

The Supply and Demand for Protection: A Suggestion for a Positive Theory of Democratic Government

BY MICHAEL D BORDO AND DANIEL LANDAU*

Introduction

With the growth of government intervention in western market or "mixed" economies, economists have been directing increased attention to a positive analysis of government behavior. By a positive analysis is meant a study of the relation between the preferences of those groups (or individuals) controlling the government and government policies; as opposed to a "normative" study of what government policies ought to be to serve the "general good".

However, if the government to be analyzed is democratic and by democratic government is meant to be government "by, of, and for the people", then we would expect government to serve the general interest. Therefore, if major policies which persist over long periods of time *seem* to serve special minority interests, these policies present a major theoretical dilemma for a positive theory of democratic government. This dilemma can be resolved in one of two ways; first, by redefining democracy to mean something less than a government controlled by the governed in their self-interest; secondly, by showing that these policies in fact are a response to the demand of the majority of the electorate and that the view that they serve minority special interests at the expense of the large majority is incorrect.

The first approach is illustrated by a considerable number of books and articles from the field of public choice. Good examples are Stigler's *The Citizen and the State* (1975); *Capitalism and Freedom: Problems and Prospects*, Selden (ed) (1975), and Borchering *Budgets and Bureaucrats* (1978).

In this paper we propose to take the second route. We provide a re-interpretation of government interventions in markets and other policies based on a perception of government in modern democratic nation states as being principally an expanded "protection agency". Beginning with a

discussion of national defense, we argue that much of what modern government does is to protect the lives, property, and permanent income of its citizens from unacceptable variations of both external and internal causes.

We believe our approach can explain the behavior of democratic government – i. e. of political markets – in a manner similar to the analysis of economic markets. Thus, individuals are assumed to be motivated in their demand for government policies by self-interest, and government elected officials – "firms" – operate in a regime of effective competition which forces them in the long-run to supply voter-demanded policies.

The key elements of our approach are developed in the next section. Section III compares our approach to the public choice view. Section IV continues the analysis and demonstrates how the size and complexity of modern government can be traced to various aspects of the market for protection. Section V provides some qualitative evidence in support of our approach from the modern history of democratic states. The conclusion sums up the paper and suggests various possible extensions.

II

In this section of the paper we explain our approach in terms of the supply and demand for government services. In the process we discuss five major issues: (i) the demand for government services as a demand for protection; (ii) the factors which allow the government to supply many forms of protection cheaper than the market; (iii) citizen control of government through political markets; (iv) the differences between short and long run supply of government services; and (v) the difference between the national and lower levels of government.

Economics views the individual as a wealth or utility maximizer. Given his resources, the individual will endeavor to attain a consumption path which will maximize utility. The consumption path actually attained will depend both on the normal returns to the factors an individual owns and the variations around these normal returns.

Asset and insurance markets allow the individual to reduce the impact of certain types of variation in income on his consumption path at the least cost. Other variations can be dealt with at a lower cost by having government bear the risks.

While some government risk bearing is of the insurance type – (for example disaster and health insurance) – the major component of government risk reduction is a special type which we term "protection". Therefore, in this theoretical section we will confine our discussion to this special form of risk bearing.¹

Protection differs from insurance in that where insurance compensates the individual (household) for losses, protection reduces the probability of events which cause losses. Thus, the possible losses due to fire can be reduced either by fire-insurance or by building with fire-proof materials. Building with fireproof materials is protection because it reduces the probability of fire.

Certain forms of protection can be provided by the state at lower cost than the market. The fundamental form of protection provided by government is protection against foreign aggression. The government can provide this form of protection at the least cost because it controls the armed forces.² The armed forces are a means of coercing foreign aggressors. The "government" of a country is *in fact* the government because it controls this ultimate means of coercion.³

The situation is similar for internal activities of governments; the role of government is ultimately based on its ability to *enforce* laws and law enforcement rests on the coercive powers of the police. Of course, governments also fulfil other functions. However, the private sector could replace the government except where the ultimate sanction of coercion is necessary.⁴

Modern democratic nation states – MDNS – provide their citizens with various forms of protection. Some of these forms of protection are also provided by other types of states, but this paper will discuss only MDNS.

The MDNS can be viewed as a club with the citizens as members and the government as its executive committee.⁵ Club members demand

from their executive committee four types of protection for themselves as well as protection for the club. For themselves as individuals, club members demand: protection against external threats (from outside the territory of the club); protection against internal private threats (criminals); protection against internal public threats (abuse by government); protection against certain "unacceptable" decreases in permanent income (e.g. those caused by farm price variations). The club members demand protection of the club as a whole because it is a key input in the production of other forms of protection (e.g. without a nation there is no national defense).

The MDNS have both economic and political markets. Economic markets exhibit the standard properties. In "political markets", the individual club members – as voters – demand government policies which are supplied by "firms" – public officials – and groups of firms' parties.⁶ Payment for government services is made to government officials both in terms of the means of achieving office-votes, campaign funds, endorsements, etc, and the returns to office holding, salaries, "perks", publicity etc.

Voter control of the government is exercised through political markets. These political markets of an MDNS are by definition democratic. By democratic we mean that political markets exhibit voter sovereignty and rationality on the demand two approaches: first, their scientific methodology on the supply side (in the long-run).

The competition in political markets both between firms-candidates and consortia-parties is quite intense. Office holders have a wide spectrum of goals – re-election, higher offices, more influence in the party and government – for which they compete both with other office holders and with candidates not yet elected. Popularity with the voters is essential to achieving these goals. Therefore politicians must continually be proving to the voters that they are providing the policies the voters desire.

This combination of competition on the supply side along with rationality on the demand side allows voters to enforce their policy preferences on their government in the long run.

