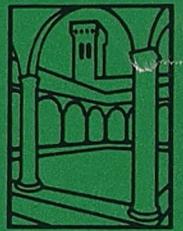


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The Future of Party Government

Volume 4

Sabine Lessmann

Budgetary Politics  
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An Investigation of  
Public Expenditures  
in West Germany

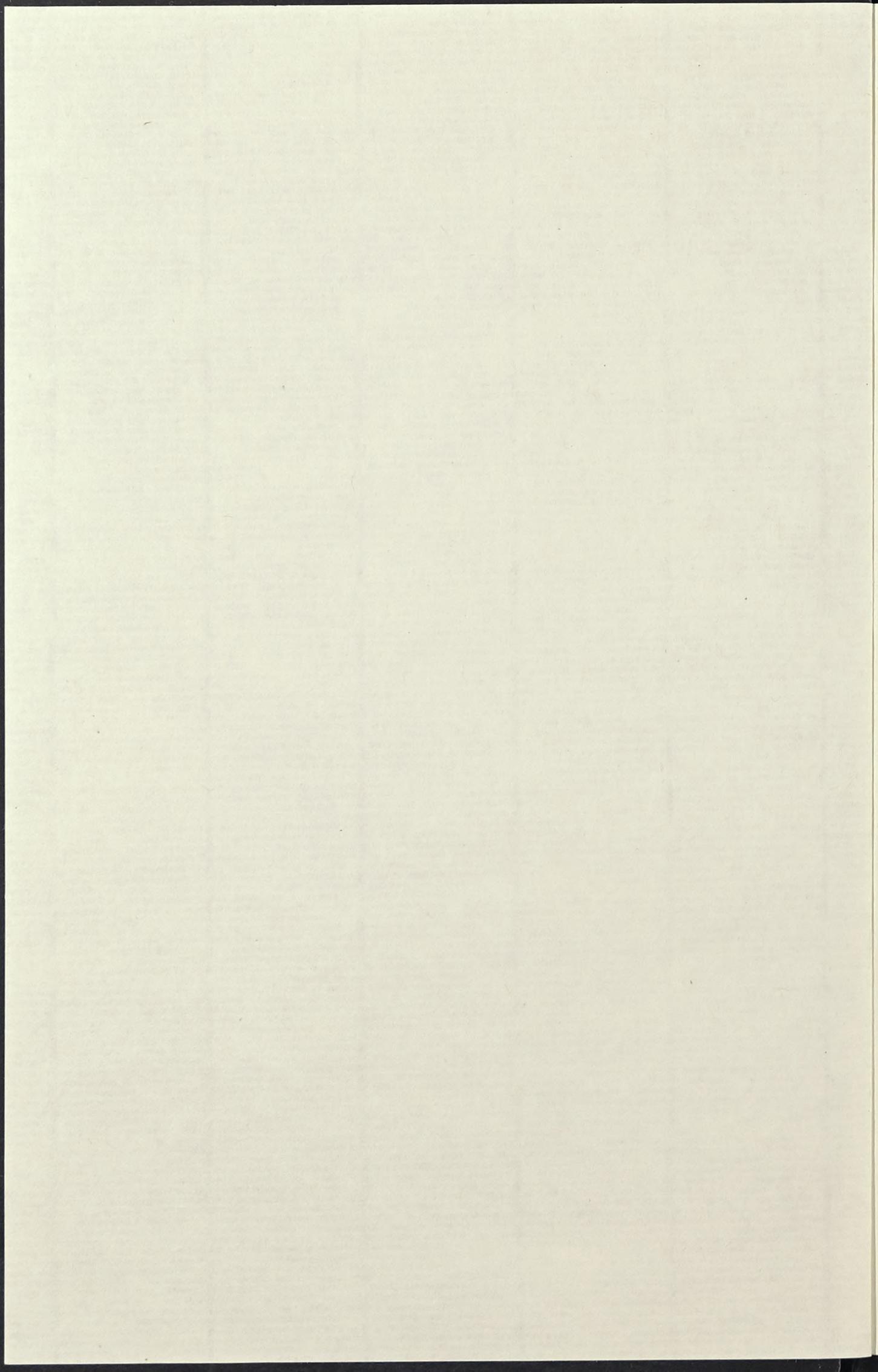
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Vol. 4: Lessmann, Budgetary Politics and Elections:

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# The Future of Party Government

A Series under the General Editorship of  
Rudolf Wildenmann

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Volume 4

## Budgetary Politics and Elections: An Investigation of Public Expenditures in West Germany

by

Sabine Lessmann



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## Preface

In the middle of August 1971 at vacation time, when most of the people in Western countries had everything in mind but global economic policies, *Richard Nixon*, then President of the United States, suddenly announced his new economic measures. He changed currency relations, putting the Europeans in quite a predicament and causing world wide repercussions.

The goal to achieve an economic situation perceived by the people as being 'prosperous' in the USA in 1972, the time of Nixon's re-election, was obvious. It was part of Nixon's counter strategy to overcome the severe domestic effects on voters of the still ongoing Vietnam war. 'If he is only half successful, it will be a sweeping victory' said an outside observer of US politics. In 1972 Nixon achieved over 60% of the votes, and many campaign 'strategists' believed that this was mainly due to the economic policies adopted in 1971.

There are many other examples where the belief prevailed that an economic policy of growth would be successful electoral politics. *Mac Millan*, having succeeded *Anthony Eden* as Prime Minister in Great Britain, initiated an economic policy in 1957 from which he reaped the benefits two years later, and so his campaign slogan: 'You never had it so good', expressed his hope that the people would support him. He overwhelmingly won the election. *Konrad Adenauer* is supposed to have said to his Minister of Finance in 1953: 'speed up the economy' ('Legen Sie da was unter'), which in turn is supposed to have grossly contributed to the 'electoral miracle' of 1953 in the Federal Republic of Germany. On the other hand, the economic consequences of the oil shock are regarded as having initiated the downfall of the *Brandt* government in 1974.

In industrial democracies attempts to increase electoral chances of party governments by 'improving' the perception of economic development or personal well-being of the voters, seem to have become a standard procedure. If such improvements do not take place or if economic difficulties arise, governments are afraid of losing elections. This basically assumes that the variation in electoral results can mainly be explained by the variation in certain economic indicators like prices, wages or employment rates. The only exception to that 'rule' seems to be countries in which larger parts of the voter

population are strongly influenced by religious beliefs and/or ideological motivations disregarding such 'material things' like the availability of money.

The literature on the subject based on empirical research is very controversial. *Sabine Lessmann* in her monography within the series of 'The Future of Party Government' discusses the most important studies. On the basis of the budgets of the Federal Republic between 1952 and 1984 she also develops her own insights. This data (available at the Cologne Central Archive for the period 1950 - 1980) is still the only comprehensive dataset for computer analysis; it was provided for at the University of Mannheim by a grant of the DFG (German Research Association).

Unfortunately, a comparative analysis was not possible due to the lack of compatible comparative data in other countries. However, the substantial empirical analysis is of lesser intellectual concern than the theoretical development which was achieved by this study (as well as that of *Helga Treiber*, 'Politik unter der Oberfläche', published in Germany 1984).

