizens. A possible issue is

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[1] To keep the discussion suitable for a reader without much mathematics, I omit the very difficult problems raised by the so-called 'paradox of voting', which suggests the possibility that no voting rule produces stable results. Since these problems are not only abstract and mathematically difficult but currently the subject of considerable research, leaving them to the specialists seems a sensible approach. It is possible that a new discovery in the economics of politics will invalidate not only this section but, indeed, the whole idea of democratic government! Riker and Ordeshook, cited in the 'Note on Further Reading' (p. 57), discuss the subject.

[2] Sometimes in the form of 'town meetings', as in the State of New Hampshire.

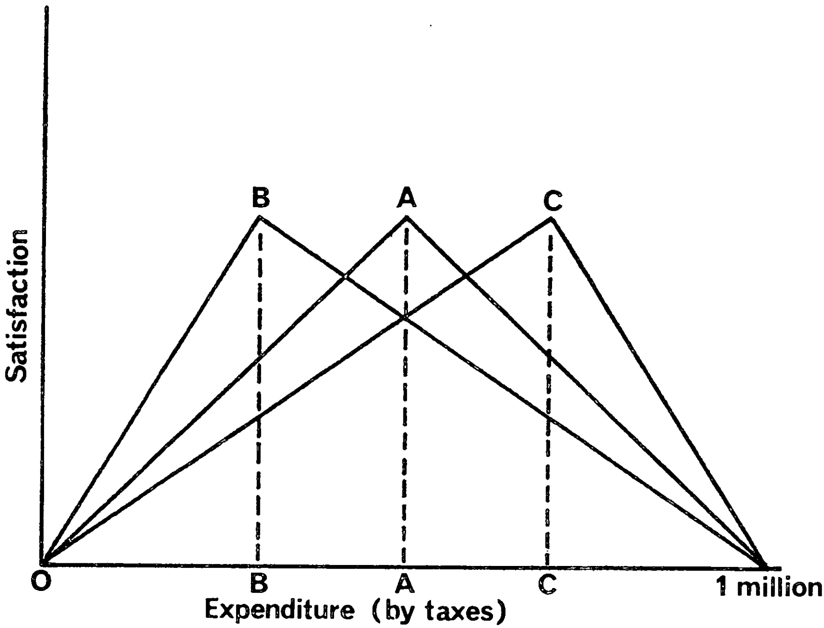

Figure 1

Collective Control by Voting (Police Services)

the amount of police services. In Figure 1, the horizontal axis shows various possible expenditures on police services from zero to 1 million. The individual voter, Mr A, will take into account both the costs of possibly being a victim of crime and the tax cost of maintaining the police services. As the police force is expanded, he is less likely to be a victim of crime, but his tax bill will go up. At first, as we move above zero, his total satisfaction increases as we enlarge the police force, because the gain he receives from a reduced crime rate is more than the cost to him of the taxes. Eventually, however, as the police force grows larger and larger and his tax bill swells proportionately, he reaches the point where he feels that any more police service is not worth its cost. For Mr A in Figure 1, this is at A.

The inverted V with its point at A is a graphic way of representing

A's relative satisfaction with various police budgets.[1] Two other voters, Mr B and Mr C, appear on the horizontal axis with an optimum expenditure for each. Suppose our community, Messrs A, B, and C, make decisions by direct voting in open assembly.[2] It is obvious that the median voter,* Mr A, will achieve his optimal preference. If A's police budget is placed against any larger police budget, i.e. some point to the right of A, both A and B will be opposed to the change, and only C at the most will favour it. Thus, there will be a majority for point A. The same line of reasoning applies for any lower budget than A.

This simple proposition is the so-called median voter[3] theorem, which simply states that if a number of voters with different views on an issue choose by majority voting, the outcome will be the optimum of the median voter. This theorem is immediately applicable to any odd number of voters; and for large even numbers of voters the slight inaccuracy generated by the possibility of a tie is insignificant.

This result may seem trivial. On the contrary, it has turned out to have surprisingly powerful predictive value. A good deal of empirical research, primarily in the United States, has been built upon this model, which has been found of great value in predicting[4] the size of school budgets, government policies on conservation, etc.[5]

The median voter model is eminently 'positive' (or what economists used to call behaviourist): it simply predicts what the out-

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[1] For mathematical purists it should be emphasised that the vertical dimension of Figure 1 is an ordinal rather than a cardinal dimension. All the lines show is that as Mr A moves from A in either direction, his satisfaction declines continuously. We do not have to say anything about the speed of decline. These lines could be quite irregular, instead of straight, without affecting the reasoning that will follow. The absolute height of the peak also means nothing.

[2] I assume here simple majority voting. It is by no means obvious that this system is optimal. Indeed, one of the more interesting aspects of the economics of public choice is the investigation of optimal voting rules or constitutions. The interested reader will find it discussed in J. M. Buchanan and Gordon Tullock, *The Calculus of Consent*, University of Michigan Press, Ann Arbor, Michigan, 1962 (2nd Edn., 1965).

[3] The median voter is midway in the total range (according to opinion on the policy).

[4] By building econometric models around this idea.

[5] Political parties regularly attempt to stay near the centre of the distribution of voters for this reason. Perhaps the strongest recent public statement of this was President Gerald Ford's remark: 'We are going to stay in the middle'. (*Washington Post*, 10 August, 1975, p. 1.)

* Glossary.

come will be, i.e. how people will behave, without making 'normative' statements about its desirability or undesirability. Some political theorists, sociologists and others tend to feel it is undesirable that the average man gets his way; but in a democracy he frequently does. In considering whether a voting scheme which chooses the median option is desirable or not, we should first notice that, strictly speaking, it does not pass the test of what economists call Pareto optimality.* It could be that Mr B feels much more strongly about the issue than either A or C, and hence that some point between B and A would be 'better' than A. This issue is dealt with at pages 41-55.

If the voters have roughly the same intensity of feeling, or if they are randomly distributed, so that people at the left of the midpoint have about as many who feel strongly as people at the right, and assuming that the location of the optima is roughly symmetrical, the median voter preference will be the point of minimum disappointment, i.e. which inflicts the least aggregate dissatisfaction upon society as a whole. The point cannot be proved rigorously without mathematics, but it is intuitively obvious for our three-voter society in Figure 1. As you move left from point A, for example, the satisfaction of B rises but the satisfaction of both A and C falls. On the average, then, this should lead to a fall-off in satisfaction over the group as a whole, although of course with a small number of voters, such as three, none of us would be very happy with taking a statistical approach.

Let us temporarily ignore the 'welfare' impact* of this model and attempt to see what we can deduce from it about real-world politics. To make it easier to deal with more realistic problems, we can convert our diagram to another form. In Figure 2, the vertical axis represents the number of voters who have their optimum at any given appropriation level for police services.[1]

Although the reasoning in this section will not be affected by the shape of the distribution of voters, this is because we assume the

[1] I have drawn this line in as a somewhat skewed normal curve, but nothing much follows from this. For the reasoning to be used in most of the remainder of this section, the reader can draw in any curve he wishes, although it will be necessary to adjust the rest of the diagram to conform. For theoretical research, I usually recommend the use of a flat horizontal line, i.e. the assumption that there are as many people at one point on the issue dimension as at another.

* Glossary.

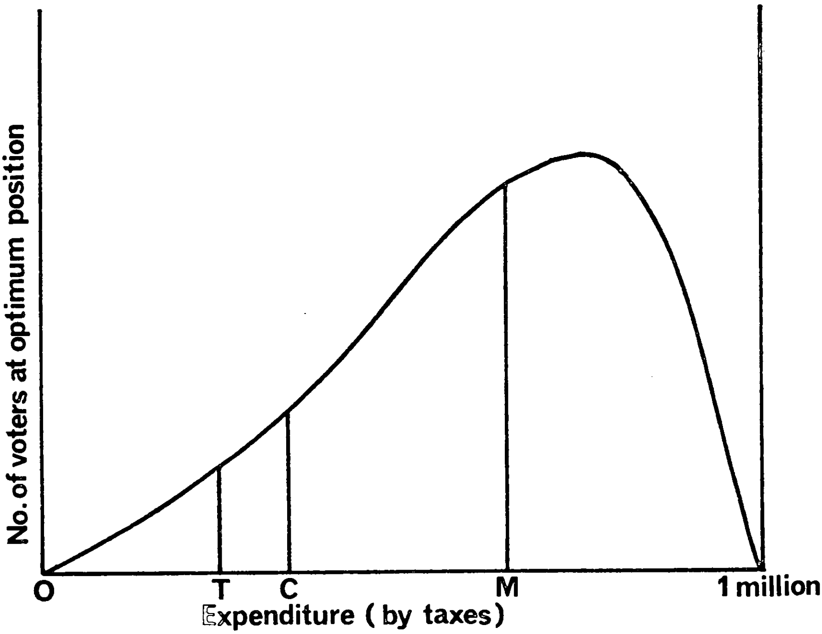

Figure 2

Many Voters (Police Services)

voter always votes for the alternative from among any two which are put up to vote and which are closest to his optimum. If we assume voters sometimes do not vote at all, or they are confused when two choices are too close together, the distribution of the voters becomes important. These problems require more mathematics. They do not, however, raise any difficulties in principle for the type of model we will use here. I have inserted the median voter at point M on Figure 2; there are as many voters to his left as to his right. The median voter is not at the high point of the distribution and, indeed, would not be unless the distribution happened to be a perfectly normal bell-shaped curve.*

Tendency to median 'consensus'

It is relatively rare in modern democracies for government to depend on direct votes of the citizens for the bulk of their decisions.

* Glossary.

The two-party system with disciplined parties, however, works much the same way. If the parties would rather be elected than beaten, and they choose their policies accordingly, they would attempt to take the position of the median voter, because that assures them of success against any other policy taken by the other party. In practice, of course, we observe that in most two-party democracies the parties are very close together and near the dead centre of opinion.

Once again, this decision of the parties can be criticised, but the party managers, in seeking re-election and choosing their policies accordingly, are creating what advocates of democracy are supposed to favour, i.e. government in which the will of the people counts – heavily.

If there are more than two parties in the legislature or, as in the United States, party discipline is lacking, the median preference model will apply within the legislature itself, with the median individual party (in a multi-party system) or legislator (in the American system) dominating. Congressmen in the United States attempt to follow policies in the legislature which will please the median voter in their constituencies, with the result that the median congressman is not too far from the median voter of the country as a whole.

Politicians, like everyone else, make mistakes and on occasion will adopt policies far from the optimum of the median voter. Suppose Mrs Margaret Thatcher makes a mistake and comes out for a very small police budget, with its accompanying high crime rate, taking position T in Figure 2. Mr James Callaghan will not take the median position at M, but will move over in the general direction of her position, taking up position C. In these circumstances both parties are offering the voters less police protection and a higher crime rate than the median voter wants. Yet this response to the Conservative Party's initial error will maximise votes for the Labour Party.

Normally we expect politicians to be reasonably skilful, and hence to adopt positions close to the preferences of the median voter. But this result applies only with two parties. If there are three, and the voting process is like the one used in Britain and the United States, i.e. the candidate with the largest number of votes wins, regardless of how small, 'models' of the sort we have been

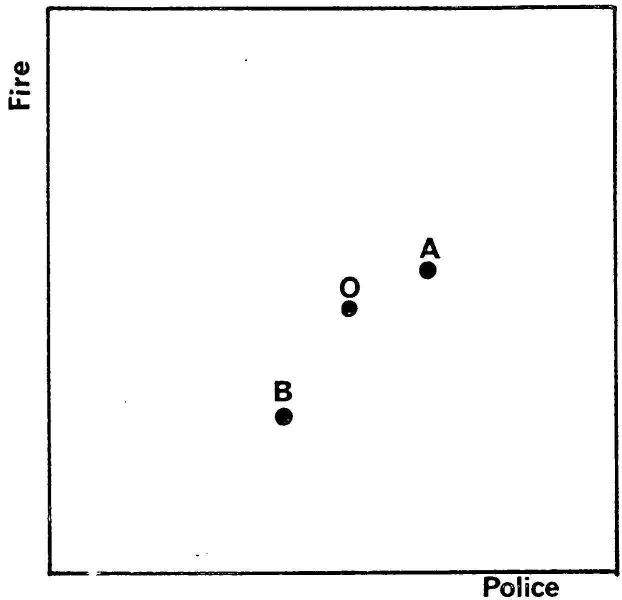

Figure 3

Joint Decision on Fire and Police Services

discussing do not predict any stable outcome. It is possible to compute an optimal strategy for a given party, granted the other two have taken a known stand; but we cannot predict the location of the three parties. By complicating the model a little we can easily accommodate three or more parties. I shall first use a more complicated model, to deal with a two-party rather than a three-party situation.

