7 WHY IS GOVERNMENT SPENDING OUTGROWING GDP?

by Enrico Deiaco

1. Extensive Government Spending - Why?

A side effect of the Swedish model of industrial relations is a high level of government spending to offset the negative effects of structural adjustment implied by the model (see Turner in this volume). The rapid postwar growth of public expenditure therefore makes Sweden particularly interesting for students of the interactions of economic development, income distribution, political processes, bureaucracy and tax rates.

In Sweden, IUI was among the first to collect and analyze data on long-term trends in government spending (Erik Höök 1962). There is, however, still little agreement about how to explain the size and growth of government. And there is even less consensus about the empirical evidence. In other words we lack a coherent theory to explain a set of "stylized facts" about government spending in Western societies.

To our knowledge, competing theories about the relative growth of the public sector have not yet been tested on Swedish data. That is the objective of this paper. After presenting and examining the competing hypotheses we will test them on Swedish postwar time-series data (1950-83). I will argue that among various models, those that emphasize voter demands for redistribution perform better than traditional public goods models. Among the former, the incentives for redistribution are increased by a more equal income distribution, and by the development of specialized interest groups such as the growth of the bureaucracy. The paper is organized as follows:

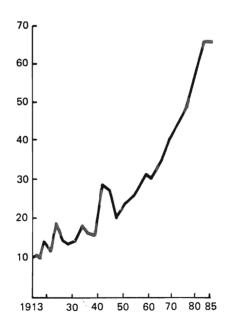
Section 2 describes long-term government growth in Sweden. Section 3 discusses some general explanations for the trends in spending. In section 4 we test four competing theories, originally tested by Fratianni and Spinelli (1982). Section 5 summarizes results and compares them with similar studies in the U.S. and Italy.

2. Highlights of Swedish Government Growth

By conventional budget and gross national product measures, government's role in the allocation of resources has increased considerably over the last century. As a result, everywhere in the developed world governments have moved from a sometimes trivial to a now considerable role in shaping national expenditures. This is exhibited for Sweden during the period 1913-1985 in Figure 1. During this period government spending increased almost four times faster than GDP, which made spending, measured as a share of GDP, increase from 12 percent in 1913 to nearly 70 percent of national value-added in 1985. In a comparative perspective Swedish government spending showed one of the highest growth rates and attained the highest level among the OECD-countries (Ysander 1979 and Lybeck 1984).

Although Sweden is on the forefront of this development the extent, similarity and durability of this trend in long-term government growth can be found in most Western countries (Gould 1983).

Figure 1 Public sector spending in Sweden 1913-85
Percent of GDP



Source: Höök (1962) and National Accounts, Statistics Sweden.

3. Some General Explanations for the Trends in Public Spending

The rapid public sector expansion in Western democracies has, of course, attracted much attention among scholars and given rise to several explanations.

Many explanations emphasize the role of "suppliers" of government services, suggesting an element of monopoly power on the supply side. The limited control over many aspects of public decision making on the part of the electorate has been advocated as a contributing factor. With different goals between those who administer government policies and the voters, bureaucratic expansion takes over.

Another tradition emphases voters' demands and the existence of a market for public goods (see e.g. Borcherding 1985). Such demand models sometimes rely on a representative voter, who makes the decisive choice for society. With universal suffrage and majority rule, the well-known median voter is the decisive voter in a specific kind of single issue election.

What distinguishes all these models is, firstly, the ways that individuals play different political roles such as voters, legislators and administrators, and secondly, the role of information in decision making. This is illustrated in Figure 2. Depending on the form of government, voters express their preferences with regard to public decisions. These decisions are realized by administrators, who may be more or less interested in their execution and influenced to a varying degree by different interest groups. These groups may seek to influence voter behavior in order to modify the final administration of public policy.

In what follows we consider models that explore the interaction between preferences and decisions, such as public goods models and redistribution models and those (interest models) whereby different political pressure groups try to influence the final outcome of preferences, decision and action.

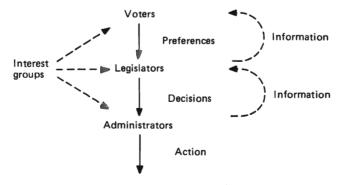


Figure 2 Different political roles of individuals

Source: Atkinson and Stiglitz (1980).