*This study is a contribution to the understanding of electoral legitimizing processes influenced or thought to be influenced by fiscal policies.* In this regard, it is also a contribution to the analysis of Party Government as such, which, by definition, is based on competition for governmental position.

It should be emphasized that electoral processes are synergetic processes and that election studies up to now have just *not* solved the problem of theoretical explanations of such synergetic processes. Various paradigms of explaining voter behaviour have been analysed since the first days of the studies by *Lazarsfeld*, *Campbell*, *Converse* or other scholars of the Ann Arbor School. Nevertheless, the identification of factors guiding or influencing such behaviour is not the same as theoretically attributing such factors within the synergetic processes. Today, we know very much about the role of class, stratification, education, issues, attitudes, non-attitudes, or the role of candidates in influencing voter behaviour. But our knowledge is, in many respects, based on 'statistical descriptions' of such factors, a fact which does not facilitate the task of analysing the synergetic processes. Institutes of opinion research never cease in their efforts to convince us that they are measuring 'feelings' only.

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However, there is one element of great importance, that is the *individual's safety* in view of the risks he/she is running in society as I define it. Improvements in safety form the basis of welfare state policies (unemployment benefits, pensions, health care and others). Large segments of societies are subsidized and live on transfers of public money. Only smaller portions of the society are still 'independent' of such transfers through their own wealth or the income distribution of market economies. This is a very existential element in social and political life; it has constituted one of the important cleavages in society since the industrialization. And in research we are bound to explore the 'normal' questions regarding 'class' with indicators leading to much more reliable variables.

To illustrate this approach: Only individuals or groups directly receiving guaranteed incomes and/or social benefits via budgetary transfers are less dependent on organizations in their access to political decision-making and in fulfilling their interests. Workers need their trade union, farmers their farmers' organization, artisans their artisans' union in order to push through policies in their interest. Also businessmen rely on their federations insofar as the industrial conflict or contract negotiations are concerned. They are all more or less dependent on collective societal 'security' or instrumentally active organizations. And it is the government which backs up this differentiated system and provides 'security'. Still, the majority of society ultimately depends on government policies. And even the 'class' which is directly government supported ('Versorgungsklasse') is very much concerned about such income policies.

This financial dependency of the majority on governmental policies is the structural basis for the belief that economic policies by governments will influence the voter decisions. The smaller the difference between winning or losing at the polls the stronger the attempts to influence voters' decisions via economic perceptions. And highly fractionalized parliaments, facing difficulties in forming government majorities, are also bound to do everything in their power to mobilize voters.

The differences in research results are analysed by *Sabine Lessmann*. First, there is a time-lag between budgetary policies and the desired change in the voter decisions. Secondly, 'hard' party identifiers (as described in the

## VIII

American Ann Arbor literature), 'consistent votes' in our terminology, are not easily changed whatever the reason for their consistency. Effects of such budgetary policies are hypothetically more observable within the volatile voters. In that respect the degree of emotional solidarity of any given voter, especially of labour, to his/her organization is very important. The lesser the trust, the higher the propensity of change by such policies. Thirdly, it is not only budgetary policy which counts, but the sum of economic policies including regulations, de-regulations, and 'preaching' as under *Ludwig Erhard* in the Federal Republic, that is a policy of non-interference, which may change voters' preferences.

In order to analyse the effects of *such* policies we need very sophisticated analyses. *Sabine Lessmann* demonstrates that we are not in a situation in which 'bread and games' will move the masses. We also know that it is not the voter who consciously goes to the polls and demonstrates his will as it is still assumed in normative democratic theories; there is much room for possible manipulation of the voters by governments. She begins her analysis by defining the *conditions, degrees and directions of governmental self-legitimization via economic policies*.

This book - though restricted in empirical evidence by the impossibility of a cross-national analysis - is an important link between Volume III ('Managing Mixed Economies') and the previous Volumes I and II of the 'Future of Party Government' Series. Almost regardless of the variation of experiences with party governments in different countries, the macro- and micro-changes of societies, the specific 'mix' of market economics and government intervention, all party governments are tempted or induced - with different rates of success - to carry out a policy of self-legitimization through economic policy. The consequences for further research are obvious: we need better studies of the interrelation between the polity and the economic system.

Rudolf Wildenmann

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Mannheim, December 1986

Sabine Lessmann



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## I. Introduction

The 1986 pre-election year in the Federal Republic of Germany was an interesting one. Starting with the communal elections in Schleswig-Holstein in March, the parties began to prepare themselves for the big upcoming event - the general election in January 1987. The governing Christian Democrats (CDU) suffered a severe vote loss in this March election as part of their most loyal supporters - the farmers - decided to abstain due to a general dissatisfaction with EEC regulations and agricultural government policies. In order to avoid further farmers' boycotts for the next 'Länder'-elections in Lower Saxony in June, Bavaria in October and Hamburg in November, the federal government sprang into action.

A 500 million DM programme was passed in the beginning of June, which reduced the farmers' contributions to the agrarian social security system with retrospective effect to January 1986. As a result of the reactor accident in Tschernobyl another 500 million DM were promised to cover the losses of agricultural products because of radio activity. In order to appease the farmers even more, a special election gift of 100 million DM to subsidize fallow land was given to Lower Saxony's farmers one week before the election took place. At the same time the parliament increased veterans' benefits by 2,15% from July onwards, further increases being promised by January 1987. The predominant social policy issue, however, concerned old age pensions, more precisely, the question of adopting a so-called 'baby year' in pension law. The coalition government in Bonn decided to give all women born before 1921 a monthly payment of 25 DM for each child. The programme will start in October 1987 and will gradually include all female pensioners with children by 1990. Described by Chancellor Kohl as a new dimension in social policy, the programme will cost 3,3 billion DM per year by 1990.

In order to finance these huge sums, the Minister of Finance was forced to pull the emergency brake. Various measures, such as a 10% freeze of non-investment costs in the 1986 budget, privatization of enterprises partly or totally held by the state, and a shift in the payment of unemployment assistance, were necessary in order to raise these funds. These measures are reminiscent of the beginning of the 1970's when

government as well as opposition clearly overestimated future economic growth and generously distributed future revenues - based on electoral calculations. The financial crisis to come was inevitable. In 1986 it happened again. New allocations of billions of DM were decided upon with very risky plans as to how they were going to be financed in the future. Was this again due to manipulative reasons - this time concerning the 1987 election?

Is it perhaps even plausible to assume that this 'democratic game' occurs whenever a general election comes up? Do politicians attempt to 'buy' electoral support in this way, and can we trace back the costs of these policy decisions in the federal budgets? These are the underlying questions of this study.

The study of government performance, public policy choices and outputs - and the forces that operate to shape policy decisions and outputs - has always been a central concern of political scientists. Thinking generally in terms of inputs, actors, processes, and outputs, 'public policy analysis' focuses on characterizing and explaining outputs. A substantial number of these public policy studies consider the government's distribution of financial resources as particularly attractive for research because such distribution is perceived as the measure of government's commitment to provide goods and services immediately relevant for the society.