Long run equilibrium is attained when voters obtain from government the policies – i.e. protection – they demand at minimum cost. The movement from short-run equilibrium to long-run equilibrium will involve three types of changes: first, elimination of policies (or lack of policies) which benefit special interests rather than the ma-

majority; secondly, voters cease to demand policies which are clearly not in their self-interest or which are simply impossible to achieve (e.g. price controls or zero unemployment); finally, high cost means of providing protection are replaced with low cost means.⁷

Control of the means of coercion and the imposition of high costs of entry and exit from the national club allow the MDNS governments to behave as monopolies over their territory. In contrast, lower level government – state, municipal – must generally behave competitively. These lower levels of government survive because they have a comparative advantage in providing certain forms of internal protection – e.g. police, fire protection, health, etc. Since these lower levels of government behave differently from national government, we limit our analysis to national government.

In sum, our approach is that the national government of MDNS can be better understood as the executive committee of a political club – the nation. The government is chosen in political markets which are effectively competitive (in the long-run). In the club's political markets the club members obtain (in the long-run) the government policies they demand which are, first and foremost, protection of various forms. The suppliers of protection are the elected government officials. Voter – club member – control of government holds (in the long-run) because all elected officials are in constant and multi-dimension competition (between themselves and with potential office holders) both *inside* and between political parties.

III

In this section we compare our view of the demand for government services as a demand for protection with the major alternative hypothesis from the public choice literature. This alternative view can be stylized as follows; the demand for government services is a demand for public goods and transfers. The latter component is the key determinant in recent decades of the growth of government.

We discuss and compare three aspects of the two approaches: first, their scientific methodological acceptability; secondly, their implications for the supply of government services; thirdly, their consistency with the available empirical evidence.

On methodological grounds there is little basis to choose between the two approaches. Our approach has the slight advantage of explaining go-

vernment growth in recent decades as well as government functions dating from previous centuries from one principle, the protection of wealth. The alternative view uses one principle (public goods) to explain government's on-going function from previous centuries, and another (transfers) to explain its recent growth.

By the more important methodological criteria of refutability, there is little basis to choose between the two approaches. Both require sub-hypotheses to keep them from being excessively general and therefore unrefutable. In section IV of this paper we demonstrate that protection motivation can explain most government activity. Similarly, almost all government policies create transfers, since to *prevent* transfers – irrespective of the motivation for the policy – would require deliberately distributing all benefits in exactly the same way as the costs. The generality of both protection and transfers is due to their close association with the fundamental general economic process of wealth (or utility) maximization; that is, in an uncertain world income stream "X" will be preferred to income stream "Y" if X either has a higher mean (with equal variances) or a lower variance (with equal means). Production and the receipt of transfers are two basic determinants of the mean income stream, while insurance and protection are two basic means of reducing variance in an income stream.

There are various sub-hypotheses or constraints which could be added on to either approach in order to make it testable and refutable. For example, a government policy might be considered as motivated by transfer (protection) considerations only if the transfer (protection) benefits exceeded a certain minimum percentage of the total cost, (e.g. 5 %, 10 %, or 25 %).

When we consider the implications for the supply of government services, the advantages of the protection approach appear to be quite important. *Given* the existence of such threats as fires, criminal attack, and foreign aggression, protection can be a "positive sum game" benefiting most *club members*.⁸ In sharp contrast transfers are at best a "zero sum game" and in fact, given the costs of effecting transfers, they are a "negative sum game" with the costs to losers exceeding benefits to gainers.

Since transfers are a negative sum game, rational self-interested maximizers will control their political markets to guarantee that transfers are kept to a minimum. Thus, proponents of the trans-

fer approach seem to be arguing that the concept of democratic government – i.e. government by, of and for the people – is basically an illusion. Considering the importance usually attached to the distinction between democratic and non-democratic governments, this approach could be counter-productive.

The problem is really much deeper. A fundamental postulate of economics is that individuals know their own self-interest, and that firms will find it profitable to supply the self-interest demands of individuals. The transfer theory claims this basic postulate does not apply to the huge and growing government sector. If the elected representatives of households in government can ignore or distort the voters' preferences and tastes, why can't large corporations do likewise? To our thinking the transfer theory is in fact calling in question the foundations of economics.⁹

The transfer theory would appear to be in conflict with the evidence in several important aspects. One is the rationality of voting and deciding whom to vote for. If the government is providing desired (protection) services it may be rational to invest time in the act of voting and in the process of deciding whom to vote for.¹⁰ However, if the government is not controlled by the voters, such use of time is clearly irrational. Thus, we would predict, on the basis of the transfer theory, that people would not vote and would not invest time becoming informed on the issues. Furthermore, we would predict that groups more likely to be rational in their behaviour and which have a higher cost of time, such as the better educated and higher income segments of the population, would vote less and be less informed about the activities of government. In fact these predictions are contradicted by the available evidence in MDNS.

The transfer theory has been around for a long time, but, as Stigler (1975) points out, there has been very little measurement of the size of such transfer. In contrast, the protection approach is new and therefore has not yet had time to be quantitatively tested. Also the transfer theory seems to have difficulties with the evidence from empirical studies of income redistribution. One prediction of many transfer theorists which has been studied empirically is that majority rule voting would appear to allow a small majority of voters to significantly redistribute income from a large (or high income) minority to themselves. This majority could even simply be a coalition of minorities. On this basis, many economists have pre-

dicted significant income redistribution towards the poor, the middle class, or groups of minorities which together reach 51 % or more of the electorate. However, various studies of government tax and expenditure policies at the federal level in the U.S. and Canada have found the amount of redistribution to be small.¹¹

We feel the drawbacks of the transfer theory are sufficiently serious to raise the question, why has the transfer theory survived? We can not provide a full explanation. However, perhaps a partial explanation is that the proponents of this approach have exaggerated the differences between political and economic markets.

Economic and political markets are so different that it is easy to assume they are simply incomparable.¹² In fact, many of what appear to be basic differences, between the two types of markets are the result of imperfect specification of the lags, information and transactions costs, services sold, and the nature of suppliers and demanders in political markets. As we pointed out earlier, the political market is a market for policies (not offices) where competition between candidates produces many elements of effective competition. Furthermore, the intermediary firms in political markets are not only political parties, they also include the huge numbers of pressure groups. Finally, economic markets allow different consumers to purchase different products in the same market. Similarly, the political market produces different tax rates and exemptions for different classes of citizens.