4. Different Models

The specific theories considered below differ both in functional aspects of public expenditures and the role of political institutions that shape the final spending decision. First, should expenditures be seen as a public good or as pure transfer? Since 43 percent of total public spending in Sweden consists of transfers this is a highly relevant question.

Second, does the organization of political institutions affect the size and growth of spending? The models differ in these respects in the following way: The *public good models* (see e.g. Bergström-Goodman 1973) focus on a market for government services, ignoring political institutions and transaction- and information costs in affecting expenditures. The *redistribution models* (Meltzer-Richard 1979 and Pelzman 1980) treat expenditures as pure transfers and allow political institutions (with perfect information) to affect the final outcome. Finally the *interest models* (Demsetz 1982 and Foley 1978) explore the relative power of different interest groups, under the assumption of asymmetrical information, on the growth of government spending.

Public Goods Models - a Market for Government Services

In the "public goods" literature, government expenditures are treated as the implicit or explicit outcome of a market for government services. That is, demand and cost conditions for publicly provided goods determine expenditures.

Redistribution Models - Government as a Redistributor of Wealth

Redistribution models emphasize changes in political incentives for redistributing welfare.

Pelzman (1980) makes the politician maximize votes for a given redistributive policy by transferring resources (property rights) from one segment of the population to another, in a "Robin Hood" manner, by taxing the rich and giving to the poor.

The hypothesis put forward by Pelzman is that a reduction in equality within the beneficiary group stimulates the growth of government, while a reduction of overall inequality retards it. The reasons are quite obvious, given the assumption of politicians having no preference of his own, except to maximize the probability of reelection.

A reduction in equality between taxpayers and beneficiaries means that as the poor get wealthier, the incentives for redistribution are reduced. The now wealthier have a larger stake in private transactions than those taxed before. If inequality is reduced within the beneficiary group, the marginally most wealthy now are less wealthy and would suffer a correspondingly small-

er loss to his private wealth, if taxes are raised so that the incentives for redistribution grow.

Meltzer-Richard (1979) model voters as demanding redistribution, and the median voter setting the tax share. The size of government spending depends on the relation between mean income and the income of the decisive voter (median). Any voting rule that concentrates votes below the mean provides an incentive for redistribution of income from upper to lower income groups. An increase in the number of low income voters simultaneously increases political pressure for redistribution policy, and therefore triggers government spending. An example of this would arise if the proportion of voters receiving social security benefit increases, raising the number of voters favoring taxes on wage and salary income to finance the same redistribution.

Interest Models - Specialized Interest and Class-Struggle

The redistribution models considered above suffer from two weaknesses. First they do not explain why public activities should grow, in contrast to merely persisting. These theories do not explain all the underlying trends in wealth distributions. Interest models of government spending claim to remedy these deficiencies. The formation of specialized interest groups or the outcome of class-struggle are examples. These models view the political arena as a market-place where interest groups can exert pressure on government. We will consider two different interest models.

Demsetz (1982) argues that the political market place probably favors the specialized interests, whether an industry or a union, over the more diffuse interest of customers. Demsetz argues that the gain to customers as a group from avoiding an increase in e.g. the tariff barrier, or the establishment of union power, generally exceeds the costs to share holders or to workers in the attached industry.

Following Fratianni and Spinelli (1982), our choice of specialized and diffuse interest groups fell firstly on the labor force in agriculture and salaried civil servants and secondly on the resident population from age 20 to age 59 as a fraction of total population. A positive coefficient in a regression equation means that the special interest group receives protection and accordingly collects a benefit. A negative coefficient means that they have to carry the cost of protection.

The Marxist approach of Foley (1978) and Korpi (1979) rests on the assumption that the agenda for state action and the major pressure on state policy, grows out of the conflict between the capitalist and working classes over the appropriation of surplus value. The testable implication is that countries, which have had a strong leftist government during the post-war period, ought to have a more rapid growth of government expenditure.