This study attempts to add to the cumulative understanding of the distribution of financial resources in a democratic system and in particular in West Germany. It is not concerned with what policies governments ought to pursue, but rather with why and in what way governments pursue the policies they implement. Our central theme is an investigation of the relationship between policy outputs - defined as public expenditures and laws - and election dates in West Germany.

That policy outputs and elections are somehow related in democratic systems seems to be a generally accepted fact. It has often been pointed out that politicians are thought to be only too ready to adjust their policies in anticipation of an immediate or delayed electoral reaction<sup>1</sup>. Surprisingly, many assumptions and assertions exist in the political science literature referring to this relationship, but no unequivocal empirical evidence is found as to whether, to what extent, and in what way elections actually have a directing impact on the

political decision-making process and policy outputs. The basic reasoning of Western democratic theory generally is that a change of government by elections *prima facie* has a considerable impact on political decisions in democracies. Although the empirical analyses of Volume III of the 'Future of Party Government' series<sup>2</sup> raise considerable doubts about this assumption, general and free elections are the political procedure through which the legitimacy of public sovereignty is secured. The legitimacy of political order in general and the legitimation of specific institutions for political decision-making are dependent on this principle. This tenet of democratic theory, however, that democracy realizes itself in elections, is opposed by Marxist and non-Marxist critiques who claim that elections are only of marginal importance, if they have any meaning at all<sup>3</sup>. Rather than prejudging the question in a normative way, we might rather ask if the actions of politicians and competing parties are limited because of elections.

One of the main assumptions of the rational choice approach is that politicians adjust their decisions to approaching elections. This paradigm - as the framework for the construction of an empirical theory - will be adopted in this study. The basic unit of analysis for the rational choice approach is the goal-oriented rational actor. The individual actors, here conceived as the political decision-makers, perceive that they have goals and their actions are motivated by a desire to achieve those goals. The most common assumed goal for politicians has been that they are interested in getting (re-)elected and therefore try to maximize votes, subject to constraints, so as to retain office<sup>4</sup>. The concept of maximization and its implications of vote-capturing policies has attracted considerable attention during the last years as this goal determination may contradict both efficient policy-making and all ideal-type democratic ideas where politicians are perceived as solely representing their voters' interests<sup>5</sup>.

We have chosen the rational choice approach and in particular the vote-maximization hypothesis as the theoretical background for our study as they provide interesting possibilities for the formulation and testing of hypotheses concerning our research question and may contribute to understanding and explaining policy outputs<sup>6</sup>.

Our study of the relationship between policy outputs and election dates takes different levels of public expenditure commitments registered in the West German annual budget plans as its dependent variables in order to explain the influence of elections on public expenditure developments. This implies the methodological advantage of dealing with variables that exist as interval data. Problems of measurement are minimized and the data allow for rigorous quantitative analysis.

The study differs from much of the related research in several ways: 1) We mainly concentrate on the explanatory power of just one factor which might influence public policy decisions - namely elections. The development of public expenditures is obviously related to a multitude of forces, such as the nature of societal, political, and economic problems <sup>7</sup>. We do not deny the existence of all these influencing factors, but instead of just adding a further analysis to the enormous amount of already existing studies which attempt to discover the relative weight of the individual components, we will first of all scrutinize the explanatory power of political factors, i.e. the election itself. In order not to rely entirely on the election factor, however, organizational, demographic and economic factors will also be incorporated in the analysis. They will serve as sort of control variables and will prevent us from coming up with a too naive interpretation of public expenditure developments. The purpose of all these factors is to test the vote-maximizing hypothesis of the 'New Political Economy'.

Thus far research being conducted in this area has not been able to provide for any convincing evidence with regard to the development of public expenditures. The normative implications of the vote-maximizing hypothesis in combination with the electoral calendar - i.e. that expenditures should follow a 'cyclical' trend - have been a highly controversial point in the literature to date. Bold inferences made from even a five-year period as to the existence or non-existence of an 'electoral cycle' or the corroboration of the vote-maximizing hypothesis are fortunately an exception <sup>8</sup>. Moreover, the concentration on the election factor as a conceptualization of the notion of financial resource allocation was stimulated by a general discussion in the literature, regarding a change from the formal principle of interest

representation to the new formal principle of vote-maximization<sup>9</sup>.

2) We concentrate on one country - West Germany. This restriction is due to practical reasons concerning the quality of the data set and the impossibility of obtaining equally disaggregated budgetary figures for other countries. The great advantage of a case study like this is that one can go more deeply into a single case and thus compensate for a loss of range by gains in depth. This point of view runs contrary to Lijphart's assessment, which pointed out that the scientific status of a case study is a bit ambiguous 'because science is a generalizing activity', and case studies can only make an indirect contribution to the establishment of general propositions and thus to theory<sup>10</sup>. We do not agree with the position that case studies are useless for testing theories, or that a single case can neither constitute the basis for a valid generalization nor the ground for disproving an established generalization. On the contrary, individual case studies can increase or decrease our belief in theories and are essential for theory development in general.

Evidence for the actual existence of 'electoral cycles' is provided by the obvious endeavours of democratic governments to assure their re-election and the assumption that votes can be won by the awarding of policy gifts shortly before elections, or by election promises for the post-election period. Arguments against this strict 'cyclical' relationship - that elections systematically affect certain public expenditures - are numerous.

In order to keep the analysis in feasible dimensions, three areas of public expenditure in West Germany are covered: subsidies, labour and social welfare, and research and technology financial allocations. The reasons leading to the selection of these three policy areas are their different political importance for governments and for the societal system, so that the impact of elections is expected to vary considerably among them. In this context, the subsidy and social policy areas are seen as the ones with a particularly high directing intensity<sup>11</sup>.

In the following, the intention is to enter first of all into the position of elections with respect to democratic theories and the perception of politicians who assign to elections a high position within the model of the policy-making process

(chapter II). Furthermore it is necessary to come to terms with existing studies which analyse the determinants of policy outputs. These will be considered in chapters III and IV, before our analytical design and the operationalization of the chosen approach will be introduced in chapter V. The results are presented in chapter VI, followed by a short summary and an assessment of results in chapter VII.

The existing studies, analysing the determinants of policy outputs are : firstly, the so-called 'policy output studies' and secondly the research results of the 'New Political Economy'. The latter studies focus exclusively on the relationship between economic policy and government popularity or election dates. A presentation and critique of both types of studies will show that they cannot give a correct description of the interrelation using macro-economic indicators over time, because, for example, the assessment and evaluation of unemployment and inflation figures varies over time. Moreover, what these studies actually examine with reference to public expenditure development is hardly regular 'cycles', but whether public expenditures increase within a given electoral period.