Two-party system

Figure 3 shows on one axis expenditures on police forces and on the other axis the expenditure on the fire brigade. The individual citizen-taxpayer who benefits from both the police and the fire services, but has to pay for them, has an optimal combination of police expenditures, fire expenditures, and the tax (in Figure 3 it is at 0). At this stage we assume that the individual, in choosing between

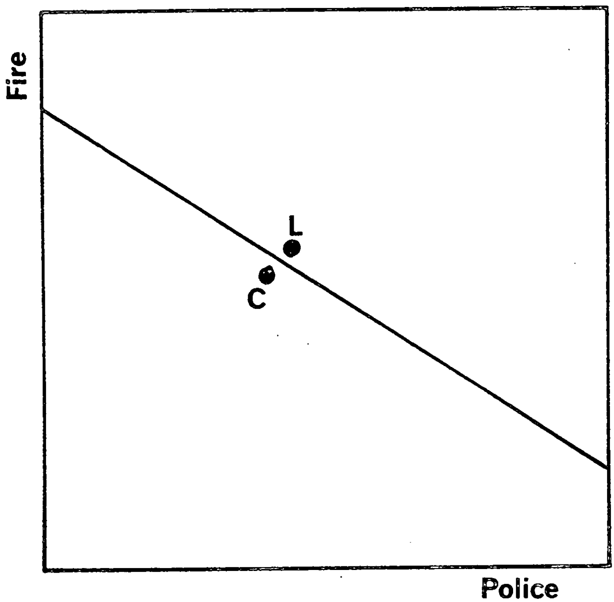

Figure 4

Fire and Police Services with Two Parties

two budgets which cover both police and fire services, will choose that closer to his optimum. For example, he would prefer A to B. In these circumstances, if we place all of the optima on a figure such as Figure 3, then, if we want to find whether A or B would attract a majority of the votes, we can do so very easily by dividing the space into those parts that are closer to A and those parts that are closer to B, and then count the number of optima in each.

If there are many voters, we would not insert the points, but use a method of showing their total distribution, such as contour lines. (I assume the voters are evenly distributed over the space, because it makes the reasoning easier. The same conclusions can be reached with a more realistic distribution of voter optima, but it requires advanced algebra.)

Figure 4 is an example. I have marked the two 'policies', L (say, Labour) and C (say, Conservative). The straight line slanting across the diagram is halfway between the two points and perpendicular to the line between them, and hence divides points closer to L from those closer to C. (If drawn correctly, it exactly bisects the issue space.)

This is a two-dimensional analogue* of the median preference theorem described above (p. 14) and can be rigorously proved, as indeed it can be proved for any number of dimensions. We would anticipate that the two parties would be found close together near the centre of the distribution of the voters, and that they would split the voters about 50-50 unless one of them had made a mistake and wandered off from the centre, with the result that the other, by moving in his direction, had succeeded in obtaining more than a majority.

Three-party system: polarising party wings?

The major advantage of using a two-dimensional diagram is that it permits us to discuss more than two parties. Suppose, now, that there are three parties and that we follow the voting system in the United States and Britain under which the party with the most votes wins the election, regardless of whether it has a majority over the other two parties.[1] At first glance, it might appear that the three parties would cluster at the middle in order to attract the most votes, just as two parties tend to be very close together. This is not so. In Figure 5 the location of three parties is shown by the little triangle of dots, and the voters who favour the one closest to their optima are divided among them. What happens if one of the parties moves a little away? Assume that the lower of the three parties moves to the position shown by the X. We can now determine the number of voters who are closer to X than either of the two parties who have not changed their location, and this is shown by the dotted line. The party which moved away from the middle lost votes in the centre of the distribution, but picked up votes around the edge (represented by the shaded areas), and the net result for this move was a gain.

[1] The situation in the United States and Britain is somewhat complicated because this rule applies only in individual constituencies. At our present level of abstraction, this raises no difficulty. The use of the continental-type of proportional representation, however, is rather more elegant conceptually and rather more readily analysed.

* Glossary.

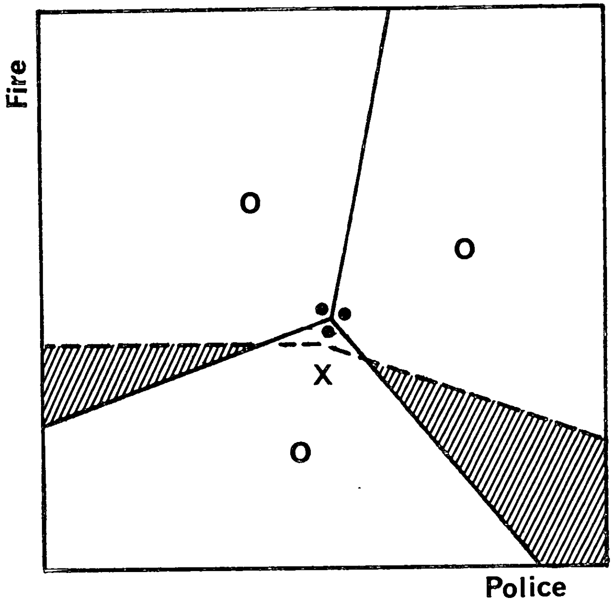

Figure 5

The Choice of Fire and Police Services with Three Parties

It is not true, of course, that as the parties move out they continue to gain. After a while they move far enough out so that the losses balance the gains from a movement farther out, and the three parties establish equilibrium in locations roughly like the three Os in Figure 5. Thus, one anticipates that the parties in a two-party system would be very close together but that there would be considerable difference between them in a three- (or more) party system. This is what we observe in the real world. It may be that the present situation in Britain, in which the Liberal party has been reviving and regional parties have developed, means that there will be more difference between the two main (and smaller) parties than in the past. Indeed the current internal developments of sharpening differences between wings or groups within both the Conservative and Labour parties may represent a movement in this direction.

Whatever can be said about the future policies of political parties in Britain, it can be said for certain about a three- (or more) party system that it requires a good deal more skill on the part of the party leaders, and mistakes are much easier to make. In a two-party system there is a simple operational rule for the politician: find out what the other party is doing and take a position very close to it in the popular direction. With a three-party system, nothing so simple exists. Difficult decisions must be made and frequent errors are to be expected.

The voter's interest: one main issue

So far I have been assuming that the voters are equally interested in all issues, i.e. as you move away from their optimum point in any direction, they are equally disappointed. In the real world, voters frequently are much more interested in one issue than another: housing, taxation, freedom, overseas aid, etc. In these circumstances, the job of the politician is somewhat more difficult than we have shown here. Anyone who has observed real politicians in action sees how they solve the problem. They try to give to minority groups with strong preferences in one item, say agriculture, favourable treatment in it, and then hope that the group will accept relatively unfavourable treatment in other issues where its feelings are less intense. Analysing this problem in models of the sort developed here is not difficult, but it requires more than two dimensions (which means we should have to proceed from geometry to multi-dimensional algebra).

The rules deduced for the situation in which all the voters are equally interested in all the issues continue to apply if we consider it from the standpoint of the politician himself. He should select that point in the issue space (Figures 4 and 5) which will attract the largest number of voters: if there are only two parties, we will find him selecting positions very close together; if more than two, the parties will be farther apart.

Power – or the public interest?

This analysis of the politician's tactics indicates simply that he is attempting to be re-elected to office, not that he is attempting to maximise the public interest. We think this situation is realistic, and, in particular, that politicians trying to be re-elected are more likely to be re-elected than those who are not. Goldwater, McGovern, Enoch Powell demonstrate the fate of politicians with strong policy ideals who try to persuade the voters of their truth. Although all three have had considerable national attention, none has risen to supreme power. Wilson, Nixon, Johnson and Heath are examples of politicians who reached the top, and we doubt that anyone will claim they are highly motivated by devotion to a consistent set of policies. It is true they normally talk in terms of policies, but the policies they favour changed depending on where political support was to be found.

There is no reason why we should be disturbed by this phenomenon. The market operates by providing a structure in which individuals who simply want to make money end up by producing motor-cars that people want. Similarly, democracy operates so that politicians who simply want to hold public office end up by doing things the people want. Perhaps the people are badly informed in their choice of policies, but all a democracy can really guarantee is popular control, and politicians whose motives and methods we have analysed do give the people control.

IV. Bureaucracy

Bureaucrats are like other men. This proposition sounds very simple and straightforward, but the consequences are a radical departure from orthodox economic theory.

If bureaucrats are ordinary men, they will make most of (not all) their decisions in terms of what benefits them, not society as a whole. Like other men, they may occasionally sacrifice their own well-being for the wider good, but we should expect this to be exceptional behaviour.

Most of the existing literature on the machinery of government assumes that, when an activity is delegated to a bureaucrat, he will either carry out the rules and regulations or will make decisions in the public interest regardless of whether it benefits him or not. We do not make this assumption about businessmen. We do not make it about consumers in the market. I see no reason why we should make it about bureaucrats.

Bureaucrats and businessmen

A business man, in an environment that is reasonably competitive and without severe externalities, will normally make a decision which is more or less in accord with the well-being of society, but not because he is consciously *aiming* at the public good. His general aim is simply to make as much money as he can,[1] and he makes the most by doing what is in the social interest. The bureaucrat will also do what is in the social interest if the constraints to which he is subject are such that his own personal interest is identical to the social interest.

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[1] In practice, and especially in the short run, this general long-run objective may be qualified by other purposes: a wish to avoid antagonising colleagues, staff, trade-union organisers, suppliers, customers; to gain power or prestige or influence with government; etc. Economists allow for non-monetary objectives. As Alfred Marshall put it, economists suppose only that men try to maximise their *net* (monetary less non-monetary) advantages.

The theory of bureaucracy should be based upon the assumption that bureaucrats are as self-seeking as businessmen, and it should concern itself with the design of constraints which will make the bureaucrats' self-interest identical with the interests of society. We should not expect the identity to be perfect – we do not have perfection in the market – but we should expect at least a high correlation. Unfortunately it is harder to arrange such a high correlation in a bureaucratic context than in the market (pp. 28-30). To return to the main theme of this *Paper,* since we have no perfect solution we must choose among imperfect instrumentalities. What, then, are the imperfections of the bureaucratic process?

Bureaucrats and elected representatives

In most modern countries, an immense number of decisions are taken by bureaucrats. They are supposedly in accord with the decisions of the elected representatives in democracies (or of the dictator in despotisms); but often the influence of these representatives is in practice modest. Indeed there seems now to be developing a mystique under which the bureaucrats are not even supposed to be under the control of elected officials. One of the criticisms of President Nixon during the Watergate affair was that he was trying to bring the bureaucrats under his control. The view that many decisions should be separated from political control by being put solely under the control of bureaucrats (sometimes in that oldest branch of the bureaucracy, the judiciary) is wide-spread.

Motives of bureaucrats

What does happen in a bureaucracy? What are the motivations of bureaucrats? Like everyone else, bureaucrats presumably try to improve their own utility. Their utility, again like everyone else's, is partly based upon their immediate ability to consume goods and partly on their appreciation of good things happening to other people. In other words, they are partly selfish and partly public-interested.

In most business activities, the approximation that the businessman is trying to maximise his money income turns out to work rather well, although seldom perfectly. In the bureaucracy, we would like a somewhat similar approximation. If we look over aims in which a bureaucrat might be interested, we can begin by listing those which are of primary concern to him: his salary, his conditions of work – office furniture, etc. (strictly apportioned according to rank in most bureaucracies), his power over other people, his public respect and reputation. In addition to these self-regarding values, let us assume he is also interested in the public good and consciously wants to accomplish something in his job. We can easily think of circumstances in which the two would be in clear conflict. Mr James Smith, for example, is due for promotion to department head, a job which will lead in due course to his becoming Sir James; but Mr Charles Brown is the best man for the job. It is, on the whole, doubtful whether Mr Smith will bring that truth firmly to the attention of his superiors.

On the other hand, we can easily find circumstances where Mr Smith would, for purely *selfish* reasons, be motivated to serve the interest of society. If we assume in this example that he is much abler than Mr Brown, his *selfish* motives would point in the correct direction.

(One of the advantages of the simple profit-maximising assumption in business is that it permits us to assume a single 'maximand'* and make calculations. If we consider the businessman as maximising his utility – Marshall's net advantages – we no longer have as easy a problem. His utility is, to him, a simple 'function' which he can maximise; but, to us as outsiders, what is observed is a number of different elements, such as his income, respect in his profession, the beauty of his secretary, other aspects of his office, etc. We would have to work out a complex function of all those variables and then attempt to maximise it; and this complex function would have to be identical to the one he uses in utility maximising. In general, economists have abandoned this problem, and assume a simple, single goal: the profit. The loss in accuracy is fortunately slight.)

What does the bureaucrat try to maximise?

Is there a similar maximand we can use for bureaucracies? The answer is, unfortunately, 'No', if we want to be completely general. Bureaucrats tend to maximise different collections of activity. But it is true that if we confine ourselves to the type of bureaucracy

* Glossary.

found in most Western countries, there is a 'not bad' approximation: *size*.

As a general rule, a bureaucrat will find that his possibilities for promotion increase, his power, influence, and public respect improve, and even the physical conditions of his office improve, if the bureaucracy in which he works expands. This proposition is fairly general. Almost any bureaucrat gains at least something if the *whole* bureaucracy expands. He gains more, however, if *his* Ministry expands, and more yet if the *sub*-division in which he is employed expands.

I have confined this proposition to *most* bureaucracies in *modern Western democracies*. It is not necessarily true of all these bureaucracies, or of bureaucracies in other political systems. The real issue here is whether the reward structure in the bureaucracy is such that people gain when their burden expands. This is not necessarily true everywhere. Further, there is one important limitation on profit-maximisation which also applies to size-maximisation for bureaucrats: in general, people do not like hard work!

A bureaucrat ordered to do research on, say, improving the bid process for North Sea oil is presumably not totally uninterested in discovering a better method of letting the bids; but he is apt to give more consideration to the opportunity this project gives him to expand the size of his office, and hence improve his probability of promotion, prestige, etc. However, it is by no means certain that he will work hard to achieve either of these goals. Indeed, in the pathological case, he will devote the bulk of this time to essentially leisure activities (some of which, like reading history or solving crosswords, may be located in his office), and time he devotes to work will be solely devoted to an effort to expand his office with no concern at all for its ostensible object. In the more normal non-pathological case, although he may not engage in what we would normally refer to as hard work, he will devote a good deal of attention both to improving the bid process and to using the project to expand his office.