5. The Redistribution and Specific Interest Models Performs Better

Table 1 shows the results from testing the various theories on Swedish data (see further Deiaco 1984). The main independent variables in the various models are listed in the column headings of Table 1. Accordingly the most important variables in the public good model are real national income, the relative price of publicly provided goods and population densities. Three measures of a changing income distribution are listed, representing the inde-

Table 1 Testing the models on Swedish time series. Hypothetical and actual signs (in brackets) of the various models, 1950-83

Duli Caranda	Income (Y)	Relative prices (P)	Population (POP)	
Public goods models	+(+)*	-(+)	+(+)	
	Income inequality:			
Redistribution models	Within benefitting group (IE)	Between benefitting and taxed group (IT)	Median/Mean income (MI)	
Pelzman Meltzer-Richard	-(-)*	+(+)*	-(+)	
	Specialized interest:			
Interest models	Agricultural employment (AG)	Public employment (RE)	Diffuse interest (RP)	Labor interest (WEP)
Demsetz Marxist	+(+)	-(-)*	+(+)	-(+)

^{*} significant at the 5 % level

Note: The following variables have been used: Y = Real national income (National Income at current prices divided with consumer prices), P = Index of relative prices (Index of public produced goods price divided by an index of privately produced prices), POP = Resident population, IE = Income inequality in the benefitting group (Gross annual wage of highest paid civil servant/Gross annual wages by lowest paid Civil Servant), IT = Income inequality between benefitting and taxed groups (Industrial wages divided by wages of agricultural workers), MI = Household median income divided by mean income, AG = population in agriculture, RE = public employment, RP = Population in 20-59 year age group, WEP = Index of labor power in OECD (Korpi 1979).

The models were regressed in logarithmic form using first differences. Dependent variable was government expenditure as a share of GDP. In Marxist models the dependent variable was government expenditure in 18 OECD countries. For a complete description of models and results see Deiaco 1984.

Source: Deiaco (1984).

pendent variables in the redistribution models. These are income inequality in the benefitting group and between benefitting and taxed groups, and the relative development or median to mean household income. The independent variables in the interest models are two measures of specialized interests (number of employees in agriculture and public sector), one measure of diffuse interest groups and one of the relative power of labor interest.

Among the various models, the Pelzman and the specialized interest model explain the data better than other models. Hypothesized and actual signs are the same, although the significance is low.

The broad conclusion to which our diverse data point is that governments grow where groups which share a common interest in that growth, and can perceive and articulate that interest become relatively numerous. Two factors account for this: Firstly, the levelling of income differences across the population has been a major source in government growth, especially the growth of a large middle class. Secondly, it seems that the growth of public sector employment itself can account for a major part of government spending, being one of the most important specialized interest groups.

This seems quite plausible for Sweden. During the postwar period income distribution has certainly become more equal. Wage dispersion has declined, for example, between age groups, educational groups and between industries (see Björklund in this volume). Lindbeck (1985) argues that during recent decades "fragmented horizontal redistributions" between various minority groups have been the most important mechanism behind the dominant redistribution policy.

Public employment increased by 300 percent between 1960 and 1985, and currently amounts to 32 percent of total employment. This is almost as much as current employment in manufacturing. Certainly, homogeneous interests act as an important source of government growth.

6. Comparison with Other Studies

The study of Fratianni and Spinelli (1982) shows results similar to those presented in this paper. The Pelzman model explains the data better than the alternatives. The argument is that the size of government responds to the articulated interests of those who stand to gain or lose from politicization of the allocation of resources.

They also try to discriminate between two competing views of a politician; the value free median voter literature and the entrepreneur emphasized in the theory of agency costs. Italian evidence suggests an interpretation more consistent with the latter view. This also seems to be the case for Sweden. Ysander and Murray (1983) found local politicians more willing to use state subsidies than to alter local tax rates, which can perhaps be interpreted in the same way.

In a recent IUI-publication (1986) Gramlich's study of different competing theories in a U.S. perspective gave some mixed signals. Gramlich concludes that there is some evidence in favor of all investigated theories. Borcherding (1985), on the other hand, argued that the public good model is capable of explaining only about half of the U.S growth of government from 1902 to 1978.

This suggests that we still have a long way to go before our understanding of Government behavior comes even close to being satisfactory. In my opinion this means developing models where state behavior is endogenous, non-partial and dynamic. This means e.g. studying what the state really maximizes; a Leviathan that maximizes a social welfare function or a self interested collector that maximizes revenue. One can thus only agree with many other commentators (see e.g. Myhrman 1985) that the interesting task for future research is to compare the design of different political systems, in organizing the relationship between preferences, decisions and action, in order to understand how different constitutions work when filtering the true preferences of the voters into political decisions.

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