The analysis will then be extended to our three policy sectors, bearing in mind that it is not sufficient to look at global expenditure figures and growth rates with respect to the existence or non-existence of a directing impact of general elections. It seems to be much more promising to analyse the micro-structure of the budget, i.e. to investigate systematically distinct smaller units of analysis such as pensions, or expenditures for job creation measures than the annual volumes or changes in total allocation in order to discover any systematic trends. This approach might enable us to show that the controversial results found in the literature are mainly due to the level of aggregation of the budgetary figures looked at.

In short, our impression is that the level of aggregation used in previous studies is too high, providing aggregate testimony which might well lead to misleading interpretations. An example might best illustrate this. Tufte (1978) compared the yearly changes in real disposable income per capita with the timing of elections for 27 countries from 1961 to 1972. Leaving aside the problem that he only reports three election years whereas in fact four elections took place in Germany during this period, he finds no empirical evidence for

Germany. This means that there were no measurable election gifts, i.e. increases in real disposable income, in election years. Von Beyme (1986) concisely comments that this result is not surprising for countries where a change in governments does not very often occur - even without big computational efforts<sup>12</sup>. Tufte's results as well as von Beyme's comments are not convincing given the obvious endeavours of our coalition government cited above. A systematic analysis of the micro-structure of public expenditures might well reveal a different but in any case a more differentiated result.

### Notes Chapter I

- <sup>1</sup> See e.g. Campbell et al. 1960:5 'The holders of elective or appointive office in democratic governments are guided in many of their actions by a calculus of electoral effect'; equally, Sartori, 1973:125.
- <sup>2</sup> See Castles/Lehner/Schmidt (eds.) 1987.
- <sup>3</sup> Dahl 1970; Parry 1972; Agnoli/Brückner 1968.
- <sup>4</sup> These ideas go back to Schumpeter 1950; Downs 1957; and Herder-Dorneich 1957.
- <sup>5</sup> Generally, 'vote-maximization' is linked with a strongly negative connotation, but we agree with Dinkel who pointed out that: 'Grundsätzlich aber muß der Wunsch, möglichst viele Wählerstimmen zu erhalten, ebensowenig negativ sein wie die Gewinnmaximierung, die im idealtypischen Beispiel der "unsichtbaren Hand" ein optimaler Lösungsmechanismus für Allokationsfragen auch aus gesamtgesellschaftlicher Sicht sein konnte. Für eine ganze Reihe von Fragen ist der Markt als Allokationssystem nicht anwendbar und der Mechanismus der Wahl tritt an dessen Stelle', Dinkel, 1980:66.
- <sup>6</sup> Within the last few years, rational choice models and in particular the vote-maximizing hypothesis have been exposed to an intensive methodological criticism. H.Simon (1951) put forward

the 'satisficing approach' and G.L.S. Shackle (1972) argued that maximization is not even possible. But referring to the classical philosophy of science treatment as established by K. Popper (1935,1965), Boland (1981) put forward that there are only two types of criticism of any behavioural hypothesis once one has established its logical validity. One can argue against the possibility of the hypothesized behaviour, or one can argue against the empirical truth of the premise of the hypothesis. It can be shown that both kinds of criticism will never be successful: The possibilities critique argues that the actor must have acquired all of the information necessary to determine or calculate which alternative maximizes utility. Shackle, for example, argues that such acquisition is impossible hence deliberate maximization is an impossible act. But true knowledge is not necessary for maximization. The politician only has to think that his theory of what is the shape of his utility function is true. With this objection, maximization behaviour cannot be ruled out as a logical impossibility. The second criticism would allow that if the politician is actually a maximizer, the hypothesis would be a true explanation of politicians' behaviour, but the truth of the premise is denied. How does one know the premise is false? It would seem that the hypothesis 'all politicians are maximizers' is a universal statement and hence is refutable but not verifiable. The methodological problem of empirical refutation is that behavioural maximization is not directly testable. The fundamental methodological problem of refuting any behavioural hypothesis indirectly is that of constructing a convincing refutation. In the form of an 'All-And-Some' statement - for all politicians there is something to maximize - it is neither verifiable nor refutable. As a universal statement it cannot be rejected because any alleged counterexample is unverifiable. The verification of a counterexample requires the refutation of a strictly existential statement and these cannot be refuted. In summary, the truth of the maximization hypothesis is no more testable than the hypothesis itself. See Boland 1981:1031-1036; 1983, and his discussion with Caldwell 1983.

<sup>7</sup> Such competing factors range from the institutional and structural constraints of the political system to the different social groupings of society. To name but a few factors that are discussed in the literature:

- the international environment
- the dynamics of party competition
- the national economy
- corporatist arrangements
- voter preferences
- cooperative federalism ...

<sup>8</sup> See Michalsky, 1961:94ff.

<sup>9</sup> Offe 1972; Narr/Thränhardt (eds.) 1979; equally Berger et.al., 1983:25 'Mit der endgültigen Abkehr vom Prinzip der Klassen- oder konfessionellen Weltanschauungspartei haben die Parteien ihren Einzugsbereich generalisiert und gleichzeitig ihre Organisationsziele spezifiziert auf Wahlerfolg und die Übernahme von Regierungsbefugnis'.

<sup>10</sup> See Lijphardt, 1971:691.

<sup>11</sup> For a detailed discussion of data and selection criteria see chapter V.

<sup>12</sup> See von Beyme, 1986:74.

## II. Elections and parliamentary democracies

The nature of the concept of democracy and its relationship to the political system with which it is associated has always been an important research topic in the study of politics. Elections and the electoral process hold a key place in modern as well as traditional democratic theory. The fact that elections take place and members of parliament, and ultimately the government, depend on them is a very important feature of a democratic political system. This is, of course, especially true for party government <sup>1</sup>.

The extent to which elections actually fulfil their assigned role in Western democracies, i.e. that voters decide on issues and policies, is a very controversial point and is opposed by Marxist as well as non-Marxist critiques <sup>2</sup>. Yet rather than deducing the steering capacity of elections on theoretical grounds - as will be done with reference to the rational choice approach later on - we will refer here to an assessment of the West German elites in the second part of this chapter. The incorporation of these elite data might add to the arguments of the 'New Political Economy' insofar as they strengthen the plausibility of its basic assumptions. Moreover, the answers given by the political elites can be used as hypotheses and are going to be tested later on as to whether they actually coincide with the observed policy outputs.

### A. The position of elections in democratic theories

In 1976, D. Robertson wrote: 'To talk, today, about democracy, is to talk about a system of competing political parties' <sup>3</sup>, i.e. about the competition of party elites to govern with public consent.

This statement is clearly related to one of the modern democratic theories, namely the theory of democratic elitism. The central idea of this theory is summed up in the definition of democracy given by J. Schumpeter (1950) who is regarded as the 'founding father' of this theory: 'The democratic method is that institutional arrangement for arriving at political decisions in which individuals acquire the power to decide by means of a competitive struggle for the people's

vote' 4. The choice and removal of elites by the people is effected by means of elections. The electoral process is the mechanism which gives the people the ultimate control over the elites competing for the positions of power. This competition is for the favour of the electorate and involves the promise of benefits to sections of the people 5. As Sartori (1973) writes, 'The results of the competition is democracy. And this is because the power of deciding between the competitors is in the hands of the demos - the onlooker who benefits from a quarrel between other people' 6. Thus, elections are regarded as very essential to democratic party government and are seen as embodying the democratic process.