Assume the bureaucrats are simply attempting to maximise the size of their bureaucracies and leave aside, for the time being, their desire to consume leisure (technically described as 'shirking' in the management literature). Economists have gone a long way with their simple, one-argument 'utility function' for business men (profit-maximisation); if we cannot get as far with our one-argument utility function for bureaucrats (size-maximisation), at least we should make some progress.

Improving the bureaucracy

One way of improving the size of a bureaucracy is to do a good enough job so that people want more of the activity it is producing. The famous Liverpool Bath would no doubt have continued to function indefinitely, and might even have had a number of additional employees and a promotion for its head, had they been able to make it attractive enough to capture a large number of customers. It does not seem likely that they would have succeeded, but undeniably there are many cases in which individual bureaucrats, whose simple motive is to expand the size of their bureaucracy, are motivated – at least to some extent – to improve efficiency and provide good service.

To examine the matter a little more formally, assume that a government activity, say police protection, is produced at constant cost, represented by the horizontal line on Figure 6. The demand for it (DD) should slant downward as in Figure 6, and can be thought of as a demand of the citizenry, or of the higher level of government, i.e. the legislature or, perhaps, of the cabinet.

The usual way of organising and supplying the police is to create a series of regional monopolies, all the police in, say, Liverpool being organised under one control. It has its own decision-making process and its own ends (although much writing on administration implicitly assumes otherwise).[1]

If it were somehow possible to buy police services competitively, individuals buying it and competing companies supplying it, the optimum amount would be obtained at point O, the cost would be the rectangle below and to the left of point O, and the consumer surplus* generated for the citizenry shown by the triangle DCO.

[1] Two classical sources are Leonard D. White, *Introduction to the Study of Public Administration*, The Macmillan Company, New York, 1948, and William E. Mosher, J. Donald Kingsley, and O. Glenn Stahl, *Public Personnel Administration*, 3rd Edn., Harper and Brothers, New York, 1950. For the same attitude in military administration, J. D. Hittle, *The Military Staff: Its History and Development*, Military Service Publishing Co., Harrisburg, Pa., 1949. This attitude may be found widely spread through the literature; for an example, Mike Royko, *Boss: Richard J. Daley of Chicago*, New American Library, New York, 1971.

* Glossary.

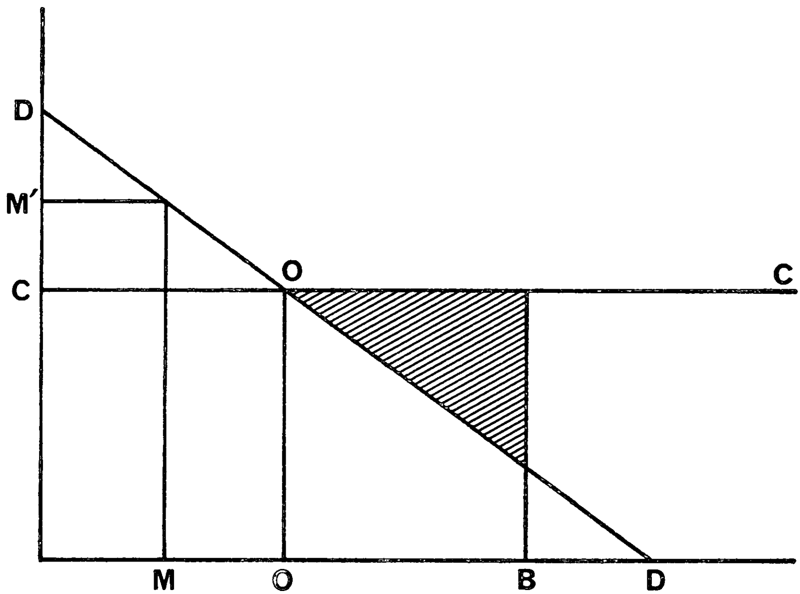

Figure 6

Supply and Demand for Police Services

If we assume the citizenry continue to buy police services independently (we are assuming this is technologically feasible), but they are supplied by a profit-maximising monopoly, it would provide M units of police service at a price of M′, and make a profit equivalent to the rectangle above the cost line and to the left of line M. There would still be some consumer surplus, but clearly the consumers would be in a much worse situation than with competitive suppliers.

Let us now more realistically assume that the individuals are not purchasing the police services as individuals but through a governmental agency which has a demand for police services derived from the demand of the individual citizens. The supplier is also a monopoly: there is only one police force in Liverpool; and let us assume that the police attempt to maximise the size of their bureaucracy. What is the likely outcome?

Single buyer v. single seller

First, we have a monopsony (single buyer) against monopoly (single seller), and this is always a difficult situation for economists to analyse. What would happen if one or the other of the two had everything his own way? If the legislature is in complete control of the situation and has a perfect idea of the cost structure facing the police, they could offer the rectangle left of and below O to the police in return for the police producing O amount of police protection, and we would have the same solution as in free competition.

If the police have everything on their side, which means they are able to conceal their own cost from the legislature, they can misrepresent the cost of providing various amounts of police services, and the legislature will not be able to discover their true 'production function'.* We then get a most extraordinary situation. The police will provide B police services and charge the amount of the rectangle under the cost line and to the left of B. This means that for the marginal police services they are charging more than they receive and there is a net social waste shown by the shaded triangle. They are able to get away with this, however, because the size of the shaded triangle is the same as DCO. As a perfectly discriminating monopolist* always will, they have squeezed out the entire consumer surplus, but have spent it on providing additional police services.

How do we reach this conclusion? The police department is not assumed to be profit-maximising (it is not possible for the policemen simply to pocket any profit they make), but they are benefited in various ways by the expansion in the size of the force. Since we assume that they are exploiting the demand curve to the maximum, they are also maximising their size by this socially wasteful expansion.

This situation is the ultimate result which could be expected if the bureaucracy worked hard at expanding its budget and was able to exploit the full monopoly gains in all-or-nothing bargaining from the legislature. The taxpayer would be indifferent between the existing police force and no police force at all, which, of course, also makes possible much lower taxes. It seems doubtful whether

* Glossary.

any existing bureaucracy has reached this position. Many bureaucracies, from the standpoint of the citizen-taxpayers as a whole, may be beyond this point; but that is because they are satisfying the demands of some persistent and voluble minority. In these circumstances, a true demand curve would be that of the minority and, once again, I doubt whether many real-world bureaucracies have succeeded in exploiting their monopoly positions to the full.

There are a number of reasons why bureaucracies would not be able to reach this goal with any degree of regularity. First, and obviously, the legislature or purchaser of the services from the bureaucracy characteristically has at least some information about the production function of the bureaucracy and is not subject to what we might call 'complete' exploitation. Secondly, since the members of the bureaucracy among other things want leisure, they are unlikely to put in the concentration and hard work required to exploit the legislature to the theoretical maximum.

Ironically, the desire for leisure – what we normally call laziness – has a net benefit for society. Suppose the individuals in the bureaucracy work hard enough to get only 80 per cent of what they could if they devoted full force to achieving it. The cost level line in the diagram would be adjusted upward to indicate that you have to hire more policemen to get a given amount of protection. This clearly would be a disadvantage for the taxpayer-citizen. On the other hand, the bureaucracy in negotiating with the legislature would not get all of the welfare triangle; it would leave 20 per cent of it to the citizen. The citizen would therefore derive some benefit from the service, although if the policemen were energetic and hard-working in both 'policing' and exploiting the legislature, the consumer surplus would be entirely consumed in producing 'efficiently' police services not worth their cost. The citizen-taxpayer is better off with lazy servants than with diligent ones here, but this results simply because the diligent ones will use their diligence to extract surplus value from him.

Odds with the bureaucracy

Does the bureaucracy in practice extort its entire theoretically possible gain from the legislature? This is the classic monopoly-against-monopsony problem, and economists normally say it is insoluble. But there are good reasons for believing the odds will be heavily on the side of the bureaucracy. It will have a good idea of the legislative demand for its services, which is essentially derived from the voters' demand. The bureaucracy has access to the newspapers, television, etc., and therefore has a good idea of the popular demand. In the circumstances, it is not able to keep its demand curve a secret.

These factors are exaggerated by two special characteristics of governmental demand. First, most government demands are organised by special interest pressure groups, like the farmers, who normally are intimately connected with the bureaucracy which will carry out the policy, the Ministry of Agriculture, which, in turn, is therefore very well informed about the political pressures that can be brought to bear upon Parliament and the government. Secondly, a good part of the demand for bureaucratic services comes not from the people who will *receive* them but from those who will be paid to *supply* them. The bureaucrat who works for the Minister of Agriculture, or the policeman who works for the chief constable, is also a voter. In voting, he (and his family) have two demands for their bureaucracy's service. First, they, like other citizens, gain whatever benefits it generates; but, secondly, they gain privately from the payments made to them.[1]

They are part of the demand for their own services, and a particularly important part. They combine very good information about their bureau with strong motivation. And, indeed, they seem to represent a larger percentage of the voting population than of the total population, because they are more likely to vote. Rough estimates in the United States indicate that about one out of five Americans derives his support from a government job in the family, but about one out of three voters do so.

If the bureaucracy has a good idea of the demand for the service, the government has difficulty determining the cost of providing it. In general, the only source of such information is the bureaucracy, which is apt not only to say that economies are impossible but also,

[1] This, of course, assumes that the payment to them is higher than their opportunity cost, not a very radical assumption in most modern governments. At the time this *Paper* was under preparation, the city of New York, as a result of a fiscal crisis, was talking of firing 10,000 policemen. The police officers' union prepared and circulated to tourists a pamphlet entitled 'Scare City', warning against the dangers of visiting New York City if the police force were reduced – an effort to manipulate the demand for their services.

if economies are imposed, to act so as to maximise their cost instead of attempting to do the best job it can in the new circumstances.

Bureaucrats resist 'cuts' by superior knowledge

Three examples readily come to mind. The first occurred when I was serving on the council of the American Political Science Association. We were in one of the budget crises which afflict learned societies from time to time. The APSA maintains in Washington, DC, a large office, engaged in not too well defined activities. It was suggested that one of the ways we could escape from our budget problem was to reduce expenses in this office. The permanent secretary of the society, who had been responsible for building up the office after he was appointed, immediately said that 'Yes, that could be done'; it would be possible for him to lay off two or three of the employees in the subscription service branch, i.e. those who took care of seeing to it that everyone got their *American Political Review, P.S.*, and other documents circulated to members. The result clearly would be that members were inconvenienced. He did not suggest that any of the 'policy officials' might be dispensed with, although it was never clear what the bulk of them were doing.

My second example involves the Federal Customs Service. Its budget was reduced. The civil servant in charge laid off every Customs Inspector in the United States but not one person in any other part of the Customs Service. This was too extreme, and he was transferred in a burst of unfavourable publicity; but he was not fired.

The third case, more recent, concerns newspaper reports that the Immigration Service is deliberately investing its resources in office staff rather than in Inspectors to make it necessary for Congress to increase its budget.

This kind of behaviour is common with bureaucracies; and, in general, congressmen have found it difficult to prevent. Professor William Niskanen, whose book *Bureaucracy and Representative Government*[1] rigorously develops the size-maximising principle,

[1] Aldine-Atherton, New York, 1971; the argument is summarised in *Bureaucracy: Servant or Master?*, Hobart Paperback No. 5, IEA, 1973.

spent most of his life before writing it as an economist in the Department of Defense, attempting to improve its efficiency. Immediately after writing the book, he moved to a higher-level agency, the Office of Management and Budget, the general control agency of the United States government, and found that there, too, it was impossible for him to outmanoeuvre the bureaucrats because they simply knew more about their departments than he did.

Solutions: more information? – reducing bureau monopoly?

What can be done? First, an attempt to develop expertise at the upper layer is required to which the whole development of cost-benefit analysis is directed. More information would help, but it is not obviously going to lead to much improvement. What is needed is some way of lowering the bargaining potential of the monopoly bureaus.

In the market place we do not try to discover the cost structure of companies from whom we buy products or service. All we do is compare the prices and services offered by organisations and choose the one that suits us best. The existence of a monopoly, of course, makes it hard for us to do this, and we tend to feel disadvantaged. Is there some way in which we could provide for Parliament or Congress the same ability to select the lowest price rather than putting upon it the burden of determining the operating efficiency of the bureaucracy? The answer, fortunately, is that such possibilities often exist, and as far as we can tell they improve efficiency.

First, although most government services are produced under monopoly conditions, some are produced with varying degrees of competition. It is very hard to get measures of efficiency, but something can be done. Examining the data,[1] we find that the least efficient bureaus are those which have perfect monopolies.

Second, where, although the individual bureau has a monopoly in one area, several bureaus operate in different areas, the legislature can at least compare cost curves. The police forces, which in both the United States and Britain are organised as a series of local monopolies (except for privately-supplied police services) rather than as a national service, are an example. There are, of course,

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[1] Thomas E. Borcherding (ed.), *Budgets and Bureaucrats: The Origins of Government Growth,* Duke University Press, Durham, NC, forthcoming 1976.

many others, such as refuse-collection, fire-fighting, education, sewerage, etc.

Third, still more efficient are government bureaus which provide a service that is also supplied by private companies. Waste removal in the United States, for example, is sometimes a government activity and sometimes carried out by private companies charging a contract fee. So far as we can tell, the government bureaus, although not as efficient as the private companies (as measured by price and service), are nevertheless markedly more efficient than government bureaus which do not face private competition.