In conclusion, for all its intuitive plausibility, the transfer theory when carefully analyzed seems to be inferior to the protection approach both in its implications and its consistency with available empirical evidence.

IV

In this section we examine the five basic categories of protection services that club members demand from their government and we argue that these protection demands can explain most expenditures of MDNS National Governments. The five categories of protection demands are: protection against external threats, protection against internal private threats, protection against internal public threats, protection against "unacceptable" decreases of permanent income, and protection of the club as a corporate body.

1. Protection Against External Threats: National Defense

The "production" of national defense by modern armies exhibits economies of scale, is highly capital intensive, and is subject to very rapid technical change. These factors alone would make national defense very expensive. However, the costs of national defense are not limited to armed forces budgets. They also include the cost of subsidized domestic defense industries, the different between budget and opportunity costs of draftees' time, part of the costs of foreign affairs and foreign aid, the cost of maintaining control by the elected civilian government over the armed forces, and more.

2. Protection Against Internal Private Threats: Crime

Government expenditure for the protection of club members against criminal elements includes the obvious components of police, courts, and prisons, but these are only a part of government outlays on crime reduction. High schools, recreation facilities, and social welfare programs are thought to reduce crime, and so a share of these much larger outlays must also be assigned to the category of protection against crime.¹³

3. Protection Against Internal Public Threats: Government Abuse

The danger to citizens from the best of governments is an ancient and important theme in political science. In general, the monopoly of the government on the means of coercion inside the territory of the club gives it the power to abuse citizens in various ways including imposing confiscatory taxation. Basically, only a branch "i" of the government can protect the individual club member against abuse by another branch "j". This leads to a whole dimension in government size and complexity starting from a bill of rights (enforceable in the courts) continuing with divisions of powers at the level of national governments – the US checks and balances – as well as with appeals to higher courts, and finally including at a very subtle level the nature of many clubs' government structure. The US federal structure was, of course, very consciously conceived as a means of limiting the power of the national government. While the direct costs of such complexities are large, the indirect costs are probably enormous. Court cases may be argued and re-

argued through several levels. Significant legislation can be passed by the congress or parliament and rejected by the president or the courts on constitutional grounds.

4. Protection Against Unacceptable Decreases in Permanent Income

There are a wide range of government programs to give the individual protection (or simply insurance) against decreases in his permanent (or current) income stream where the decreases are felt by the majority to be both excessive and beyond the individual's control. These programs include insurance type programs (unemployment insurance, social security, government health insurance, disaster relief, etc) and programs to influence supply and prices in various sectors (farm programs, tariffs to protect declining industries). They also include various laws and government regulations intended to protect the consumer (or employee) directly from "dangerous" products (or working conditions).¹⁴

Each of these income programs is a special case requiring a detailed empirical study. However, some of the more general issues raised by the three categories of such programs mentioned allow more general theoretical answers.

Insurance type programs raise several general issues. Most important, are they purely insurance, or is there a protection component also? What we observe is that most of these programs seem to have protection elements. Unemployment insurance reduces the danger that the unemployed will become a threat to the stability and peaceful economic activity of the club and its employed members. Survivors' insurance has the same benefit with respect to the orphan children of club members. Insurance of a minimum income to the elderly increases the identification of younger adult club members with the club and its stability and security just as the prospect of a company pension increases the employee's identification with the firm. (See discussion of the demand to protect the club as a corporate body below.)

The examples given indicate that the protection benefits from various compulsory insurance programs may be significant and they *could* easily exceed any inefficiency costs of government instead of voluntary private insurance.¹⁵

Our theoretical framework is designed to explain the survival *in* MDNS of government policies which economics has usually found to be harmful to economic welfare. The classic example

of such unwelcome survivors is the tariff, which effectively limits import competition with domestic firms. (We can limit our analysis to tariffs to protect existing industries since tariff protection of new industries is a short-run problem.) As we have learned in our principles courses that tariff protection for existing industries usually reduces economic welfare, tariffs represent a case where our approach runs most counter to an economist's basic intuition. It is helpful to break the problem down into two sub-issues: first, why should one citizen (not owning factors employed in the protected industry) suffer the cost associated with protecting another (who does own factors employed in the protected industry); secondly, why should protection take the form of a tariff instead of a (seeming more efficient) subsidy?

The essential distinction between our approach and the standard analysis is the positive value placed by the individual club member on the survival of the club as the provider of protection to him. The individual will be ready to pay (with higher product prices) to protect and promote the club. Therefore if individual member X_i would want protection for his capital – specific capital to industry I – he will accept as legitimate the demand of individual club member X_j for protection of his specific capital employed in industry J. (The specific capital could be human or non-human, but the human capital in the form of laborers with specialized skills is usually given greater importance.) Thus the club member X_i has two reasons to agree to protection for X_j : (i) he wants such protection to be a privilege of club membership and therefore available to him; (ii) allowing such protection to X_j will strengthen X_j 's loyalty to the club which protects X_i .

Given the decision to protect domestic industry J from competitive imports, basic economic theory tells us a subsidy ought to be relatively less costly than a tariff.

However, this elementary analysis assumes the costs of administering protection (direct and indirect) are equal between the two means. In fact, for subsidies both costs are likely to be higher. The direct costs of administering a subsidy are those of knowing how many units of output J each firm in the industry produced and then making the payments. The direct costs of a tariff are those of monitoring flow through ports of entry and collecting payments. The latter will tend to be less since monitoring incoming goods flows is a necessary part of basic protection whereas monitoring output of individual firms *inside* the club

territory is not an essential activity of government.