This emphasis of the importance of elections can also be found in the so-called 'traditional' theories of democracy which had been formulated in the late eighteenth and the nineteenth century. According to Holden (1974), traditional democratic theory divides into two main types - liberal democratic theory and radical democratic theory 7. Both types of theory have a model of the political system in which the basic constituent elements are individuals only. Important representatives of the latter school of thought are Rousseau, Bentham, and James Mill, whereas political theorists such as Burke and John Stuart Mill fall in the former category. Both types of theory emphasize the role of elections in bringing forth a representative body, though in liberal democratic theory the decisions of voters are usually seen as expressing opinions, whereas in radical democratic theory they are regarded as expressing interests rather than opinions 8.

The common feature of these traditional democratic theories is their individualism. This is in contrast to one of the modern democratic theories: the pluralist theory. In strict pluralist theory the importance of elections is downgraded as elections are no longer seen as embodying the democratic process. Although they may still be regarded as a necessary condition for the existence of the democratic process, the will of people is manifested in the inter-election pressure-group process 9. This strict model has been modified by Dahl into a 'pluralist-elitist' democratic theory where elite government and electoral competition are combined with the pluralist emphasis on the dispersal of power 10. Thus, people act through both

the electoral system and the group process, and the importance of elections is stressed again.

The various critiques of the different models of democracy all stress a lack of democracy, pointing, for example, to the limited possibilities of citizens' participation, corporatist arrangements, or a general critique of the capitalist state and a mere veiling function of elections <sup>11</sup>.

But despite all criticism of the theory and practice of liberal democracy, elections have a central position for the legitimacy of those exercising political power. The idea of legitimacy, i.e. the representation of the electorate for the period between two elections by a representative body governing with public consent, is a central component of democratic rule. The plebiscitary elements in the notion of legitimacy assign a directing effect to elections. On the one hand they bind the rulers to the will, interests or opinions of their constituents, thereby controlling the decision-making process of the political elite; on the other hand a so-called 'fundamental consensus' between those who govern and the governed, with the political order and policy decisions is expressed. Since the beginning of the 1970's, however, a crisis of legitimacy for late capitalist systems was postulated e.g. by Offe (1972), Narr and Offe (1975) and Guggenberger and Offe (1984). Legitimacy and illegitimacy of political decisions have been measured with new criteria. Economic efficiency and social welfare have been downgraded in favour of new 'ways of life' and better environmental conditions. The legitimacy of the political order and especially of majority rule is questioned and more participatory elements are claimed. As pointed out by Kaase (1983), however, there is no empirical evidence as to a delegitimation or even a crisis of legitimacy of the political system in West Germany <sup>12</sup>. The position of elections was and still is largely unchallenged on grounds of legitimacy. One might assume on the contrary that a heightened awareness of policy problems combined with a higher politization of the population could even increase the responsiveness of political elites and the directing impact of general elections. We assume that this direction is carried out with the help of a sanctioning mechanism, which is 'no re-election' of the incumbent government at the next election. Thus we consider the competition for votes in order to get (re-)elected as the most important directing instrument of elections.

## B. The position of elections in the perception of politicians

The definition given above concerning the directing impact of general elections has necessarily to be consolidated and specified within the rational choice approach which constitutes the theoretical framework of our study. It is thus no longer conceived only as an orientation of decisions with respect to the interests of the electorate, but contains at the same time an attempt to influence voters with the help of election 'gifts' or promises in order to enhance (re-)election chances or retain office. As voters are unable to influence policy directly, directing impulses are required from the political elites. On the one hand the general perception of the next election as a mechanism to get (re-)elected plays a role. On the other hand there must be a concrete perception of the interests of the electorate in order to get enough votes to win the next election. Only if politicians perceive the election as important and as decisive for the filling of key political positions, and is therefore in his interest, does it become possible for elections to direct decisions. If politicians do not perceive the election as decisive, there is no obvious starting point for the influence of elections on policy outputs<sup>13</sup>. Other important and countervailing influences could be, for example, maintenance of ideological purity or policy demands of party activists. These might well lose votes for governments seeking to win the next election but be important for maintaining party unity<sup>14</sup>. Added to the politician's perception of the election as decisive for the filling of key political positions, however, must be the perception of specific voter's expectations as being decisive for the election turn-out. Only then will the directing 'cycle' be complete. Thereby it might well be that only some groups of voters enter into the perception as 'important for next election', either because they are perceived as decisive for the election turn-out or because they simply cannot be neglected.

Since no special investigations of perceptions of this controlling 'cycle' exist, there is a need to refer to more general questions concerning the perception of the political system and democratic rules on the part of members of the West German elites in general and the political elites in particular. A very good synopsis of the assessments of democratic principles and rules can be obtained by looking at

the answers to some attitudinal questions which were asked in 1981 within a comprehensive West German elites survey <sup>15</sup>.

The elite members were identified according to the positional approach in elite research, starting from the principle that power is bound to formal leading positions in differentiated industrial societies. The survey includes 1744 respondents in total and the following sectors were included in the analysis :

- political sector (PS = politicians SPD,  
PC = politicians CDU, PF = politicians FDP)
- administration (V)
- business enterprises (WU)
- trade associations (WV)
- trade unions (G)
- mass media (MM)
- science (WI)
- army (MI)
- cultural sector (K)
- others (S), e.g. church, justice

One of the relevant questions in our context required a balancing between stability and governability - attitudes which might be important in elections where there is a possibility of replacing the government by the opposition. The respective statement and answers were:

'Stability and continuity of political leadership are more important for the FRG than the opportunity for the opposition to remove the party in power'

The evaluation was given according to a six-point scale ranging from +3 (full agreement) to -3 (full rejection) without a zero value. The basic calculation shows the following distribution :

- |    |    |                |
|----|----|----------------|
| 1. | -3 | full rejection |
| 2. | -2 |                |
| 3. | -1 |                |
| 4. | +1 |                |
| 5. | +2 |                |
| 6. | +3 | full agreement |
| 9. |    | no response    |

VARIABLE : stability of political leadership

CATEGORY :	1	2	3	4	5	6	9
FREQUENCY:	367	365	332	302	210	132	45
PERCENT :	21.0	20.4	19.0	17.3	12.0	7.6	2.6

Divided up into the respective sectors one obtains the following means :

	<u>S</u>	<u>PS</u>	<u>PC</u>	<u>PF</u>	<u>V</u>	<u>WU</u>	<u>WV</u>	<u>G</u>
M	3.07	2.78	3.10	2.68	2.86	3.35	3.54	3.28
N	125	116	120	25	291	273	172	87
			<u>MM</u>	<u>WI</u>	<u>MI</u>	<u>K</u>		
M			2.55	2.91	3.61	2.42		
N			219	127	42	101		

M = mean, e.g. a mean of 3.07 corresponds to a -1 on the scale presented above, i.e. the question was rejected. N = number of respondents; missing values = 45 or 2.6%.