Government bureaus, even in this final negative situation, are almost never as efficient as private companies in a competitive industry.[1]

The question of the efficiency of private industry in monopolistic situations, of course, is not at issue here, since no one (so far as I know) regards this as a particularly desirable organisation of the economy. The reason is simple (Figure 6). If one company protected by a high tariff has a monopoly in motor-car production in its home market, the demand curve is for motor-cars in total. If there are two companies, the motorist who is thinking whether or not to buy a car also has the alternative of buying it from the other company. Similarly with a bureaucracy: the more the competition, the more it is forced to produce close to the optimum output and productive efficiency one would anticipate in a competitive industry.

Introducing competition into the bureaucracy

(a) Competition within bureaus

Can we introduce competition into bureaucracy? First, we could simply stop enacting cartel legislation. Most 'efficiency' studies of government[2] have attempted to root out competition (called 'duplication'). In the United States' automobile market, not only is General Motors 'duplicated' by Ford, Chrysler and American

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[1] *Ibid.*

[2] This tradition has been maintained consistently. A very thorough example is the multi-volumed Hoover Report prepared by former President Herbert Hoover for former President Harry S. Truman immediately after the Second World War, and the almost equally voluminous Ash Report prepared for former President Richard M. Nixon by Roy Ash, formerly the president of a large corporation and, after completing the report, Chief of the Office of Management and Budget. Both reports may be obtained from the US Government Printing Office, Washington, DC.

Motors, but a lot of odd foreigners like British Leyland, Fiat, Volkswagen, and Toyota are also 'duplicating activity'. Wouldn't we be much more efficient if we abolished 'duplication'?

The absurdity of this proposition would not in any way be reduced if we substituted a government service for production of motor-cars. In the United States, highways are characteristically constructed by a large number of private companies. Their repair and maintenance, however, is normally done by monopolistic government enterprises. In some areas – Blacksburg, Virginia, where I live, is an example – a good deal of the maintenance is let out on bids to competing private companies. We pay lower repair prices than we would if a monopolistic agency was doing all the repairing. Furthermore, the competing companies ready and willing to replace bureaucracies in other cities and counties also make the road repair bureaucracies there careful about prices.

Thus one way of increasing the competitiveness of government services is simply to contract them out. Many services are contracted out in various places in the world. The entire line of public utilities – telephone, telegraph, radio and television transmission, water supply, sewage removal, electricity, and gas – are sometimes provided privately and sometimes publicly. Usually the private companies are given some kind of a government monopoly, which sharply reduces their efficiency; but sometimes one or more of the utilities are generated by competing private companies. It is not obvious that this arrangement is ideal, but it would certainly be worth careful investigation. The mere act of looking into this possibility would probably lead to very sharp improvements in efficiency in the corresponding government agencies.

There are also many other government activities which can be performed by private agencies on contract. Fire protection is, in general, a government activity, but for some obscure reason a private fire protection industry has developed in the state of Arizona. The private fire protection companies enter into contracts with the smaller cities to provide them with fire protection, and also offer their services to private individuals. Comparative studies[1]

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[1] A popular account of this phenomenon is William C. Wooldridge, *Uncle Sam, the Monopoly Man*, Arlington House, New Rochelle, NY, 1970. For a more scholarly account, Roger Ahlbrandt, 'Efficiency in the Provision of Fire Services', *Public Choice*, XVI, Fall 1973, pp. 1-16.

seem to indicate that the private companies provide fire protection for about *half* the cost of public fire departments serving similar communities. Further, the private companies – tiny though they are – have been the cutting edge of scientific progress in the fire protection industry. They have invented an entirely new technology which, granted the extraordinarily small funds they have for research, is a remarkable achievement. This technology is beginning to spread through the United States government fire departments, but only very slowly, since there are few fire commissioners who really want to cut their budgets in half.

(b) Competition between bureaus

A second way to impose competition on bureaucracies is to retain bureaucratic control but permit competition within it. The area served by a bureaucracy might simply be divided into smaller areas with separate budgets. It would help efficiency if Parliament made a habit of changing the geographic scope of the small bureaucracies handling, say, police protection. If, for example, the Commander in charge of division I seems to have done better one year than the Commander in charge of neighbouring division II, 15 per cent of I might be added to II, the Commander of I promoted, and the Commander of II reduced. In the following year, at the very least a good deal of thought on methods of improving efficiency by both might be expected. Perhaps the 15 per cent could be shifted back at the end of the next year.

Small-scale experiments desirable

So far we have gone from analysis to a set of reforms which may seem extremely radical. It is generally not desirable to adopt radical proposals instantly for a large and important organisation. Experimentation on a small scale would seem to be called for. The proponents in Britain of the voucher method of financing school education are a good example.[1] Although they are convinced it is the best method, they are not proposing that the education system be revolutionised, but that well-conceived experiments be under-

[1] I understand that Kent County Council is the pioneer in studying the feasibility of voucher experimentation.

taken to obtain more information and to find whether their proposals are as attractive in practice as they appear to be in theory. The reforms for bureaucracy (pp. 36-39) should be handled in a similar manner. They can be tried in a local area and, if they work, expanded. As may not have escaped the reader, I think they would work.

V. Logrolling

The word 'logrolling' is a fairly unusual one in the American version of English but seems unknown in the English version. Its meaning is very simple: I agree to vote for something you want in return for your agreeing to vote for something I want. It is also a very common phenomenon in a democratic political system; indeed, it usually dominates the process of selecting policy although it is concealed from public view.

Logrolling is frequently thought to be wicked and, indeed, is against the law in many democracies. The laws against logrolling (probably passed in part through logrolling) have substantially no effect on the functioning of democracy in countries which have adopted them. At best, they make it necessary to carry on the logrolling in a somewhat indirect and hidden way, which probably reduces its efficiency to some extent. Nevertheless, most people when first told about logrolling feel it is undesirable, yet they normally do not respond in this way if it is explained with a little tact.

A British example

I once attended a meeting where there were several British MPs. One, of outstanding personal ability and with an academic background, seemed a good man to ask about the institutions in Britain. When I put the matter to him, he denied flatly that there was any logrolling; and, after my efforts to explain my hypothesis on how it was done, he denied this was so. Shortly thereafter, he made a public speech in which he explained how he was working to get his party to support a certain policy. The description was 100 per cent logrolling; as he put it, 'I attend committee meetings and vote on things I don't care about at all in order to get the people who really are interested in those subjects to attend my meeting. And then I hold up their hands when it comes to a vote'. The latter, of course, was an exaggeration.

This MP had simply been trained in one theoretical description of how politics works and then learned how politics works in practice. Since there was no reason for him to put these two ideas together, he had not done so. When I, a visiting specialist in the economics of politics, asked questions about British procedure, he answered quite truthfully in accordance with the theory he had *learned.* When he was explaining what he himself *did,* he again truthfully explained, but was not aware of the divergence. It was not until after his public meeting, when I raised the issue, that he realised there was any contradiction between the two positions.

Logrolling in Labour and Conservative politics

My friend the MP was typical. Most people who deny the existence of logrolling in what we may call the theoretical context either engage in it or expect that their representatives will engage in it in practice. The 'social contract' in Britain, for example, if one accepts the Labour Party and trade union description of it, involves an exchange of redistributional policies for union support. Union support is supposed to take the form of not making too large wage demands, but it is nevertheless a policy swap. But I have seen no public claims that it is immoral. It is sometimes said it will not work, or that it is fraudulent in the sense that neither party really intends that it shall work. This is quite different from saying that the social contract would be immoral even if it were completely successful.

Recent Conservative Party politics raises something like the same issue. Mrs Thatcher promptly introduced into her Shadow Cabinet a number of people who had opposed her when running for the leadership. She also quickly moderated her political position so that she would acquire more votes, and hence have a better chance of applying her policy. The various factions of the Conservative Party who will now back Mrs Thatcher are clearly going to find themselves, if the Conservatives should form a government, required to vote in Parliament for some policies they do not like in return for receiving others they do like but to which other groups in the party object.

All of this is perfectly normal, not only for British politics but for democratic politics in general. Indeed it is also normal for non-democratic politics, although we know less about them, and hence it is not so clear there. In all democracies I know of there is both public criticism of logrolling as immoral, as well as the widespread use of it in making government decisions.

Explicit or implicit logrolling: a US 'model'

Logrolling is usually classified as either explicit or implicit. Explicit logrolling is more common in the United States than in Britain, but it is a little easier to explain if we begin with an explicit 'model' and then proceed to an implicit 'model'. So, although this *Paper* is to be published in Britain, let me begin with the American Congress rather than the British Parliament, and simplify matters by assuming there is only one legislative house.

If we examine the day-to-day process of government in a democracy (or, indeed, a non-democratic government), we observe that most of the activities have differential impact: they affect some people more than others. A proposal to change the tax law will have more effect on some citizens than on others. Almost all expenditure decisions affect some citizens more than others. Even simple changes in the criminal law are usually of differential effect.

These observations are not necessarily obvious to the casual observer. 'The public works budget', 'the military appropriation', 'the health programme' appear to have wide scope if we think of the whole programme at once. In practice, detailed decisions must be made, such as where to run a dual carriage highway (which makes a lot of difference to many people because of the effect on the value of their homes), which weapons system the armed forces will purchase, and where new hospitals will be built.

These policies can be dealt with by establishing general rules. But the details become important to special groups and, in any event, democracies do not seem to be able to stick to general rules. Referring them to non-political officials may be a solution, provided they are convinced the elected officials will not take their performance into account when deciding on such matters as departmental appropriations.

Differential impact of political decisions

We cannot avoid such differential impact of decisions (although we can avoid *thinking* about it). But it is not obviously undesirable. Suppose all government acts were decided by direct majority vote, with all individuals voting on them. Some of the smaller Swiss cantons come very close to this system. Suppose there is a project which would benefit one city, say Durham, very much and which would have a relatively modest cost to the national taxpayers. If Durham were unique, i.e. if there were no other city which could receive a major benefit at modest cost to the national taxpayers, we might feel that the nation should not make this gift to them. But in the real world, such situations are common. There are many opportunities for investment in public facilities in local areas for which the cost is less than the benefit. If they are to be paid for from the national exchequer, however, and if they are voted on individually, they would most assuredly fail.

Suppose the benefit to Durham would be £100 million and the tax cost is £1 per head for all UK voters. If we put it up to a direct vote, the voters in Durham, facing a very favourable 'trade-off' of a £1 expenditure against a large return, would presumably vote for it. The taxpayers in the rest of the UK, facing a cost of £1 which does not benefit them at all, would surely vote against it. And the project would be lost. We deal with these problems by setting up a kind of bargain, explicit or implicit, in which Durham gets its project and a lot of other cities get theirs.

In the United States Congress, this bargain is fairly open and above board. The bulk of the negotiations take place in committees, cloakrooms, and congressional offices, but there is no secret about what is going on. In the traditional 'pork-barrel'* area of public works, suppose we are 20 years in the past and President Eisenhower has decided that dual carriage highways be built in various parts of the United States to improve highway transportation. They are to be paid for (as indeed they were) by a tax on the gasoline consumed by *all* drivers – not only those who drive on the dual carriage highways.

In these circumstances, a given community is best off if it has one of the interstate roads running through it, but it must also pay for interstate roads built in other parts of the country. One would anticipate that the congressional delegation from, say, Pennsylvania would, on the whole, favour interstate highways in Pennsylvania and, to some extent, those outside; but, generally speaking, they

* Glossary.

would not be interested in taxing the inhabitants of Pennsylvania to build 'interstates' 3,000 miles away in California. In the event, Eisenhower met this problem by implicit logrolling, rather than explicit. But it is a nice example to explain *explicit* logrolling also; so let us discuss it as *if* it had been decided by explicit logrolling, and then switch to explain implicit logrolling.[1]

Explicit (open) logrolling

If the congressional delegation from Pennsylvania is interested in getting its interstate highway through, it goes to the delegation from Illinois and offers to vote for 'interstates' in Illinois if they will vote for 'interstates' in Pennsylvania. It makes the same kind of trade (exchange, swap) with Texas, New York, etc., until it gets a majority of the Congressmen willing to vote for 'interstates' in Pennsylvania. We now have the 'interstates' being built in Pennsylvania and a number of other states have the Pennsylvania delegation's promise to vote for their highways. The delegation from, say, Illinois already have the Pennsylvania vote and require others. They seek out, say, California, Oregon, Florida, etc., until they also compile a majority.

There is no reason in this type of (explicit) logrolling why the coalition that votes for the Illinois roads should be the same as for Pennsylvania. Indeed, we would anticipate that almost all the states would be able to build up this kind of coalition simply because a state that seemed to be on the verge of being left out could offer exceptionally good terms. It could, for example, take somewhat fewer miles of road in its own state, and hence impose a lower tax on citizens in other states, or it could 'sweeten' the bargain by promising to vote for something else of special interest to another state in addition to their roads. The end-product should be an 'interstate' network spreading all over the United States in a way which fairly uniformly reflected the number of voters in each state.

Although this was not the way the interstate was laid out in the United States, the nationalestrassen in Switzerland are being built

[1] A study of the way in which the highway system has adjusted itself to the political reality is Ann F. Friedlander, *The Interstate Highway System: A Study in Public Investment*, North Holland Publishing Co., Amsterdam, 1965.

almost entirely in this way: by explicit logrolling. This is why nationalestrassen are highly disconnected. It is necessary to give at least a few miles of divided highway to mountain cantons, such as Chur, if their support is to be obtained for the nationalestrassen running through heavy-density areas such as the plateau between Lake Geneva and Lake Konstanz.

Implicit ('secret') logrolling

In the United States the interstate system was built by a special form of implicit logrolling. A professor at Harvard, who had been deeply involved in negotiating the interstate bill when on leave as a government official, read a book[1] which discusses logrolling on return to Harvard. He informed a number of his colleagues that he had concluded that explicit logrolling was inherently immoral, but that implicit logrolling of the sort used to build the 'interstates' was quite different and moral. He was willing to concede that the end-result was about the same, but thought the means were more important.