The indirect costs of a tariff or subsidy are the resulting distortions in the domestic market. A tariff does not require intervention in the domestic market for J; domestic producers are only protected from imports with no commitment to protect them from domestic market competition. A subsidy implies (and may require) protecting domestic producers from domestic market forces in order to guarantee a quantity and price of J which will make imports non-competitive.¹⁶

Government intervention in internal markets to protect consumers (employees) from "unsafe" products (or working conditions) is clearly an example of protection. Such protection would be in the protected consumers' (employees) self-interest if the gains in utility (expected income) exceed the costs in higher product prices (lower wages). The scope of such regulation has grown enormously in recent years. There is, of course, no way of knowing if the newer regulation will pass the test of long-run survival. However, major examples such as airline safety and nuclear power regulation would appear to fit current voter preferences.

5. *Protection of the Club as a Corporate Unit*

The self-interested individual will value the club as a key input to his own protection. Thus, he will accept government expenditures and interventions to perpetuate and advance his club in a world of many national clubs.¹⁷ He will also favor expenditures and interventions which increase other club members' identification with the club.

Perpetuation of the club implies maintaining its national culture, language, customs, institutions, etc. This results in taxes, subsidies and constraints on individual maximizing behavior which can be quite costly.

The club will tend to be stronger the more homogenous its population since mutual trust tends to come easier in groups of similar people.¹⁸ A growing club population, however, helps the club by allowing economies of scale in national defense and in tariff-protected economic markets. The combined goals lead to measures designed to increase birth rates, improve health, restrict immigration and reduce emigration. Here again, substantial costs may result from programs designed to efficiently promote and protect the national club.

In conclusion, we would list additional types

of government policies which are of a protective nature; however, it would appear that these five categories of protective policies can account for much of the cost of government.¹⁹

V

In the preceding sections of the paper we have outlined an approach to explaining the growth and persistence of government in the MDNS. In this section we provide some qualitative evidence in support of our approach from the modern history of a number of democratic nation states.

First, we discuss several examples of the importance of the linkages between protection from external threats, development of nation states, and economic policies.

a. The British Navigation Acts can be viewed as an important form of protection – protection for the English middle class as well as protection for all commercial users of the North Atlantic in the eighteenth century.²⁰ The British provided a service to their colonies and to other countries by ridding the seas of pirates and protecting the sea lanes from violence. This service was to be paid for by restricting British colonial commerce – between colonies, the mother country and third parties – to British or colonial ships as well as by other policies such as import duties and export bounties.

The absolute defeat of the Dutch navy by the end of the seventeenth century ensured the British navy the complete monopoly right to providing protection. Moreover, some of the clauses of the Navigation Acts which appeared to be to the detriment of the British North American Colonies can be explained as being part of a package of protection against the threat of the French in Canada.²¹

b. The American Revolution in our view largely reflected a major change in both the costs and benefits of providing protection to the thirteen colonies. Before 1763, the British efficiently protected the thirteen colonies from the French in Canada. With the defeat of the French in 1763, the colonies were well able to protect themselves, and moreover, removal of the French threat allowed the British to act as if they had a monopoly on the protection of North America. This was reflected in the British attempt to increase the colonists' contribution to the British Empire after 1763 with new taxes and greater enforcement of the less popular statutes of the Navigation Acts. To the colonists the reduced benefits of protection

(there being no immediate foreign threat) outweighed the costs and we can view the revolution as a rational switch to a more efficient and *more easily controlled* protection agency.^{22, 23}

c. In Canadian history, two elements stand out as the pillars of an effective protective system for the Canadian (British North American) club: securing a national transportation system; and the tariff (the National Policy). Confederation in 1867 can be viewed as an arrangement whereby French Canadian language and cultural rights were to be protected in exchange for support of the British North American club against possible encroachment by the US club.²⁴ To ensure effective protection of the club, extensive resources were committed to the construction of a national railway, the Canadian Pacific Railroad, and it was imperative to the "Fathers of Confederation" that this railroad only run through Canadian territory, regardless of the cost.²⁵ To build the railroad, the embryonic Canadian government extended generous land grants, subsidies and other privileges to the railroad.²⁶ As well, the national tariff policy, established in 1879, was designed to encourage (inefficient) east-west (intra-Canadian) trade to the detriment of (the more efficient) north-south (US-Canada) trade.²⁷ An alternative explanation, consistent with our view was provided by the Dean of Canadian Economic History, Innis, who argued that the national tariff was primarily a revenue tariff established to generate the substantial funds to subsidize the building of an (inefficient) national transportation system. Such a system Innis argued was crucial to the protection and survival of the Canadian club.²⁸

Secondly, we argue that a large number of major government interventions in modern economies can also be regarded as satisfying basic protection demands.²⁹

a. Many governments have subsidized or built transportation networks for direct protection goals (such as moving troops, supplies and tying together various regions of the nation's territory) and indirect protection goals (such as settling the club's territory). This holds for ancient states, modern non-democratic states, and modern democratic states alike. The Ancient Chinese built roads along and to the Great Wall,³⁰ as did the Romans and almost all modern nations, for moving troops, encouraging settlement, stabilizing food supplies, and other protection motivations. Similarly, canals have been aided and built out of protection motivation – e.g. Suez, Panama.³¹

The connections between government building of harbors, aid to the merchant marine, the moving of vital war supplies like oil, and naval defense has always existed. Prominent examples include the British Navy, US privateers in the Revolutionary War, US "Liberty" ships in World War Two, and Israeli oil tankers today. Government aid to and building of railroads has been heavily influenced by defense and other protection consideration; examples include the Canadian case, the Trans-Siberian railroad, and railroads in many Western and Central European countries.³²

b. The institution of public education in Prussia in the eighteenth century (Frederick the Great), France in the nineteenth century (Napoleon), and to a lesser extent Great Britain in the nineteenth century³³ was primarily to provide effective troops for a national army. The desire to educate club members into the shared culture of the club has been prominent in countries allowing immigration such as the US, Canada, and Israel.