Synopsis for the political elite :

PE (PS+PC+PF)

M	2.85
N	261

The basic calculation shows that over 60% of the respondents rejected the question in this form and 41% in fact quite strongly, while only 36% of the respondents could agree with it, with 17.3% only slightly agreeing. The division into the individual elite sectors yields that all sectors rejected the question.

This statement can be seen as an attitude in favour of democratic procedures and party competition and hence emphasizes the importance of elections. According to the rationalistic paradigm - as will be outlined below in more

detail - politicians are self-interested office seekers, in no way altruistic and have no democratic ideals. But if the only route to office is through partisan election, then those seeking office or seeking to pursue their preferred policies must necessarily adhere to democratic procedures and principles in order to get elected or re-elected. As Katz (1986) points out, the current democratic party system is likely to be of great importance to those owing their position to it. Those who have gained power through general elections will not adopt other strategies and will continue to adhere to democratic norms <sup>16</sup>. Two other questions required an evaluation of interest groups in the FRG :

'In the long run democracy is only possible in the FRG if a strong political leadership disregards all group interests'

Basic calculation :

VARIABLE :	<u>no group interests</u>						
CATEGORY :	1	2	3	4	5	6	9
FREQUENCY:	337	241	264	281	191	200	30
PERCENT :	30.8	13.8	15.1	16.1	11.0	11.5	1.7

Means for the respective sectors:

	<u>S</u>	<u>PS</u>	<u>PC</u>	<u>PF</u>	<u>V</u>	<u>WU</u>	<u>WV</u>	<u>G</u>
M	3.06	2.48	3.52	2.64	2.75	3.66	3.44	2.13
N	126	122	121	25	293	274	174	87

	<u>MM</u>	<u>WI</u>	<u>MI</u>	<u>K</u>
M	2.62	3.13	2.88	2.07
N	221	127	42	102

missing values = 30 or 1.7%.

Synopsis for the political elite :

PE

M 2.88  
N 268

and

'In the FRG public welfare and the interests of all people are fundamentally endangered by constant claims and conflicts by interest groups'

Basic calculation :

VARIABLE :	<u>public welfare</u>						
CATEGORY :	1	2	3	4	5	6	9
FREQUENCY:	301	345	325	297	270	185	21
PERCENT :	17.3	19.8	18.6	17.0	15.5	10.6	1.2

Means for the respective sectors :

	<u>S</u>	<u>PS</u>	<u>PC</u>	<u>PF</u>	<u>V</u>	<u>WU</u>	<u>WV</u>	<u>G</u>
M	3.51	2.39	3.74	2.96	3.00	3.87	3.59	1.80
N	128	122	122	25	295	275	174	87

	<u>MM</u>	<u>WI</u>	<u>MI</u>	<u>K</u>
M	3.12	3.46	3.80	2.99
N	221	129	42	103

missing values = 21 or 1.2%

Synopsis for the political elite :

PE

M 3.03

N 269

As we can see, both statements were rejected, pointing to the importance of interest groups and their participation in the democratic process. On the whole a high evaluation of democratic procedures and principles can be stated. Elections as a control mechanism and as a directing instrument - mediated through both interest groups and the public - seem to have an important position in the politicians' perceptions. An orientation towards the voter, his assumed interests, and a pursuit of electoral politics seems to be a plausible hypothesis, as indicated especially by the next question regarding the elite perception of the electorate and the sanctions they have.

The respondents were asked to give their opinions on the topic of decreasing governability of Western democracies, i.e. whether it is an important or less important problem or does not exist at all. Then they were asked to elaborate on their responses to the previous question if it was an important problem for them ; 142 responses (7.8% of the valid responses) were that the problem of decreasing governability is: a result of party competition, dependence on the electoral cycle, short-term political solutions, the re-election constraint preventing adequate decisions, and small majorities. 54 responses (2.97%) mentioned the utopian claims and public expectations in general. Another 4 responses were referring to the public's high expectations emerging from election promises. So, in total, about 12% of the responses referred explicitly to the dependence of politicians on the electoral calendar and election promises. These answers were given to a large extent by the political elite, the administration, and - interestingly - business enterprises.

The statements clearly express the elite perception of the directing impact of elections and the necessity to pursue electoral policies in order to get (re-)elected. The competition for votes and the sanctioning possibility of the electorate may thus well lead to the directing 'cycle' as laid out above. In

order to examine the directing impact of elections on budgetary categories within the framework of our general research question, a necessary precondition is that politicians perceive some policy areas as useful instruments for obtaining political support. Public opinion data may help to indicate those policies of widespread popular concern. The two relevant questions in this context are : a) which policy issues enjoy high priorities among the population?, and b) are high priorities or concerns actually reflected in electoral behaviour?

A differentiated picture of issue salience was presented by Klingemann and Taylor (1978). The degree of importance was measured by a scale of zero to ten, i.e. from no importance at all to highest importance <sup>17</sup>.

#### Importance of Selected Problems for Voters, 1961-1976

Political problems	1976	1972	1969	1965	1961
	$\bar{x}$	$\bar{x}$	$\bar{x}$	$\bar{x}$	$\bar{x}$
Price stability	8.8	8.8	8.9	9.0	3.7
Better opportunities for education	6.9	6.6	7.2	5.5	5.9
Old age security	8.6	8.4	8.5	8.3	8.5
Law and order	7.5	7.7	8.2	7.7	7.6
Security from Russian aggression;	6.9	6.0	7.2	7.3	7.9
Good relations with the US;	6.2	6.3	7.0	7.0	7.1
Better relations with the Soviet Union;	5.2	6.2	6.3	6.7	6.5

If these data can be taken as indicators of the priorities of voters or potential voters, then it would not be surprising if price stability and old age security were taken into electoral considerations. The assessment of the importance of securing pension spending from the West German political elites themselves is very much in accordance with the results of

Klingemann and Taylor, and runs as follows:

	<u>PS</u>	<u>PC</u>	<u>PF</u>
M	7.50	7.51	7.32
N	122	123	25

M = mean; N = number of respondents; the degree of importance is also measured on a scale from zero to ten whereby zero means no importance and ten highest importance.

The hypothesis that old age security is likely to be taken into electoral considerations is based on a critical assumption, namely that priorities or concerns of the population are actually reflected in voting results and are perceived by politicians as being a useful instrument to enhance (re-)election chances. Only then is it rational for politicians to attempt to influence the election turn-out through budgetary policy. In this context the results of Klingemann and Taylor show that issues of highest salience have in fact the greatest impact on voting intentions<sup>18</sup>.

But, do governments use the budget to maintain or gain political support? Are elections and party competition crucial factors in determining policy outputs? The answers given by the political elites give us the impression that this might actually be the case. Our hypothesis would thus be that governments try to influence voters via particular budgetary decisions shortly before elections. A first answer may be derived by looking at the results of the already existing studies which try to explain the size and development of public expenditures, which is consequently the topic of our next two chapters.

## Notes Chapter II

<sup>1</sup> See Castles/Wildenmann 1986.