Many people, when they finally are willing to concede the existence of logrolling, seem to take the view that explicit logrolling is somehow morally much inferior to implicit logrolling. I have never been able to understand this view, but perhaps the reader will find it congenial. At any rate, this is how implicit logrolling works.

Instead of voting on each segment of the system, it would be possible to vote on the system as a whole. In essence, a network of highways, together with their supporting taxes, was proposed in Congress consisting of many segments. However, the individual voter and taxpayer, instead of having to make up an explicit bargain with other people in which he voted for highways in other states in return for getting them in his own state, could look at the whole collection and decide whether he favoured it or not.

This procedure does not eliminate the logrolling but simply makes it less public. It makes the logrolling implicit. The details of the nationwide highway system and the tax to be used to pay for it must be so designed as to produce a majority of votes. Since

[1] J. M. Buchanan and Gordon Tullock, *The Calculus of Consent*, University of Michigan Press, Ann Arbor, 1962 (2nd Edn. 1965).

it is still true that the citizens of Pennsylvania gain from highways there and, to a lesset extent, from highways in the vicinity, but lose on highways on the other side of the continent, the person who makes up this highway bill, which is a package of individual proposals for construction of highways, must analyse the preferences and the relative intensity of preferences of the citizens of the various states.

The Harvard professor had spent several years in this arduous activity, and finally he and his colleagues had produced a highway construction bill which could get through. He had gone through a negotiation process very similar to that which would have occurred had we used the explicit logrolling process; but the implicit logrolling was quieter, and more centralised.

It is possibly, though not certainly, more efficient to do it this way because it centralises negotiations in a small group of specialised people.

In any event, the outcome is apt to be similar, except that with implicit logrolling it is possible for a group, which could be almost 50 per cent of the population, to be left out of the bargain. In a way, implicit logrolling moves us back to the median voter situation in a special form (pp. 14–22).

Logrolling and the median voter

What is the relationship between logrolling and the median voter analysis? The answer is simple if put in geometric terms.[1] In plain English, the difference is that there are some issues upon which people feel much more strongly than on others. It is these issues which lead to logrolling. Individuals are not motivated to make trades (exchanges) between two issues if they all feel equally strongly about both because there is no profit to be made by a bargain. It is only when the two parties feel more intensely about certain issues, and the issues are different, that a bargain can be made. If A is very much interested in having Liverpool harbour dredged at the government's expense and would, on the whole, prefer not to be taxed to pay his share of the dredging of Southampton harbour, he may nevertheless be able to make a bargain with B, a

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[1] The indifference curves around the optima in the median voter theorem were circles. In logrolling they are ovals.

resident of Southampton with the opposite preferences, under which both harbours are dredged. This kind of bargain cannot be presented by simple geometry because it requires more than two dimensions and algebraic tools.

Implicit logrolling in Britain: party manifestoes and coalitions

The most obvious single case of implicit logrolling is the position taken by a party going into a general election. The manifestoes of the major parties in Britain (or the platforms in the United States) show that they involve implicit logrolling. Measures clearly unpopular with many voters are included because they are highly popular with a minority, which can be expected to accept other planks in the platform unpopular with it. Opinion polls seem to indicate that trade unions in Britain are disfavoured by a majority. Nevertheless, the Labour Party supports them and the Conservative Party has refrained from urging very radical acts against them. The reason is obvious. The strong partisans of the trade unions are likely to vote for the Labour Party because of its support, even if some of the other parts of its policy are contrary to their desires. And other members of the Labour coalition, although they are more critical of unions, are willing to accept a general programme which includes support for the unions because other parts of the manifesto promise policies they favour.

In a sense, almost every bill that passes through a legislative body represents this kind of implicit logrolling. The people who have drawn up the bill have consulted many other members of the legislature and have made changes to please minorities who can be brought to support the bill if given something in return. No doubt the supporters of the bill have also engaged in explicit logrolling in that they have promised to vote in favour of other issues in return for that support.

Referenda

In a way, the clearest example of implicit logrolling will be found in some referenda on local improvements in the United States. Sometimes these referenda involve a large project. The voters in my county in Virginia recently voted against a proposal for a new courthouse. Often the referendum proposal is a collection of unrelated projects except that if grouped together it is thought a majority will favour them, whereas it would oppose any individual one. Since this kind of referendum is frequently used in school financing, textbooks used to teach administrators of public education in US schools of education frequently contain instructions on how to make up this kind of bargain.[1]

We should not be unhappy about these very common democratic practices, although normal discussion of them is condemnatory. There is no reason why minorities should not be served by democracies. The problem is acute only if the advantage to the minority is less than the gain to the majority.

Logrolling in Britain: compromises in the Cabinet

The description I am about to give is to a considerable extent hypothetical rather than based on direct personal knowledge. In the first place, I am a foreigner. Secondly, British politics is carried on in a highly secretive manner. It is not very obvious exactly who determines the policies that the parties adopt. It is clear that the party in power will, because of the party discipline that normally dominates the British parliament, be able to get its will enacted. The question is: how does it determine what it 'wills'? There are two possible and different procedures, but fortunately they lead to much the same conclusion.

For the first, let us assume that the basic decisions are made by the government itself, or in practice the cabinet, which is composed of a group of people who (*a*) are leaders of the party, i.e. represent various points of view within it, and (*b*) are the heads of branches of the executive government. In both of these capacities, they have ideas on what policy should be carried through. It is only possible, however, for, say, Mrs Shirley Williams to get something she favours if she can win the support of the bulk of the cabinet. As a consequence, an implicit, extremely tactful process of negotiation goes on in the cabinet, and a series of policies are adopted, mainly in the form of bills to be presented for passage by Parliament. If Mr Callaghan wishes to remain Prime Minister and the members of the cabinet wish to remain members of the cabinet,

[1] This is, in my opinion, not to be criticised morally. But another aspect of these text-books should be severely criticised: they also explain how to time the election so that people who favour the collection of expenditures are more likely to vote than people who do not.

this combination of bills must be such that at least a majority of the party will back it and the members of the cabinet are very good representatives of the politically active part of the party. Thus, a compromise set of bills worked out in the cabinet is apt to be one which the party as a whole will regard as acceptable. One Minister accepts a Bill which benefits another, but which he would prefer not to pass, in return for the contrary favour to him.

The second procedure by which the same outcome is likely comes through the party apparatus. In the Conservative Party this is a set of committees of MPs who must maintain the support both of their local party apparatus and of the voters. These committees on various subjects do not in the true sense control the cabinet or the shadow cabinet (if the Party is in opposition), but their expression of opinion has strong influence: the members of the cabinet or shadow cabinet hold their positions in essence because they have the support of at least one-half and preferably much more of their MPs.

The procedure is as described earlier (p. 41). Individual members of the committees have personal preferences. They make bargains with one another (no doubt in a most tactful way) under which they swap support. In consequence, the 'position' (policy) papers adopted by these committees have general voting support, even though the proposition, if taken by itself, would often attract only a small minority of the party.

All of this is strongly reminiscent of the American system, except that it is concealed rather better. The American system is also rather concealed, and frequently congressmen will deny what they are doing. Indeed, a number of political scientists have succeeded in writing books about Congress without noticing the phenomenon of logrolling. This probably reflects their essentially moralistic approach more than their inability to see what is going on before their eyes.

Benefits of logrolling

But if logrolling can clearly create benefits, it can also cause harm. Consider a simple society of nine voters who confront a large collection of measures, each of which will be paid for by a tax of £1 on each of the nine, and each of which will confer benefits exclusively upon one of them. Policy A will cost a total of £9 in the form of a £1 tax on each voter, but will confer upon voter A a benefit worth £15. Clearly we would, on the whole, prefer that projects like this go through, although for any individual bill of this sort we might object to its effects on the distribution of income. Normally we would anticipate that the voters, if confronted only with this bill, would vote 8 to 1 against it; but with logrolling, assuming there were similar projects for other voters, it would get through while conferring similar benefits on other voters. The end-product would clearly be an improvement in the state of society.

But consider another project which similarly imposes a cost of £1 on each of the nine citizens and confers upon voter A a benefit of only £2. Here there is a clear cost of £7 to society as a whole. We would not want this bill to pass. And it would not get through under logrolling because the voter could not afford to vote for four other bills each of which would cost him £1 apiece, in return for four other people voting for his bill. This would lead to a loss for him of a net of £3, and hence he would not attempt to logroll the measure.

Defects of logrolling

So far logrolling has worked efficiently; unfortunately, there is an intermediate class of issues where it does not. Suppose the return to voter A of a bill (which, once again, costs £1 apiece to every one of the nine taxpayers) is £7. He would be willing to trade a favourable vote on four other issues, costing him a total of £4, for four votes on his issue which would net him £2 on the entire deal. Society as a whole, however, would have been paying £9 for something worth only £7. We clearly do not want the government to undertake this kind of action. Is there something we can do to ensure that only those bills with benefit to society get through by logrolling? Unfortunately, the answer is 'No', but we can do better than the present system. I regret to say that the necessary change, however, is one the average person will consider extremely radical.

Before indicating my radical prescription, let us begin with a theoretical analysis. Assume we have very many voters. Let us also consider various possible voting rules other than majority rule. On Figure 7 I have drawn the horizontal line as the possible

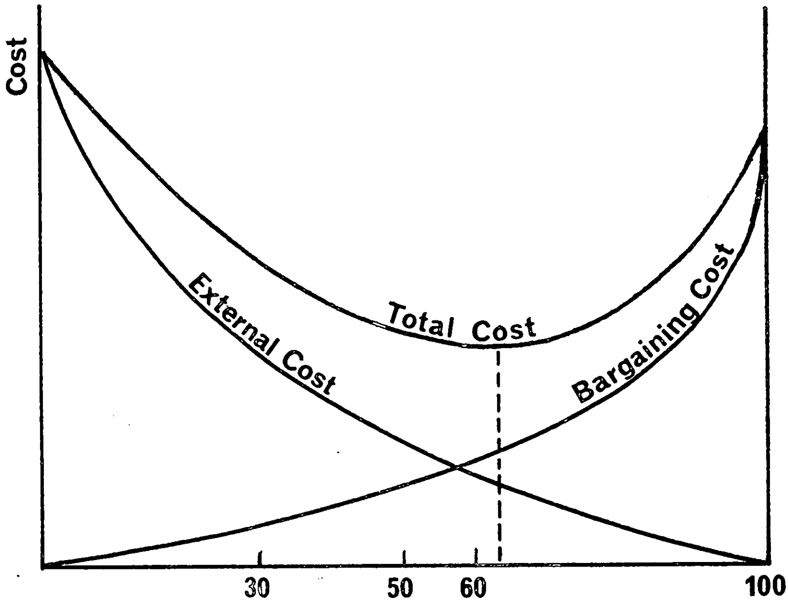

Figure 7

The Costs of Democratic Decision

voting rules that might be adopted: from requiring only one voter at the left to requiring unanimity or all of the voters at the right.

When I first present this diagram to students, I almost always encounter the view that a rule of less than majority is impossible. In the modern world, in which it is very common for candidates or even governments to be elected by less than the majority, as now in Britain, I find it hard to understand this position. Yet it is true that, although less than majority institutions are commonly used for electing *candidates* to office, they are rarely used for selecting *policies* or passing *laws.*

President Nixon was elected by 43 per cent of the popular vote in 1968. The last two governments of Britain have had much less than a majority of votes; indeed, none since 1945 has had a majority.[1]

[1] The American figures are not quite as extreme, but also not drastically different. Since 1870, only two-thirds of all American presidents have had a majority of the popular vote.

In both countries, the voters vote for someone other than the ultimate government – MPs in Britain, electors in the United States. Yet these representatives are frequently elected by less than a majority. MPs have been elected by as little as 36 per cent of the vote in their constituency, and electors in the United States can have even smaller percentages.[1]

We can use for policies the same procedure we use for selecting candidates. It is true that we will have to abandon Speaker's casting vote, invented to make a simple majority voting process work. It fits in nicely with majority rule and does not fit in with any other voting method. If we are going to consider other voting methods, we must assume that we use the same procedure used in selecting MPs in England, which is that anyone who wishes to be an MP puts his name up (and a deposit) and the one with the most votes is elected. For issues, anyone could present any proposal for voting and, in a series of periodic rounds of votes, the one with the most votes would be passed.[2]

Another complication is necessary for my diagram, though not for real-world voting. Many real-life voting systems have a minimum number of votes necessary for election. The Peruvian military government originated in a complicated dispute about whether a person elected to the Peruvian presidency did or did not have the 40 per cent of the popular vote the constitution required. The horizontal line on Figure 7, then, represents *all* such rules: from that which says the minimum number of votes necessary for an issue to pass is one to the rule which requires 100 per cent. The points indicate the percentage of votes necessary for passage: 50 is, of course, approximately the point normally used in majority rule.

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[1] The all-time record in this respect involves the 1960 election in the state of Alabama. Six of the 11 electors from that state were reported by Richard Scammon (Richard M. Scammon, *America at the Polls: A Handbook of American Presidential Election Statistics, 1920–1964*, University of Pittsburgh Press, Pittsburgh, Pa., 1965) as having been elected by 1·4 per cent of the voters. This is a mistake. The electoral situation in Alabama was extremely complicated and Scammon chose to resolve the difficulty in a way that had this result, and led to Kennedy having more popular votes in the national election than Nixon. If he had selected almost any other way of resolving the difficulty, it would have given Nixon more popular votes than Kennedy.

[2] As is true with the election of MPs, some arrangement to prevent instantaneous reversal by the next vote would have to be included.