c. Central banks can be regarded as agencies designed to protect contracts by providing a high quality (predictable) medium of exchange. Thus the valuable monopoly right attached to the right to issue paper money (seigniorage), which displaced high resource cost commodity money, was implicitly sold to the Bank of England and Second Bank of the United States in exchange for the promise that they would not overissue, i.e., that they would provide "high quality money" (meaning money that would ensure as stable a price level as the displaced specie).^{34,35} Later on, of course, government realized that by allowing the Central Bank to break its contract and over-issue it could finance at least cost – by the inflation tax – its other protective activities (making war).

d. According to our theory, macroeconomic policy, both counter-cyclical monetary and fiscal policy, could be viewed as attempts by governments, following Keynesian doctrine in the post-war period, to satisfy basic protection demands by reducing the variance of national income. However, the key assumption in our model – of voter rationality – would lead us to conclusions similar to the recent "rational expectations" literature,³⁶ which stresses the futility of discretionary monetary and fiscal policy in all but the very short-run. Indeed, the recent trends in several countries towards central banks' adoption of monetary rules, and the campaign for balanced budgets, would suggest that the acceptance of discretionary macro policy has only been a short-lived phenomenon.

Thirdly, we argue that the nature of protection provided will be related to the composition of club membership. Thus, we would expect that groups gaining protection will be those becoming the majority. Thus, in the nineteenth century, the majority of US families owned non-human capital (which were vital inputs to producing their market income) because they were self-employed. Thus it is natural that the laws (and the court decisions interpreting and enforcing them) tended to protect non-human capital. In the twentieth century, with the decline of self-employment, the ownership of non-human capital ceased to be an important element in the market income of the majority who are now employees. At the same time, labor or human capital becomes the determinant of market income for the majority of families. As a result, the laws protecting property rights (income streams) come to give better protection to human capital-labor earnings – and weaker protection for non-human capital.

The most notable example of this shift is the legalization of unions and the right to strike de facto.³⁷ We observe the same phenomenon in the US' conduct of military operations in World War II, with its emphasis on the minimizing of casualties. This same phenomenon is also illustrated in various consumer protection laws such as meat inspection, highway safety, anti-pollution, etc. The rights of owners of non-human capital are being reduced to increase the protection of human capital.³⁸

Fourthly, government farm aid programs, represent very important forms of protection in high income democratic countries. These programs are very complex in their details and differ widely between countries. The protection of farm sector incomes would appear to be an example of protection of permanent income but some countries also view food as a vital war supply.

An examination of Johnson's studies of the US farm program (1973, 1974) reveals all the key elements our theory would predict for a program of protection of a sector's permanent income: first, it has been modified and the cost reduced in response to political pressure; secondly, a key goal and achievement has been the reduction of the variance of income; thirdly, the program has not, *in practice*, been to aid low income farmers but rather farmers who are able to adjust to market forces; fourthly, the program has included import restrictions and the subsidization of exports; fifthly, the program, for all its size and complexity, has apparently not prevented the long-run market dy-

namic of a decreasing labor input in agriculture; sixthly, US farm programs in general – including the agricultural research and extension elements – has helped preserve a sector of small business – family farms – with a rate of productivity advance exceeding the average for the US economy.³⁹

Finally, if we extend our analysis to the postwar international economy we observe that post World War Two military technology – nuclear missiles – has left the western European national clubs unable to protect themselves from external threats. The result has been the formation of a super national protection club – NATO. As we would expect, the emerging internationalization of basic protection supply has been accompanied by unprecedented levels of economic aid – the Marshall Plan, etc., – and significant reductions in barriers to trade – the European Common Market, Kennedy and Tokyo rounds, etc., between the many members of the North Atlantic protection organization.

In sum, a very wide range of major historical events, institutional developments, and changes in property rights structures can be understood in the terms of our model as responses to the demand for protection (as it existed or in its changing forms). Thus, government behavior can be explained directly from the fundamental nature of government as a protection agency without the need to assume that the governmental apparatus is used for additional purposes beyond its fundamental function.

Conclusions

In this paper we have argued that the emergence of most government policies in democratic states stems from basic protection demands of the electorate. Much of the paper is then devoted to a discussion of the nature and implications of such demands. Furthermore, we argue that the assumption of rationality and competition in the political market place ensure that, over the long run, only those policies which satisfy the basic protection demands of the majority will survive.

Evidence in support of our theory is provided by an examination of a number of historical examples which describe the development of protection policies in modern democratic states.

Our approach has a number of interesting implications for the analysis of government's role in the economy.

First, we can relate our theory to some recent

developments in the public economics literature. Our paper is basically concerned with positions of long-run equilibrium. We argue that in the long run, policies not efficiently providing voter-demanded protection will tend to be eliminated. Strands in the recent literature stressing the role of bureaucrats, agency costs, fiscal illusion, and special interests as determinants of government intervention can be regarded in our framework as part of the short-run dynamics. Our prediction that, in the long run, voter control will dominate, suggests a guideline (or constraints) to these short-run effects without denying their existence or importance.

Secondly, our theory suggests that the so-called "Laffer Curve" – that real per capita income growth will initially be positively correlated with the share of government expenditure in national income and then negatively correlated – is reversible. In other words, that increases in the share of total government expenditure in national income will reduce the growth rate of real per capita income, but ultimately the decline in the growth rate will induce rational voters to reduce government expenditures for all purposes other than to satisfy basic protection demands. Perhaps the recent conservative victories in several western countries are indications that such a reversal is already taking place.

Thirdly, much of the literature measuring the welfare costs of various government proposals ignores the "protection returns" attached by the public to such policies. According to our theory, so-called "inefficient" policies will persist only if the protection returns are in fact substantial.

Finally, our approach can be extended to analyze the interesting protective and representative role played by such institutions as trade unions, consumer organizations, religious organizations, etc. Thus, the apparent powerlessness of the individual in the modern democratic nation state is reduced somewhat by the existence of these organizations which act to transmit individual protection demands to government at least cost. They should not be viewed as merely representatives of special interest groups seeking transfers but primarily as brokers in the political market place.