<sup>2</sup> See note 2 chapter 1.

- 3 Robertson, 1976:1.
- 4 Schumpeter, 1950:269.
- 5 Holden, 1974:157.
- 6 Sartori, 1973:124.
- 7 See Holden, 1974:66ff. In general Locke is seen as the 'founding father' of traditional democratic theory. 'In liberal democratic theory the people are given a negative role. This involves the people in little more than rather passively choosing between options presented to them. This is associated with the idea that the elected representatives have a greater knowledge than their constituents.... In radical democratic theory the people are given a positive role. The people actually initiate the policies. This involves the idea of representatives being closely controlled by their electors. In a word, they are delegates', Holden, 1974:69.
- 8 See Vogel/Nohlen/Schultze, 1971:4ff.
- 9 See Plamenatz, 1973:34ff.; Holden, 1974:159.
- 10 Dahl 1956, 1961, 1971; Bachrach 1967.
- 11 Dahl, 1970:143f.; Parry 1972; Agnoli/Brückner 1968; Lucas 1976.
- 12 See Kaase, 1983:226.
- 13 See Preusker 1979.
- 14 The response that Robertson suggests for party leaders is to satisfy their followers when an election is 'unwinnable' or 'unlosable', and to satisfy the voters when the election's outcome is in doubt. This means that competitiveness is not absolutely necessary for the party which has won a large majority in the past and vice versa. Not absolutely necessary means that the number of votes likely to be lost by taking up a position nearer to that of their followers is not thought to be worth the ideological sacrifice to prefer a more vote maximizing policy.

Vote maximizing implies taking up political positions that are best calculated to win elections. Stated briefly, Robertson's model requires vote maximizing by the party only when it is either necessary or advantageous. The prediction of this model is that parties' positions will be related to the previous or to the predicted voting strength for each party; cp. Robertson, 1976:140ff.

- 15 This project was conducted by R. Wildenmann/M. Kaase/U. Hoffmann-Lange and a research team of the University of Mannheim. All data are taken from Wildenmann et.al., 1982.
- 16 Katz 1980, 1986.
- 17 Klingemann/Taylor, 1978:129.
- 18 Klingemann/Taylor 1978; equally Eichenberg 1981.

### III. Determinants of policy outputs I

The next sections will deal first of all with the existing studies and research concepts which analyse the outputs of political systems and the determinants of this output. In this chapter the policy output studies, the incrementalist approach, and the concept of limited flexibility of public expenditures will be presented.

Although the policy output studies do not directly address the question we are most interested in, i.e. a direct relationship between elections, public expenditures and budgeting, it might be useful to know what kind of explanation for expenditure developments is put forward in these studies and how it relates to our research question. The incrementalist approach and the concept of limited flexibility entail concrete suggestions as to how budgetary decisions are made. The ideas of those studies are - contrary to the former ones - directly relevant for our study, and their explanation of expenditure developments will be contrasted with and tested against the rational choice approach later on.

#### A. Policy output studies

The analysis of public policy on the local, state and federal level has become rather popular in American political science over the last twenty years.

The theme of these studies is based on the following assumption: political systems produce different output, e.g. different levels of expenditures in different policy areas. It is assumed that the reasons for this fact are different political and/or socio-economic structural conditions. The very point in question now is, to find out the relative weight of political and socio-economic variables in order to explain the variations in policy output. A common frame of reference is becoming accepted in the field, and a rudimentary systems model has been employed in most of the recent comparative inquiry<sup>1</sup>.

The systems model, in its most simplified form, treats the political system as a dynamic interplay between inputs (demands and supports) from the environment. These inputs are transformed by political processes into some kind of

outputs (policies, symbols, services), which themselves have subsequent consequences (feedbacks) for inputs and the political process. Demands and supports enter the political system, which accommodates and converts these demands and supports into outputs, customarily termed 'policy'.

Since we are especially interested here in the role of political parties and their governmental activity, some studies will be presented which deal specifically with this question.

The landmark publication in this field appeared in 1963 and was conducted by Dawson and Robinson. The units of analysis were - like in almost all of the following studies - the American states. Dawson and Robinson analysed the relationship between party competition, socio-economic variables and certain aspects of state wealth, and expenditures for a variety of welfare related programmes. The socio-economic variables were conceived as 'rough cognates of the demands and supports posited in the systems model'<sup>2</sup>. The indicators of party competition were conceived as a part of the political sector, and the indicators of expenditure were used to reflect system outputs.

Dawson and Robinson proceeded from the hypothesis that the intensity of party competition would influence the state activities in the public welfare sector in such a way that the higher the intensity of party competition the higher welfare expenditures would be.

In the process of their inquiry, Dawson and Robinson questioned the relevance of interparty competition to public expenditures. They demonstrated that no apparent systematic relationship exists between interparty competition and the welfare orientation of the state and local public policies. They indeed found high correlations between interparty competition and levels of state and local expenditures in certain welfare related policies. But when they controlled for levels of urbanization, income, and industrialization, the competitiveness-spending correlation disappeared.

Up until then, it had always been taken for granted that party competition had a direct bearing upon the decisions of policy-makers within the states, and that 'public policy' was very much dependent on which party governs. So, the result of the Dawson and Robinson study had two consequences for subsequent research: - a body of literature has appeared to

replicate the approach of Dawson and Robinson; - and the attention given to socio-economic structures has increased.

But also most of the following studies have found that the variation in the level of state and local expenditures is more closely tied to variation in long-term effective social and economic variables such as industrialization, per capita income, and urbanization, than to political variables such as party competition and electoral participation<sup>3</sup>. Insofar outputs often seemed to be nothing else than the automatic product of modernization. In short, politics has come to appear as irrelevant.

The 'economic' point of view of these policy output models is not unchallenged, however. The findings have been criticized by subsequent research for several reasons, methodological as well as with regard to their contents<sup>4</sup>. A heated debate began which centred on the dichotomy 'politics does or does not matter'. One of the main arguments was that most of the studies have the American states as their basis; it was assumed that they draw a false conclusion as political parties have only a reduced function in the American two-party system, party competition being thus reduced to the competition between the two presidential candidates, which puts any generalization of the results in question.

Furthermore it was argued that in order to grasp fiscal effects of party competition for public expenditures, it was not sufficient to reduce political variables to the party-political orientation of the government; government activity has rather to be seen and analysed in the context of the interacting structures of the party system and the party-voter relation.

Also the ambiguity over the actual definition of 'policy' caused some problems in the treatment of particular variables as independent rather than dependent in the policy model.

One of the most critical points of the policy output studies is the measurement of output. Most studies work with relatively large areas of public expenditure which tend to be rather inflexible; thus, policy output is measured on an aggregate level which is too high to express policy priorities adequately.