On the extreme left end, the one-person rule would mean that any proposition favoured by any individual in society would be enacted. The £1 tax on all the nine members of our little society required to confer a benefit of £2 on one of them would be accepted under this rule. The 'external cost' line indicates the cost of this procedure. The individual facing any voting system except unanimity will find that some bills are passed which, on balance, injure him. This clearly inflicts a cost on him and is an 'externality' in the same way as the injury inflicted upon him by a smoking chimney.

As the number of votes required to pass a bill rises, the individual must select only those policies for which the cost to him of acquiring support is less than the benefit. The 30 per cent rule, for example, would eliminate our £2 benefit at the cost of the £9 bill, but not the £7 benefit bill. As the number of votes required to pass is increased, the likelihood of the individual being caught by a bill which injures him goes down; hence the external cost curve falls. At unanimity, it is at zero, although there are other reasons for not using unanimity.

If we deal with the kind of bill that does not concentrate its benefit on a few people but spreads it over a number, increasing the number of votes required for passage does not affect it until the number exceeds the number with net benefits. Then they must begin logrolling and, if the total benefit to society exceeds the total cost, they should be able to pass it even if the rule is unanimity. In other words, the external cost line is a genuine statement of the cost inflicted upon people by the passage of bills which, on balance, injure them under the different types of voting rules.

What about bills not passed? Surely they are as important as the ones that are. If we assume that bargaining and logrolling are absolutely costless and instantaneous, no bills for which the total gain exceeds the total loss would ever fail. This assumption, of course, has nothing to do with the real world; it is frequently very useful for analytical purposes and we have used it for the last few paragraphs. Let us now abandon it.

Radical solution: a proposal for 'reinforced majorities'

Another line is marked 'bargaining cost' on Figure 7. If we are following the 'any-person' rule, there is no bargaining cost. I simply specify what I want done and it is done. When we require more voters, however, I have to make bargains with them. In the first place, there are resources committed to the bargaining process. More important, however, as the number of voters increases and in particular as it approaches unanimity, we will find that desirable legislation will fail because the bargaining process is too tedious and expensive. Hence, the bargaining cost line is partially the investment of time and energy in bargaining; but, much more importantly, imposing this bargaining cost means that desirable bills fail.

The total cost inflicted upon society by various rules is calculated by simply summing these two cost lines, as in the total cost line. The low point on this line is the optimal voting rule for the society. Only by coincidence would it be the simple majority. For important matters, I think in general it would be well above the majority and, indeed, most formal constitutions require more than a majority for at least some matters. The British constitution in this respect is something of an exception, but even in Britain so-called constitutional changes are not attempted unless there is thought to be more than a simple majority of support for them, regardless of the technical possibility. Even if republicans like Mr William Hamilton, MP, some day found themselves with 51 per cent of the MPs, it is extremely doubtful whether they would regard themselves as authorised to dethrone the Queen and confiscate her property.

Majority voting is thus generally not optimal. For important matters we would require something more. This conclusion is in general accord with constitutional processes throughout the world. But my opinion is that 'reinforced majorities', say two-thirds majority, should be used much more widely than they now are. Indeed, I have on occasion recommended that the President of the United States always veto all bills in order to compel a two-thirds vote for everything in both houses of Congress. Startling though this proposal is, the analysis which leads to it is in the process of becoming the orthodox doctrine in public finance texts in the United States and, indeed, is now spreading to Britain.[1]

[[1] Professor Tullock is, with Professor J. M. Buchanan, the originator of this analysis.—ED.].

VI. Envoi

When I began this *Paper,* it seemed to me that instead of surveying the contributions of the new economic approach to politics, it would be better to present a few simple, but fundamental, examples. The reader can get an idea of the type of reasoning applied and some of the conclusions drawn from it. Even at this early stage, the conclusions are by no means uncontroversial; but I think they withstand scientific criticism. I hope I have aroused the reader's curiosity and that he or she will continue studies in this development of economics to government and politics. New knowledge is more valuable if used than if it moulders in a library. (To assist in further investigations, I append suggestions for further reading, p. 57.)

Today, in both Britain and the United States, there is a widespread feeling that the old solutions have failed. This is a time when a careful rethinking of our position is necessary. I hope the new economic approach to politics will provide the foundations for such a reconsideration.

A Note on Further Reading

For the British reader interested in learning more about the new economic approach to politics, a brief introduction to the literature may be helpful. On the theory that the reader of introductory *Papers* does not want to jump immediately into the most difficult and advanced work, I begin with more general books rather than highly specialised texts and journal articles.

On the subject of Chapter II, there are two general books, *The Logic of Collective Action* (Harvard University Press, 1965) by Professor Mancur Olson, and my book, *Private Wants, Public Means* (Basic Books, New York, 1970). Olson's was the pioneering work; my book, an undergraduate text, may be better as an introduction, even though it contains little original thought. On Chapter III, Professor Duncan Black's *The Theory of Committees and Elections* (Cambridge University Press, 1958) is the pioneering work. Professor Anthony Downs's *Economic Theory of Democracy* (Harper & Row, New York, 1957) and Professor James M. Buchanan's *Demand and Supply of Public Goods* (Rand McNally, 1968) are also essential.

A discussion of the voting paradox and an introduction to a large collection of other problems raised by voting is in *An Introduction to Positive Political Theory* (Prentice Hall, Revised edn., 1973) by Professors William H. Riker and Peter C. Ordeshook. This is a difficult book, but I know of nothing simpler. *The Calculus of Consent* (Michigan University Press, Ann Arbor, 1962) by James M. Buchanan and me discusses the design of optimal voting rules and other problems of producing a constitution. Although easier than Riker & Ordeshook, it is more difficult than most of the other books I suggest below. Finally, on Chapter IV, my book, *The Politics of Bureaucracy* (Public Affairs Press, Washington DC, 1965), and William A. Niskanen's *Bureaucracy and Representative Government* (Aldine-Atherton, New York, 1971), will set the reader well on his way.

The reader may then wish to turn to the more specialised literature. Dennis C. Mueller's comprehensive review article and bibliography of public choice is in the *Journal of Economic Literature*. It contains a comprehensive bibliography and surveys a good deal of work I thought too advanced for this *Paper*. As another fairly readily available source, the journal *Public Choice* carries about a third of the articles published in this new subject. Looking through issues of the journal in a library or, better still (from the standpoint of the editor), subscribing to it will provide an up-to-date view of the most recent work in the economic approach to politics (above, p.3, text and footnote 1).

A British Commentary

Party Politics and Bureaucracy in Economic Policy

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I. Introduction

Formalising the obvious often illuminates the obscure. When the economist formalises his understanding of commonplace, possibly uninteresting, phenomena, which do not even evoke curiosity in most people, he hopes to extend his understanding to more interesting and less obvious ones. The 'permanent income hypothesis'[1] revolutionised the theory of consumption and dampened the faith in the use of short-term tax changes to manipulate economic activity. Yet this hypothesis is no more than a brilliant formalisation of the ostensibly uninteresting observation that people do not consume less on Saturdays and Sundays even though their income on those days is less than during the rest of the week.

Before such formalisation succeeds in extending our knowledge, it is subjected to two types of criticism. The first, by those with little faith, is that the economist merely wants to 'jargonise' what is obvious to anyone with common sense. Second, especially in the social sciences, people feel that the formalisation of human action verges on immorality. This is especially so if the formalisation is by economists so well known for their lack of faith in the goodness lurking in the hearts of men.

The economic approach to politics is especially subject to the second kind of reaction. Probably very few readers of this *Paper* would be shocked if they read in the newspaper that the Labour Government had imposed selective import controls in exchange, say, for acceptance by its Left Wing of its policies to cut government expenditure. Few are shocked if political commentators write that the recent devolution plans of the Government arose from rash promises made by the governing Party in the last election to

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[1] This theory states that consumption decisions over a particular period do not depend on the income over that period but on permanent income, i.e., the income the individual believes he can maintain over his lifetime.

acquire votes.[1] Many commentators on the political scene believed that the recent Chrysler decision to re-allocate work to the Linwood plant in Scotland had some connection with the political threat arising from Scottish nationalism. As independent events these are accepted with a shrug and possibly with the comment 'Well, that's politics'. Yet many readers might be deeply shocked when an attempt is made to formalise such phenomena in order to find a common theme that can be used to predict such action in the future. That is exactly what the economic approach to politics is attempting.

[1] Examining the changing views about the economic powers to be given to the proposed Scottish Assembly a commentator has the following to say: 'Though the men have changed, the motives have not. The good government of Scotland has never been one of them. The sole aim is to save Labour seats in Scotland. The chief stimulus has been the rising vote for the Scottish National Party.' (John Whale, 'Bad motives, bad deal for Scotland', *Sunday Times*, 2 May, 1976.)

II. Public Finance and the Economic Approach to Politics

Traditionally public finance has been concerned with two general kinds of issues. The first was the application of economic analysis to predict the effects of various government policies, both micro and macro. This 'positive' analysis of how people act in response to changes in circumstances can be carried out whatever one believes is the *motive* for such policies. The second, and more specific public finance issue, has been analysed by a 'normative' approach to government. Here the major problem has been to delineate the areas in which it is thought the government *should* participate in the economy. 'Public goods', 'externalities' and any other kinds of 'market failure' became the domain for public finance.[1] Thus in the textbooks the government's role is to provide defence, police, justice and lighthouses. For the economic ills revealed by these categories we have over many years accumulated a cupboard-full of prescriptions: one shelf of optimal taxes and subsidies, another of optimal tariffs. In recent years we have also acquired the 'social discount rate' and 'optimal intergeneration transfers'.[2]

Sad to say, the inventory of unsold prescriptions has grown nearly at the same rate as the manufacture of new ones. In this market supply does not create its own demand. When economists move away from the textbooks and see the activities of government in practice, they need immense contortion to fit them into the traditional boxes. Garbage collection, education, housing, health

[1] 'Public goods' are those for which the consumption by one individual does not reduce the quantity available for consumption by others, e.g. defence. 'Externalities' occur when an individual's economic act imposes costs or benefits on others, e.g. factory smoke dirtying somebody's laundry. 'Market failure' is the general term for all situations where the market, *even if functioning perfectly*, would not lead to an optimal solution of an economic problem.

[2] The 'social discount rate' is the discount rate the government *should* use when evaluating its investment projects. 'Intergeneration transfers' occur whenever the consumption of the current generation is reduced for the sake of increasing the consumption of future generations.

services, all are provided by government; and so are electricity, gas and even airline services. How much have those activities to do with the economist's concepts of externalities or public goods? The connection between the activities undertaken by government and the textbook categories become more and more tenuous. Optimal subsidies would not create butter mountains or wine lakes. Infant industries should not be treated as infantile long after acquiring the middle-aged spread.

The government now controls roughly 40 per cent of GNP directly, and employs about 27 per cent of the labour force. Even for purely economic predictions this development can no longer be left out of the stage. It is after all very embarrassing for the economist always to have to reply: 'That depends on political decisions' whenever he is asked to predict economic events. Unlike traditional public finance, the economic approach to politics is concerned with what political decisions *will* be taken rather than with what political decisions *should* be taken. To avoid misunderstanding I must emphasise that the new approach is not a substitute for the old for two reasons. First, even if we attempt to predict the behaviour of political decision-makers we still need to know the expected consequences of their actions, for we must assume that the decision-makers take the consequences into account. Secondly, even the normative part of traditional public finance may still be important because often, or possibly only sometimes, the political decision-makers will want to maximise the welfare of a group even though they may only be interested to do so to buy its votes. The creation of butter mountains does not represent only a mis-allocation of resources: it might also have political costs which the political decision-maker might want to avoid.[1]

The dilemma

The dichotomy between the economic and political objectives is beautifully exemplified in two articles appearing on the same day in the *Observer* (8 February, 1976). On page 14 there is one headed 'Railroading railways' by Professor Alan Day. In it he discusses a

[1] A recent report from the EEC predicting massive food surpluses in many products describes how the European Commission has warned member countries against agreeing high support prices because if they do '. . . the Nine will be faced by politically embarrassing surpluses much worse than in previous years'. (*Observer*, 22 February, 1976.)

study by Professor Peter Hall (a geographer) and Mr Edward Smith (a civil engineer) of Reading University on the use of railways.[1] According to Professor Day:

> '. . . this study makes a powerful *prima facie* case for the view that it would be cheaper, environmentally beneficial and helpful to passengers if a substantial part of our present rail network were turned into road expressways'.

Reading this the student of economics will sit back with at least a slight glow of warmth. A cost-benefit analysis once again shows the relevance of his theories and techniques for socially important problems. This glow is quickly dimmed if he also reads page 3. Here an article headed 'Labour seats "at risk" if rail fares rise' starts with the statement 'At least 20 Labour seats will be in danger if the Government goes ahead with increased commuter rail fares' and describes how evidence for this 'potential Labour electoral nightmare' will be presented to Party leaders by rail union leaders. Further on the article makes the following comment:

> 'When Mr Crosland, the Environmental Secretary, announced the Government's recent proposal to peg investment in railways . . . he hinted that the consequent inevitable fare rises would hurt mainly rich Tory commuters.'

What is the economist to make of this candour? For the efficient allocation of resources, rail fares should depend on the social marginal cost of providing rail services. The amount of investment in railways should be decided on the basis of the kind of cost-benefit analysis described in Professor Day's article. Surely neither the marginal cost of rail services nor the benefits from converting rail networks into road expressways depends on the *political* allegiance of the travellers. How are the economic and the political cost-benefit analyses to be reconciled? Because they are both *normative,* neither traditional public finance nor traditional political science offers an answer. The *positive* approach discussed by Professor Tullock in this *Hobart Paperback* offers at least a glimmer of hope.