Footnotes

- * Carleton University and University of Toronto. We would like to thank the following for helpful suggestions and comments: Carl Dahlman, Charlie Stuart, Lance Davis, Stephen Ferris, Irwin Gillespie, Bo Larsson, Robin Neill, Anna Schwartz, E G West, Stan Winer. Research was funded by a grant from Carleton University and able research assistance was provided by Paul Sevigny.
1. Unemployment compensation and other income security systems are basically insurance. However, they also give protection services. For the nation and economy as a whole they reduce the threat of social unrest and the resulting instability, thereby protecting the state and its more fortunate citizens. The danger from large numbers of dissatisfied unemployed after World War I in Great Britain was undoubtedly a factor in the significant increase in unemployment benefits there. Similarly the institution of social security in the US was most likely related to the mass unemployment during the Great Depression.
 2. The government is more efficient at supplying controlled violence because economies of scale in the production of violence exist up to and perhaps beyond the capabilities of the largest of modern states (e.g. nuclear missiles).
 3. See Leffler (1978) for a view of government similar to ours. The government can sub-contract the right to use violence and coercion in restricted circumstances. However, were other institutions to acquire extensive rights to use violence, then they would become de facto governments. North (1979) is also relevant here.
 4. Clauses stipulating binding private arbitration of disputes between parties to a contract are sometimes termed "private enforcement". They are in fact nothing more than agreement to leave certain (difficult to formulate) parts of the contract unwritten. Enforcement of these clauses, as with the contract as a whole, is dependent on the governmental apparatus of courts, police, and prisons as the ultimate sanction against violation.
 5. See Buchanan (1965) for a discussion of the club in economics.
 6. See Stigler (1972) and Becker (1976).
 7. An example is the movement in some countries to replace active fiscal and monetary policy as stabilization instruments with rules for monetary growth.
 8. The analysis of national government policies must allow for the exogenous existence of other nation states which could attack the country in question. For a nation in a world of potentially hostile nations defense expenditures are a means of protecting national product just as insecticide sprays are a means of protecting crops against the exogenous insect threats. In both cases the exogenous threat means the protection expenditure is welfare maximizing. The fact that a world without hostile nations (or insects) could attain a higher level of welfare without expenditures on national defense (or sprays) is irrelevant.
 9. The argument that government behavior is in significant elements beyond voter control is sometimes buttressed by contentions that the government is in a position to suppress systematically, and over the long-run, essential information about its activities. This argument implies that the news media – via their many and competing branches of print, radio and T V – will not find it profitable to uncover the information government wishes to suppress. Given the rewards for "investigative journalism" we find this implication unlikely.
 10. In the literature there is debate if it is rational for the individual to vote when the electorate as a whole determines government policy. As Stigler (1972) points out, the determination of *issues* depends both on the size of majorities and, frequently, on more than one round of elections so that it is rational to vote even if one is only a small fraction of the majority. To this it might be added that individuals may in fact exert the strongest influence on elected officials not directly as individuals, but as members of various groups (clubs) such as churches, unions, ethnic organizations etc. These groups can influence elected officials much more if they can "get out the vote" and thus they increase by various means the incentive for their members to vote for favored candidates.
 11. See Gillespie and Labelle (1978) and Maital (1975). The findings that income redistribution has been small are not hard to explain. If voters are motivated by self-interest they will not want significant income redistributed away from themselves. The small majorities which the transfer theory postulates can force significant income redistribution would tend to be very unstable. See Stigler (1972). It is sufficient for a 49 % minority suffering redistribution to bribe 2 % of a 51 % majority receiving redistribution to change the majority and minority roles and the direction of redistributive flows. The process could then be reversed again by bribing a 2 % share out of the new majority. Obviously this kind of instability could use considerable resources in transactions with no-one gaining. Therefore the rational voters would learn – after X rounds – that redistribution towards themselves was impossible in practice and they would structure the legislative process to limit attempted redistribution.
 12. See Stigler (1972).
 13. In general our model is consistent with the literature of the economics of crime; see Becker and Landes (1974).
 14. Following the "hedonic" price technique pioneered by Griliches we can generalize the income concept to include the value to consumers from safer products and to employees from safer working conditions.
 15. We have left unanswered many questions about compulsory government insurance. One of the more