Costs, benefits, and votes

For their predictions economists use the expected response of households and firms to changing economic circumstances. To

[1] *Better Use of Railways*, University of Reading Geographical Papers No. 43, 1976.

analyse the effects of a subsidy, for example, the economist will make some assumption about the goals of households and firms and the market structure within which they operate. He will then examine how the subsidy changes the possibilities open to them and predict their response, and possibly carry out a cost-benefit analysis to evaluate the full effect of the subsidy on the allocation of resources. He may deduce from his positive analysis that the subsidy will result in a flow of resources into the subsidised sector and, given certain conditions,[1] that the result will be an inefficient allocation of resources.

The *dramatis personae* on the economist's stage are households and firms. But the hero of the piece (or its villain) is missing. With the current size of the government's economic activity its exclusion from the show is surely courting a disastrous performance. If firms make great losses they do not necessarily move out of an industry, as the Conservatives showed with Rolls-Royce, and Labour with Chrysler.

Political parties use economic policies to acquire votes. *Their response to changing economic circumstances, and their actions in changing those circumstances, can be analysed in the same way as those of other economic agents.*[2]

Agricultural subsidies are and have been very large and there have been a few studies of the politics of this phenomenon.[3] Traditionally the Conservative party supported the agricultural interest. However, in politics as in economics abnormal profits induce the entry of new firms. In the early 1950s the Liberal party abandoned its economically efficient free trade and anti-subsidy principles, because they were considered politically inefficient: they would lose votes.[4] In the middle and late 1950s the Labour Party joined in the bidding for the agricultural vote. One study of this period concludes, unduly circumspectly:

'It would be unduly cynical to assert that Labour simply tailored its policies to win farmers' votes. It would be truer to say that

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[1] These conditions refer to the existing state of efficiency in the sectors from which the resources are withdrawn.

[2] Anthony Downs, *The Economic Theory of Democracy*, Harper & Row, 1965.

[3] J. Roland Pennock, 'The Political Power of British Agriculture', *Political Studies*, October 1959; Peter Self and H. Storing, *The State and the Farmer*, Allen & Unwin. 1962, Chapter 10.

[4] Pennock, p. 292.

having found itself unexpectedly popular in agricultural circles, Labour concluded that farmers could be persuaded to change their traditional allegiances. For this to happen . . . Labour planning itself had perhaps to be adjusted a little to meet farmers' special tastes . . . The old socialist panacea of land nationalisation had also to be shelved, for nobody supposed that farmers liked it.'[1]

Such economic behaviour of governments, pursuing political goals, is relevant for economic predictions. Moreover, if a cost-benefit analysis concludes that, to achieve the economically efficient allocation of resources, the party in power will have to undertake a vote-losing action, it should predict that such a policy will not be undertaken. If the project is undertaken, the prediction should be that it will be modified so as to avoid the loss of votes. It follows, of course, that in its modified form it may no longer result in the efficient allocation of resources.

Inflation and the trade unions

The economic approach to politics may be very useful and to some extent has been implicitly used in the analysis of trade unions as a 'cause' of inflation. Over the last few years there has been a great debate about the causes of inflation and the roles played by trade unions and the monetary authorities. The monetarists have argued that a necessary and sufficient condition for inflation is an increase in the quantity of money relative to output. They are agreed that trade unions are not the cause of inflation, or rather that trade union economic activity is not a cause of inflation, at least not directly. If the monetarist's explanation of inflation is correct, which I believe it is, he still has a problem to explain why the government in power keeps increasing the quantity of money.

There are two possible lines of explanation. The first is that the government or the monetary authority is ignorant about the effect on the price level of expanding the money supply. An alternative explanation that might be suggested by the economic approach to political decision-making is that politically inflation is an efficient method of transferring resources from the private sector to the government sector: efficient, of course, only from the

[1] Self and Storing, p. 200.

point of view of the political party that is increasing the money supply.[1] Taxation with its obvious costs and unpopularity, and the creation of debt with its costs in the form of higher interest rates, might be electorally more expensive than the creation of money. Moreover, the creation of money might even have political 'spillovers'. Many people have argued that the expansionary policy carried out by the Conservative government was to avoid the politically costly unemployment which would otherwise have been caused by the demand of unions for increases in real wages. This combination of direct power by trade unions (to raise their real wages) with their political power (to fight the resulting unemployment) may be a route by which a more fundamental explanation of inflation may be given. Thus, even though the *proximate* explanation for the inflation is the high rate of growth of the money supply, the more *fundamental* explanation might lie within the economic theory of political decision-making.[2] Of course, inflation also has political consequences. Even politically it is not a 'free good',[3] and therefore a theory along these lines would have to explain why political authorities are willing to 'trade off' the potential future costs of inflation for the current benefits from financing expenditures in an inflationary manner. This is not so difficult.

As Professor Anthony Downs has pointed out,[4] in an uncertain world with large information costs the discount rate of a political party is very high. Their main interest is the coming election which will determine whether they will maintain or lose power. Given the long lags between an increase in the money supply and the effects on the inflation rate, it would not be difficult to construct a political cycle of inflation.[5] Such lags between the cause and effect

[1] Milton Friedman, *Monetary Correction*, Occasional Paper 41, IEA, 1974, and *Unemployment versus Inflation?*, Occasional Paper 44, IEA, 1975; Jack Wiseman, 'A Model of Inflation and the Government Deficit', in *The Dilemmas of Government Expenditure*, IEA Readings No. 15, IEA, 1976.

[2] It is partly because of the temptation to use money for political ends that there have been suggestions to take the control of the money supply out of the hands of political parties, e.g. F. A. Hayek, *Choice in Currency*, Occasional Paper 48, IEA, February 1976. More recently Peter Jay has suggested the creation of a Currency Commission which would follow a fixed rule for money creation. (*The Times*, 15 April 1976.)

[3] Even in politics the economic principle that there is no such thing as a free lunch applies. The only question is who pays for it.

[4] Anthony Downs, *op. cit.*, Chapter 10.

[5] For some verification for the existence of a political cycle, Peter Donaldson, *Economics of the Real World*, a Pelican Book published in conjunction with a BBC-TV series, 1973, Chapter 5.

make it much easier to reap a short-term gain with only a small risk of having to pay the long-term political costs. At any moment of time the inflation is blamed on events which are not under the control of the political party in power, but ideally on the political party previously in power. At the same time the provision of the benefits financed by the money creation can be acclaimed as a major achievement of the government at very small cost in the short term. It may be true that one cannot fool all of the people all the time, but to get elected one only has to fool half of the people some of the time.

Incomes policies

Along these lines one may also consider why incomes policies are so popular with the parties in power. When out of power, both the Labour party and the Conservative party were against incomes policies. When in power, they both resorted to them. Most of the available evidence is that incomes policies do not have significant effects on the inflation rate. Why then are they so popular?

To maintain votes political parties must be *seen* to be taking action to solve problems. To achieve this object their acts must be seen as having a direct connection with the problem. However, in economics as often elsewhere, causes and effects are not always linked by a glittering thread obvious for all to see. And many 'obvious' connections are really non-existent; monetary and incomes policies respectively exemplify these two cases. Even the monetarist must agree (though sadly) that 'We shall keep the rate of growth of the money supply at three per cent per annum' is not the most inspiring of political slogans. To master inflation governments must, of course, do what is economically necessary. A reduction in the rate of increase in money supply with some unemployment are the necessary remedies. The addition of incomes policies may be the political icing one has to pay for the economic cake. Insofar as incomes policies distort relative wages and prices, the damage is concealed and its effects are delayed.

III. The Economic Theory of Bureaucracy

Bureaucratic empires

'The Job Makers: Whitehall's Newest Empire' was a *Sunday Times* 'Insight' report 'on the bizarre results of the Government's £30m. unemployment campaign'.[1] The title gave some confirmation to the economic theory of bureaucracy; the contents are even more encouraging (for the theory, though not for the taxpayer!). It described the work of the Job-Creation Programme (JCP) organised by the Manpower Services Commission (MSC). It briefly described the birth of the MSC as a '. . . novel type of public agency' (bureau), its struggle for survival, its failure in competing with the private sector in previous ventures, and its successes in acquiring funds for the job-creation programme. It described how from the moment of its birth the MSC plunged into

> '. . . what one Department official called "the most dramatic instance of empire building since Clive's arrival in India". Prestigious offices were taken over in Piccadilly and Hyde Park Corner . . . As unemployment rose, the Commission's staff rose to meet it. The Department of Employment's former group of functions is now administered by nearly 50,000 civil servants against some 35,000 in January last year, and the bulk of this increase is attributable to the burgeoning of the MSC and its subordinate agencies'.[2]

Job creation, like charity, plainly starts at home.

For the economic theory of bureaucracy, nothing in this episode should be surprising, except possibly how well it fits the theory. Economists working with a theory based on the idea that bureaucrats want to maximise the size of their bureau, its budget, and the non-pecuniary returns to the bureaucrats, are not particularly

[1] 7 December, 1975, p. 17.
[2] *Sunday Times,* ibid.

surprised when these things happen in practice. The JCP also exemplifies the difficulties in measuring and sometimes even defining the output produced by a government bureau – let alone evaluating its performance against its costs.

If by output is meant the achievement of the stated objectives of the scheme, the creation of jobs in regions of 'pressing needs . . . designed to provide some vocational training', the project does not seem to have been very successful. According to the 'Insight' article

> '. . . The burden of the complaint [about the scheme] is that in view of the almost total absence of training, those youngsters involved . . . are likely to be worse off at the end of it than they were at the start'.

But is that really the correct measure of the output for which the JCP receives funds from its sponsors? After all, there is something strange about a situation in which one government bureau is telling local authorities to cut their expenditures while another wants to give them money to create jobs. Possibly the reported comment of Dr Gavin Kennedy from Strathclyde University that Job Creation is an 'exercise in window dressing' is a better guide to the real output of the project. From the point of view of the sponsor, its success must then be measured by how well it succeeds in this political aim. The report ends with 'Job Creation has already announced that it will require a further £100 million to continue its work beyond next year'. Obviously from the point of view of its government sponsor it has delivered the sponsored goods. In February 1976 Mr Healey announced in his special 'employment-creating' package an extra subsidy for the JCP of £30 million.[1]

The reticent bureaucrats: the information obstacle

'The Concorde Conspiracy' as described in the *Sunday Times*[2] is a fine example of the information obstacle to controlling bureaucracies. The political party acquires its information about costs

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[1] In addition to the initial sum of £30 million (September 1975) and a further allocation of £10 million (December 1975).

[2] 8 and 15 February, 1976.

and benefits of projects from the bureaucrats themselves. For a rational decision about a project like Concorde at least three pieces of information must be available: technical feasibility, costs of providing the finished product, and the expected benefit. The student of economics is taught that with such data he can begin to perform a cost-benefit analysis. It is understood, of course, that in any project of this kind there are uncertainties of all sorts. Predicting the future is not an easy task for economists or for bureaucrats. The political party making decisions, even in terms of the economic approach to politics, also makes a cost-benefit analysis. No political party gets many votes from squandering money. After all, even government works under a budget constraint, and spending £x million on one project means that there will be less to spend on other projects, unless taxes are raised, bonds are issued, and/or the money supply is increased. Thus even in terms of the goal of maximising its votes, a political party will have to evaluate the costs and returns of any project, although it may well take account of electoral costs and benefits which the strictly economic approach may ignore.

The bureaucracy which will carry out the project also makes a cost-benefit analysis. But what variables enter into it? Assume the bureaucrats want to maximise the size of the bureau, their prestige, etc. Their constraints are the amount of funds they can get from their sponsor, the government. This will depend on the government's cost-benefit analysis made on the basis of the information available to it. Many of the variables entering the several cost-benefit analyses may be the same, but what is being *maximised* is not necessarily the same. We therefore do not expect to have the same solution from the three sources: economists, government, and bureaucracy. The bureaucrats have however the biggest advantage since they control the information required for all the cost-benefit analyses.

'...Concorde began as a dream among the boffins of Farnborough . . . The project gathered momentum and adherents as . . . enthusiasm spread to key civil servants'. 'Dissent within Farnborough itself . . . was suppressed . . . The 1959 report of the technical studies . . . was presented with such enthusiasm . . . that the difficulties were minimised.' A lobby was formed which '. . . faked the first, ludicrously low, cost estimates to get them past the politicians [and] excluded the Treasury from the scrutiny of the early research and development costs'.[1]

In 1962 the Mills Committee appointed to assess the project went away from its meeting 'believing that all the technical problems of building . . . were already solved'.[2] When realistic estimates for the project were required by the Treasury, it faced the typical kind of information problem in such situations:

> 'The Treasury, of course, had no aviation expertise of its own. It could only cross-examine the experts from the Ministry. The guts of the costings were done largely by the enthusiasts at Farnborough and their ex-colleagues now promoting the project in the Ministry.'[3]

Step by step, the project was pushed through until recently it attained its well-deserved *technical* glory. But few believe that the rumoured opening line of the 1972 Rothschild (internal) report will have to be changed: 'Concorde is a commercial disaster . . .'[4]

If the politicians in power had had the available information at the time, it is doubtful whether Concorde would have 'got off the ground'. But they did not, because, to quote Niskanen,

> '. . . a bureaucrat has a stronger relative incentive [than the politician] . . . to obtain the information relevant to his position (and to obscure information relevant to the sponsor) . . . the relative incentives and available information, under most conditions, give the bureau the overwhelmingly dominant monopoly power.'[5]

Bureaucrats and managers

The analysis of bureaucracy by Niskanen on which Professor Tullock's analysis is based mainly applies to bureaux defined as 'non-profit organisations that receive a periodic appropriation or grant'.[6] This is not the everyday usage of the term 'bureaucracy',

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[1] *Sunday Times*, 15 February, 1976, p. 10.
[2] *Sunday Times*, 15 February, 1976.
[3] *Ibid.*
[4] *Ibid.*, p. 12.
[5] William A. Niskanen, *Bureaucracy and Representative Government*, Aldine-Atherton, 1971, pp. 29-30.
[6] Niskanen, *Bureaucracy: Servant or Master?*, Hobart Paperback No. 5, IEA, 1973, p. 8.

which is often applied to any large organisation. As the whole tenor of the economic approach to political decision-making is how to compare different institutional arrangements to allocate resources, it is useful to distinguish between large private firms and political bureaucracies. The former are run by managers, the latter by bureaucrats. Will they behave differently?