- important ones is, what if 90 % of the adult population would voluntarily insure themselves? Do the protection benefits of compelling the last 10 % to insure themselves through the government exceed the costs of the resulting inefficiencies? This can only be answered by detailed studies. However, if the demand for insurance is income elastic, the answer could indeed be yes. Furthermore, benefits like a commitment of the club to protect the minimum consumption levels of its elderly members would be lost with purely voluntary savings for old age.
16. See Krauss "Protection and the Welfare State" *Wall Street Journal* June 29, 1979 and his book (1978). See also Krashinsky (1978).
 17. Prestige and status generating government expenditures are often considered by economists to be one of the purer forms of government "waste". However, when we study the role of military strength in protecting the club this conclusion becomes suspect. If prestige - type expenditures - e.g. a beautiful capital city or Olympic gold medals - increase the loyalty and identification of soldiers and civilian with the club they aid protect.
 18. This is not to say that national clubs must have homogenous populations. Indeed, countries such as Belgium, Switzerland and Canada may be viewed as federations of homogeneous sub-clubs organized for common protection against external threats. Thus, we would expect that, as external threats diminish in importance, separatist-type movement would become a problem, e.g., the current separatist movements in Spain, France, Belgium, the U.K., Canada, etc. For an interesting study of the implications of club member homogeneity see Landa (1979).
 19. The conclusion could be much stronger if we measure the share of protection expenditure in the "net" expenditure of the federal government. By net expenditure we mean total government outlays minus the value on the market of government services of the type which could be purchased from private sector firms.
 20. The Hudson's Bay and East India Companies can be regarded as situations where the British government sub-contracted its protection power to private individuals, i.e., the crown sold the monopoly right to trade and exploited vast tracts of land in exchange for an implicit promise to protect this territory from encroachment by agents of other clubs. This sub-contracting probably reflects the weakness of the British state in the seventeenth century. Indeed, in the last half of the eighteenth century much of the protection services supplied by these companies were supplemented by the use of British troops as both the cost and the complexity of protection increased because of the threat of foreign (French) encroachment. See Easterbrook and Aitken (1958) on the early role of the Hudson's Bay Company as a protection agency.
 21. See Dickerson (1968) who provides comprehensive evidence that before 1763 there was little serious opposition by the colonists to the de facto operations of the Acts. Also see Egnal and Ernst (1972) and Gipson (1950) for evidence that the colonists were basically content with their position in the pre-1763 empire. Finally, see the extensive literature pointing to a small economic burden of the Navigation Acts. Harper (1939), Thomas (1965), McClelland (1969) and Reid (1970).
 22. "In accounting for the radical change in attitude of many leading colonials between the years 1754 and 1774 respecting the nature of the constitution of the empire, surely among the factors that must be weighed was the truly overwhelming victory achieved in the Great War for the Empire. This victory not only freed colonials for the first time in the history of the English-speaking people in the New World from dread of the French, their Indian allies, and the Spaniards, but, what is of equal significance, opened up to them the prospect, if given freedom of action, of a vast growth of power and wealth with an amazing westward expansion. *Indeed, it is abundantly clear that a continued subordination of the colonies to the government of Great Britain was no longer considered an asset in the eyes of many Americans by 1774, as it had been so judged by them to be in 1754, but rather an onerous liability.*" (emphasis ours) Gipson (1950) in Wahlke (ed) (1962). For an alternative view see Reid (1978).
 23. It took the British a full century to realize they could not properly operate an international club by direct control from London. One could hypothesize that had the British been willing to offer Dominion status to the thirteen colonies in 1776 that the American Revolution never would have occurred.
 24. See Creighton (1967).
 25. See Easterbrook and Aitken (1958).
 26. See Mercer (1973), Neill (1979) and Wogin (1979).
 27. See Easterbrook and Aitken (1958) for the standard view. Also see Dales (1967) for a neoclassical analysis of the efficiency costs of the National Policy.
 28. See Innis in Neill (1972).
 29. We believe that further careful historical research would allow us to explain most persistent interventions as attempts to satisfy protection demands.
 30. See Reeschauer and Fairbank (1958).
 31. A classic statement of the protection motivation for transportation aid was made by Gallatin, Secretary of the Treasury, to Jefferson: "The early and efficient aid of the Federal Government is recommended by still more important considerations. The inconveniences, complaints, and perhaps danger, which may result from a vast extent of territory, can no otherwise be radically removed or prevented than by opening speedy and easy communications through all its parts. Good roads and canals will shorten distances, facilitate commercial and personal intercourse, and unite, by a still more intimate community of interest, the most remote quarters of the United

States. No other single operation, within the power of Government, can more effectually tend to strengthen and perpetuate that Union which secures external independence, domestic peace, and internal liberty." From Goodrich (1967).

32. See Heaton (1948).
33. See West (1967) and (1970).
34. See Klein (1978).
35. Peel's Act in 1844 was an explicit attempt to ensure that paper money had the same quality as specie.
36. See Sargent and Wallace (1976).
37. See Davis, Easterlin and Parker (1972) ch 6, especially pp 197–200, pp 225–227, Rees (1962) ch 1 and p 201, and Ashenfelter (1969). It is worthwhile to quote Rees at length on the role of unions in the US because it is a classic statement of the importance of the national club and protection in economic policy: "If the union is viewed solely in terms of its effect on the economy, it must in my opinion be considered an obstacle to the optimum performance of our economic system. . . . Many of my fellow economists would stop at this point and conclude that unions are harmful and that their power should be curbed. I do not agree that one can judge the value of a complex institution from so narrow a point of view. Other aspects of unions must also be considered. The protection against the abuse of managerial authority given by seniority systems and grievance procedures seems to me to be a union accomplishment of the greatest importance. So too is the organized representation in public affairs given the worker by the political activities of unions. . . . If the job rights won for workers by unions are not conceded by the rest of society simply because they are just, they should be conceded because they help to protect the minimum consensus that keeps our society stable. In my judgement the economic losses imposed by unions are not too high a price to pay for the successful performance of this role." Rees (1972) pp 194–5.
38. The agitation by the media and the Eastern establishment for such laws may reflect the above average level of human capital that people in such groups have. Here it is important to ask two questions: (1) have extreme laws been on the books very long; (2) are extreme laws actually enforced? Non-enforcement may be a cheaper solution for the majority with less taste for this form of protection than getting the laws repealed.
39. The reader should not misunderstand our references to Johnson. He believes that US farm programs which he studied either had become in the early 1970s (or always were) incorrect in major details (on equity and/or efficiency grounds). We are not suggesting otherwise! Rather, we regard the US farm program as remarkably consistent with our model. Given the extensive criticism of these programs, we were surprised by this finding.