The analysis of bureaucracy is closely related to the analysis of large corporations. The latter raise problems of the relationship between shareholders as owners and ultimate recipients of residual profits, and the managers as decision-makers. Similarly, government bureaucracies raise the problem of the relationship between taxpayers as the ultimate recipients of the 'services' provided, the political party in power as the intermediary, and the bureaucrats as the decision-makers. In both situations it is assumed that managers and bureaucrats want to maximise their own utility functions[1] which may contain variables like the size of the bureau (or the size of the firm), the size of offices, a comfortable life, and other monetary and non-monetary advantages. If there are any differences between the two, it must be in the opportunities facing the bureaucrat and the manager.

In a world of perfect information and no transactions costs,[2] the manager would have to maximise the profit or utility of shareholders, otherwise he would be fired. The bureaucrat would have to do the same for the voter, otherwise the political party he serves would be fired. In a world in which information is costly to acquire, both the manager and the bureaucrat can divert some of the 'profits' to achieve their own goals rather than those of their respective sponsors. These returns can come by 'exploiting' either the consumer of the products or the ultimate recipients of residual profits. The distinction between the two, from which all others follow, is that the government bureaucracies have a higher degree of monopoly power over the goods and services they provide than do managers in industry.

Consider a firm that is badly run by its managers. To the consumers of its product the efficiency of the firm is not of much

[1] The utility function is a representation of peoples' tastes – how they evaluate different goods and services.

[2] Information about all the activities of managers, and the transactions costs of changing managers.

importance *as long as there are good substitutes for the product.* However badly the firm is run, the managers' powers to acquire resources so as to maximise their own utility do not extend over the consumer. The only way in which they can acquire the resources to increase their own utility is to divert some or all of the profits from shareholders to themselves. Since they cannot directly appropriate profits for their own use, this may be done in the form of exceptionally high salaries for beautiful secretaries, exceptionally high rents for big offices, exceptionally high expenses for champagne lunches, etc. But although shareholders do not have information about these 'costs', they do have information about the profits left to them in the form of dividends and retained earnings. These yields can be compared with those from other shares in the same industry or outside and the shareholder can exercise the one power he always has if he is not satisfied with his managers – he can sell his shares. The existence of other companies (and potentital competitors) means that there are prospective takeover bidders if the price of the shares falls low enough. Such bidders do have an incentive to acquire information on why profits are low and, if they discover it is because of the diversion of profits into managerial utility-increasing activities, they will replace the managers by taking over the company.

Consider a similar situation in a government bureaucracy. The consumers of the service do not have many alternatives in the product market with which to make the comparisons made by consumers of market products. This means not only that the consumer (taxpayer) cannot buy the product elsewhere, but that he has no information on whether the high price charged is due to 'inefficiency' (from his point of view) or to real factors such as relative scarcities. Is the price of first-class post so high because the post office is inefficient or because real costs are high? Even if this information were available, what can customers do? They can protest, form pressure groups (like consumer associations), write to their MPs and send angry letters to the newspapers. But protests are not costless and the information must be available. However, the only source of the relevant information is the very group or organisation they want to affect. There are no takeover bidders either, and the taxpayer cannot as easily 'sell his shares', although emigration is, of course, always a possibility.

The economic approach to bureaucracy

Complaints about bureaucratic inefficiency are not new, nor are they confined to those whose approach to bureaucracy is 'economic'. However, most other approaches concentrate on bureaucrats, rather than on the institutions of bureaucracy. If there is a deep belief, not uncommon in Britain, that when ordinary people are turned into bureaucrats they acquire saintly virtues, or that the selection procedure is such that only saintly people are elected to the bureaucratic calling, the solution to any instance of failure is perverse. It is usually to create another bureau to oversee those who have lapsed into sin. Bureaux are piled on bureaux and the bureaucracy grows on. From the resulting mountain it is soon impossible to unearth the molehill that started it all.

The solutions suggested by the economic approach to bureaucracy are quite different. It does not accept that bureaucrats are especially virtuous (nor, let me emphasise, especially unvirtuous); the solution looked for by this approach is therefore how to set up constraints which will induce the bureaucrat to act in the social interest. The economist would like to introduce an 'invisible hand' to pat the bureaucrat on the back when he acts in the correct manner; and possibly an invisible foot for a different part of the anatomy if he does not. The deep-rooted belief in the exceptional virtue of the bureaucrat is the biggest deterrent to any such solutions. Few people are shocked, and most would approve, if a private company has an incentive scheme for its young managers based on their performance ('incentive schemes' sounds much better than 'efficiency tests'). Many MPs will make long speeches about the necessity of passing laws to force private companies to reveal all their accounts, the managers' salaries, shareholdings, performance, etc., all in the cause of protecting the shareholders. But these laws are seldom applicable to government bureaucracies. Why is it so difficult, for example, to get information about the performance in 'O' or 'A' levels from the bureaux controlling local schools? Those government bureaucracies considered to be part of the Crown are also exempted from many of the laws which apply to, and constrain private institutions, such as, for example, those regulating planning permission.[1]

[1] For a discussion of the laws applying to government departments, J. A. G. Griffith and H. Street, *Administrative Law*, Pitman, 1952 (4th Edn., 1973.)

Where there is, or may be, competition from private companies in the product market, the government bureaucracies are also protected. There are laws prohibiting private mail deliveries, or the private import of cheap coal. When rail costs rise there are demands for higher taxes on other means of transport. A recent case is a good example. Laker Airlines applied for permission to operate the Laker Skytrain to New York. This was to be a 'walk-on' service very economically provided by what seems from all accounts to be a very efficient private company. Recently Mr Peter Shore (the then Secretary of Trade) rejected the proposal on the ground that it would have bad effects on British Airways which would lose customers. Similarly, any attempts by private bus companies to compete with British Rail for its commuter traffic are strenuously opposed by both British Rail and the National Bus Company. These prohibitions are, of course, never justified in terms of protecting a possibly inefficient government-subsidised concern. Their function, or so it would seem, is to protect the consumer from that terrible calamity of getting a better product more cheaply.

More disclosure: why not as much as companies?

Many of the problems of bureaucracy arise from the lack of information about the achievements of the bureaux. Why should not the bureaux be subjected to *at least* the same rules for revealing information to their 'shareholders' as private companies? I do not even mean information about how decisions are reached, about the debates and horse-trading going on behind closed doors (although that would also be welcome); I mean simply information about the achievements and failures, and the explanations for them. When an estimate of £1 million turns into £10 million, it is not enough to shrug and say 'We all suffer from inflation'. True. But even with a 100 per cent rate of inflation the other £8 million evoke a justified curiosity.

Similarly it would be very useful to have information about the quality of the products of bureaux (a bureaucratic *Which?* would be most helpful). For example, all schools should be required to reveal information relevant to their customers if asked: the number of 'O' and 'A' levels, the truancy rates, the qualifications of teachers, etc. Of course this would cause some problems, long waiting lists for some schools, disgruntled parents in others. But the underlying problem does not arise from the information but from the differences in the quality of output, and it is not beyond the ingenuity of men to solve queuing problems. The use of education vouchers is one suggestion that has been explored in some detail.[1] For those who are opposed to the introduction of filthy lucre into such a noble enterprise as education, there are alternatives. For example, a lottery to allocate the queues. This is very egalitarian; random numbers have no prejudices.

In the many activities where there is scope for competition by private companies, it should not be discouraged. Why should not government corporations be subjected to the same laws about competition as private companies? Why are 'good' government monopolies sacrosanct, while there is an open season on the 'bad' private monopolies? Both are equally bad from the point of view of excluding alternatives.

The costs of solutions

To avoid misunderstanding, one proposition should be emphasised. The approach described by Professor Tullock and taken here is one in which institutional arrangements are not taken for granted but examined to judge their efficiency in solving problems. Suggested solutions must be subjected to the same analysis. Incentive solutions may not be costless. To take Professor Tullock's example (p. 39): it may be true that promoting the efficient police officer from one division to a higher rank in another will stimulate his efficiency. Exactly the same analysis which leads to that conclusion also predicts that if efficiency is measured by, say, the number of arrests, he will have an incentive to arrest more 'freely'. It may be necessary to set up other institutions which may not be costless. After analysis it may turn out that the incentive system suggested to increase efficiency results in even more inefficiencies. In that case, of course, it should not be introduced.

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[1] Alan T. Peacock and Jack Wiseman, *Education for Democrats*, Hobart Paper 25, IEA, 1964; *Education: A Framework for Choice*, IEA Readings No. 1, 1967 (2nd Edn., 1970); E. G. West, *Economics, Education and the Politician*, Hobart Paper 42, IEA, 1968; *Choice in Welfare 1970*, IEA, 1971; Alan Maynard, *Experiment with Choice in Education*, Hobart Paper 64, IEA, 1975; Kurt Klappholz, 'Equality of Opportunity, Fairness and Efficiency', especially Section II, sub-sections E and F, in Maurice Peston and Bernard Corry (eds.), *Essays in Honour of Lord Robbins*, Weidenfeld and Nicolson, London, 1972.

Summary

Problems are solved by people, not by institutions. How well they are solved depends on the people *and* on the institutional restrictions imposed on their behaviour. 'The government', like 'the market', cannot solve any problems. Both are institutional arrangements within which individuals operate. They both provide a different structure of incentives for some acts and of disincentives for others. Both are imperfect. Two hundred years of systematic economic analysis has provided us with a reasonable understanding of the types of incentives and sanctions provided by the market. It has given us some understanding of the problems posed by the imperfections of the market and sometimes even suggestions for possible solutions. The economic approach to politics is an attempt to acquire a similar understanding of government.

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Questions for Discussion

1. One of the arguments against electoral reform has been that, in a more representative system, coalition governments would become the rule and voters would not have a clear choice of policies. Do inter-party coalitions pose more difficult problems of choice to voters than intra-party coalitions? Would policies carried out by a coalition government be different from those under the present system?

2. From the point of view of the information available to a voter, which is preferable:
   (*a*) a multi-party system in which a coalition will always be necessary to form a government; or
   (*b*) a two-party system in which coalitions are made within the parties?

   Would your answer be different if in a multi-party system every party announced in advance, as part of its platform, the party or parties with which it would be willing to join in a coalition?

3. Anthony Downs (*Economic Theory of Democracy*, p. 297: cf. Further Reading, p. 80) says: 'New parties arise when either (*a*) a change in suffrage laws sharply alters the distribution of citizens along the political scale, (*b*) there is a sudden change in the electorate's social outlook because of some upheaval such as war, revolution, inflation or depression . . .' Can you apply this analysis to the rise of the Labour and the Scottish Nationalist parties?

4. What would you predict about the attitudes of the Conservative, Labour and Liberal parties to Scottish Nationalism assuming that their objectives are to maximise their political power? Specify the assumptions you make about the reaction of Scottish voters to 'nationalistic' policies. How would you

expect the rise of a fourth party, the Scottish Nationalists, to affect the attitudes of the other three parties?

5. In the United States many of the higher (and lower) ranks of the 'civil service' are political appointees. When there is a change in the political party in power there is a massive change in the government bureaucracy. In Britain Ministers change but the civil service remains unchanged. Compare these two arrangements, making explicit your assumptions about the goals pursued by the various groups.

6. One of the arguments against private health services has been that they would draw the 'better' resources (doctors, equipment, etc.) away from the National Health Service. One of the arguments against private provision of mail and other government-provided services has been that they would draw away the more 'lucrative' trade. Discuss a similar argument in the following cases: Cinemas draw customers away from TV (and *vice versa*); which should be prohibited? Private house building draws resources away from council house building (and *vice versa*); which should be prohibited? The provision of leather shoes draws resources away from leather furniture; which should be prohibited? Chrysler draws resources and customers from British Leyland; should British Leyland therefore be subsidised?

7. When the government considers cuts in public expenditures there are always reports of Ministers fighting for their Departments to be exempted; some even threaten to resign if cuts are made. Is this an efficient way of allocating resources?

8. Discuss the following two arguments:
   (*a*) Nationalised industries will be more efficient than private industry because their shareholders (i.e. taxpayers) via their representatives (the government) can fire managers more easily than can shareholders in large private companies.

(*b*) The trouble with nationalised industries is that politicians, for political motives, interfere in their management and do not allow the managers to run them in a 'business-like manner'.

9. In recent years many firms on the verge of bankruptcy (or beyond) have been saved by the government. Both political parties in Britain have participated in these 'rescue operations'. What are the economic or political justifications for them? If the justification is political, do you think the different parties would tend to rescue different kinds of firms? What criteria would, and should, be used?

10. Recently the EEC has suggested a tax on margarine to raise its price so as to make butter more 'competitive'. It has also been suggested that the price of natural gas in the UK should be raised, presumably to make other forms of energy like coal and electricity more 'competitive'. Whose interests are being pursued in these attempts to ensure more 'competition'?

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