References

- Alchian, A and Demsetz, "Production, Information Costs and Economic Organization", *American Economic Review*, LXII, Dec 1972.
- Ashenfelter, O and J Pencavel, "American Trade Union Growth: 1900–1960", *Quarterly Journal of Economics*, 83 (1969), pp 434–448.
- Becker, G, *The Economic Approach to Human Behavior* (1976).
- Becker, G and W Landes, eds, *Essays in the Economics of Crime and Punishment*, NBER, New York, 1974.
- Becker, G and G Stigler, "Law Enforcement, Malfeasance, and Compensation of Enforcers", in R Selden (ed) *Capitalism and Freedom: Problems and Prospects*, Univ of Virginia, Charlottesville (1975).
- Borcherding, T, *Budgets and Bureaucrats*, Duke Univ Press Durham (1978).
- Buchanan, J, "The Political Economy of Franchise in the Welfare State", in R Selden (ed) *Capitalism and Freedom: Problems and Prospects*, Univ of Virginia, Charlottesville (1975).
- "An Economic Theory of Clubs", *Economica*, 32 (Feb 1965) pp 1–14.
- Creighton, D G, "Economic Nationalism and Confederation", in Ramsay Cook (ed) *Confederation*, University of Toronto Press, Toronto, 1967.
- Dales, J H, *The Protective Tariff in Canada's Development*, University of Toronto Press, Toronto, 1966.
- Davis, L, R Easterlin and W Parker, eds, *American Economic Growth*, Harper & Row, New York (1972).
- Dickerson, O M, *The Navigation Acts and the American Revolution*, Barnes, New York, 1863.
- Easterbrook, W and H Aitken, *Canadian Economic History*, Macmillan, Toronto (1956).
- Egnal, M and J Ernst, "An Economic Interpretation of the American Revolution," *William and Mary Quarterly*, Jan 1972.
- Fabricant, S, *The Trend of Government Activity in the United States since 1900*, NBER, New York, 1952.
- Friedman, D, *The Machinery of Freedom*, 1972.
- Gillespie, W I and Labelle, J B, "A Pro-Poor or Pro-Rich Redistribution of Income," *National Tax Journal*, 30 (1978).
- Friedman, M, *A Theory of the Consumption Function*, NBER, New York, 1957.
- Gipson, L, "The American Revolution as an Aftermatch of the Great War for the Empire 1754–1773," in J Wahlke (ed) *The Causes of the American Revolution*, Lexington, 1962.
- Goodrich, C, *The Government and the Economy: 1783–1861*, Bobbs-Merrill, New York, 1967.
- Harper, L A, "The Effect of the Navigation Acts on the Thirteen Colonies," in R B Morris, ed, *The Era of the American Revolution*, New York, 1959.
- Heaton, H, *Economic History of Europe*, Harper & Row, New York (1948).
- Johnson, D, Gale and J A Schmittker, *US Agriculture in a World Context*, Praeger, New York, 1974.

- Johnson, D Gale, *Farm Commodity Programs*, AEI, Washington, 1973.
- Johnson, H G, "A Theoretical Model of Economic Nationalism in New and Developing States," *Political Science Quarterly* (1965) pp 169-85.
- Klein, B, "Competing Monies, European Monetary Union and the Dollar: The Case Against the Europa," *UCLA Working Paper* No 115, April 1978.
- Krashinsky, M, "The Cost of Day Care in Public Programs," *National Tax Journal* 31 (1978).
- Krause, M, *The New Protectionism*, International Center for Economic Policy, New York, 1978.
- Landa, J T, "The Economics of the Ethnicly Homogenous Middlemen Group," *U of Toronto Inst for Policy Analysis Working Paper Series*, N 7924, Oct 1979.
- Leffler, K, "Government Output and National Income Estimates," in *Carnegie-Rochester Conference Series on Public Policy*, Vol 9, *Public Policies in Open Economies* (1978).
- Maitals, S, "Apportionment of Public Goods Benefits to Individuals," *Public Finance*, 30 (1975).
- McClelland, P D, "The Cost to America of British Imperial Policy," *American Economic Review*, May, 1969.
- Mercer, Lloyd, J, "Rates of Return and Government Subsidization of the Canadian Pacific Railway: An Alternative View," *Canadian Journal of Economics*, 6 (Aug 1973) pp 428-37.
- Neill, R, "Tweedle-Dum and Fiddle-Dee-Dee," Conservatives, Liberals and the National Policy," *Carleton Economic Paper* (1979).
- *A New Theory of Value: The Canadian Economics of H A Innis*, University of Toronto Press, Toronto, 1972.
- Niskanen, W, "The Pathology of Politics," in R Selden (ed) *Capitalism and Freedom: Problems and Prospects*, U of Virginia, Charlottesville (1975).
- Nordhaus, W and J Tobin, "Is Economic Growth Obsolete?" in *Economic Growth*, NBER, Fifth Anniversary Colloquium V. (New York 1972).
- North, D C, "A Framework for Analysing the State in Economic History," *Explorations in Economic History*, 16 (1979).
- Rees, A, *The Economics of Trade Unions*, U of Chicago Press, Chicago, 1962.
- Reeschauer, X and X Fairbank, *East Asia: The Great Tradition*, New York, 1958.
- Reid, J, "Economic Burden: Spark to the American Revolution," *Journal of Economic History*, Vol XXXVIII, No 1, March, 1978.
- Reid, J, "On Navigating the Navigation Acts with Peter D McClelland: Comment," *American Economic Review*, Dec 1970.
- Sargent, T and N Wallace, "Rational Expectations and the Theory of Economic Policy," *Journal of Monetary Economics*, II, April 1976.
- Schumpeter, J, *Capitalism, Socialism and Democracy*, 3d ed, New York, 1950.
- Stigler, G, "The Economists' Traditional Theory of the Economic Functions of the State," Ch 7 in *The Citizen and the State: Essays on Regulation*, University of Chicago (1975).
- "Economic Competition and Political Competition," *Public Choice*, 13 (Fall 1972).
- "General Economic Conditions and National Elections," *American Economic Review*, May, 1973.
- Thomas, R P, "A Quantitative Approach to the Study of the Effects of British Imperial Policy Upon Colonial Welfare: Some Preliminary Findings," *Journal of Economic History*, Dec 1965.
- Tullock, G, *The Social Dilemma: The Economics of War and Revolution*, University Publication, Blacksburg, Va, 1974.
- Wahlke, J (ed), *The Causes of the American Revolution*, revised ed, D C Heath, Lexington, 1962.
- West, E G, *Education and the State*, 1970.
- "The Political Economy of American Public School Legislation," *Journal of Law and Economics*, Oct 1967.
- Wogin, G, "Land Settlement and Freight Rate Policies of the CPR," unpublished, 1979.