In more recently published studies it is assumed that public policy conducted by the state is not merely a reflection of socio-economic factors, but is further shaped by political parties, i.e. that countries characterized by strong parties

should manifest significantly different policy configurations<sup>5</sup>. The debate on the relative importance of socio-economic and political factors in the determination of policy outputs has concentrated on the analysis of public expenditures and, in particular, on public expenditure on welfare. Most studies focus on factors like the strength of socialist parties, since such parties profess goals which are particularly relevant to public expenditure patterns, e.g. the extension of social service expenditures<sup>6</sup>. Some attention has also been paid to: a) the strength of parties of the Right as determinants of welfare outcomes<sup>7</sup>, b) competitive or coalescent elite behaviour patterns<sup>8</sup>, c) the link between political structure - conceived in terms of the diverse levels of political centralization in federal and unitary states, - and d) a variety of policy variables<sup>9</sup>. The primary goal of these latter studies was to provide some evidence that 'politics does matter'. But according to Castles, 'the focus on demonstrating whether or not politics matters obscured the need to examine a variety of causal sequences by which socio-economic and political factors might interact to determine expenditure patterns'<sup>10</sup>. Trying to go beyond the simple dichotomies of the 'politics matters' debate, he concludes from his analysis of the pattern of public expenditure that partisan control of government is a major determinant of policy outputs: 'What it does seem to imply is that the ideological preferences for greater or less state activity or greater or less welfare have a directing impact on the policies that parties pursue'<sup>11</sup>.

Interesting studies which go into the influence of politics on government activity in Germany are those of Schmidt (1978, 1980) and Treiber (1980), which show that differences in the formation of government can be seen in policy outputs. The basic idea of these studies is to find out whether results differ from those presented until now when one uses differentiated policy sectors.

Treiber maintains that: 'party political variations do not manifest themselves in the total output of (here) education policy but these variations can be recognized if we differentiate between expenditure categories within this area'<sup>12</sup>. She concludes that parties do restructure according to their priorities within the educational policy area, that parties' policies do differ, and politics matters<sup>13</sup>. In a further cross-national study, Schmidt (1982) reaches the conclusion

that politics always matters but with different degrees regarding different policy areas. This seems to indicate that future research results in this area will leave the too simple dichotomy behind and reach more complex and promising findings.

The results of the policy output studies in general point to an explicit conflict in the literature concerning the effects of political variables and especially party competition on the size and development of public expenditures. In this sense they do not provide us with any clear hints regarding the assumed synchronization of e.g. welfare expenditures with the electoral calendar. However, as all these studies try to explain long-term developments, it is important to note in this context that even if the long-term development of public expenditures is/might be largely determined by socio-economic factors, that does not mean that political considerations cannot have a considerable impact in the short-term political model which we will base our analysis on.

An important argument supporting the theory that political considerations might not have a direct effect in some of the above-mentioned studies was put forward by Schaefer and Rakoff (1970) and Schaefer (1972). Taking the systems model of the policy-making process as a starting point, they try to describe its shortcomings in that it suffers from its oversimplification of complex phenomena and political processes. They conclude that the systems model is neither an appropriate conceptualization of the policy-making process nor appropriate for the purpose of analysing the outputs of policy-making systems. The operationalization of the political system variables is too crude so that real sources of political variation cannot be explained by the model<sup>14</sup>.

#### **B. A budgetary perspective: the theory of incrementalism**

When explaining the determinants of public expenditures or public sector growth, three main types of long-term explanation have been expounded. Two of them have already been presented: the first mode of explanation puts the emphasis on the structural determinants, economic and demographic, of public expenditure and is resting on the primacy of these factors; the second refers to factors specific

to the political system, like party competition and the role of ideology. The third refers to the organizational setting within which public expenditure decisions are made <sup>15</sup>.

The importance of organizational factors is central to one approach to the problem of explaining public expenditure increases: the theory of budgetary incrementalism. Theories of budgeting have their origin in more general theoretical work on decision-making in complex organizations <sup>16</sup>. Individuals and organizations often lack factual and causal information that could facilitate calculation and the effectiveness of existing expenditure as well as the need for future spending. Budgeting therefore tends to be incremental in the sense that only small changes are made to existing programmes. Wildavsky (1979) - one of this theory's most influential advocates - sums up as follows: 'Budgets are almost never actively reviewed as a whole every year in the sense of considering the value of all existing programs as compared to all possible alternatives. Instead, this year's budget is based on last year's budget, with special attention given to a narrow range of increase or decrease' <sup>17</sup>. These tendencies are reinforced by political constraints: The various actors in the governmental/bureaucratic arena often disagree as to the goals of specific policies and to the priorities to be established among policies. Budgeting is therefore a process of negotiation over acceptable goals and priorities. Due to the range and complexity of government activities, budgeting is characterized by specialized and fragmented participation. This specialized nature leads to a problem of coordination. Budgeting is also constrained by time limitations as pointed out by Klein (1976): 'From the incrementalist perspective, it is the interaction between organizational routine and the inherited pattern of public expenditure that is the key - and the residual problem is to identify the economic, social and political factors which help to influence the gradual modification of the historical legacy' <sup>18</sup>.

The value of this approach is that it underlines the constraints within which public expenditure decisions are made and the limits of change. It is, however, not only the limits or constraints the decision-makers are confronted with that have an effect towards incrementalism. Each decisive spending decision in the annual budget is the result of previous policy with an often long-term commitment. In that

sense even formally fixed expenditures produce a tendency towards incremental changes, guaranteeing at the same time some continuity in public policy-making. But this approach also presents some problems. The most obvious one is to give some operational definition of 'incremental'. The second problem is to be sure that incrementalism is not just a function of the level of aggregation of expenditures relevant for the analysis. That means that even if total public allocations seem to increase incrementally, there may well be political and economic factors operating at a more disaggregated level which produce a completely different pattern. Moreover, it is by no means evident that organizational factors must necessarily lead to a strategy of 'muddling through' combined with incrementalism. Kristensen (1980), for example, also starts from an atomized decision-making process and emphasizes the importance of organizational processes, but reaches a completely different explanation of expenditure developments. He demonstrates that the logic of the political-bureaucratic decision-making process is the cause of public expenditure growth. By applying Olson's 'Logic of Collective Action', he investigated the consequences of that logic, i.e. the inherent structure of the process, for the overall size of government budgets. Kristensen concludes that atomized spending decisions are characterized by an asymmetrical decision-making process: 'the benefits of specific public programs are of private nature to public employees and their clients, while the costs are of collective nature. This implies that the 'spenders' always tend to be stronger than the 'cutters'<sup>19</sup>. Thus, the general tendency of bureaucrats - to ask for more money in relation to the programmes they are administering, and not only as a result of bureaucratic self-interest - is not endangered by institutionalized counterpressures. In that sense the decision-making process is asymmetrical and biased in favour of public expenditure growth.

However, in the incrementalist perspective final budgetary allocations are perceived as resulting from a number of atomized decisions made by the various participants in the governmental/bureaucratic system. A given structure of expenditures will only be marginally modified, i.e. gradually changed by the help of different allocations of growth rates but not reviewed as a whole. New budgetary requests with

high priorities have over-proportional growth rates or lead to additional expenditures. These decision-making routines lead to an increase in total allocation because of additional expenditures which are not counterweighted by cuts in other areas.

A description of the political setting in which German budgeting is carried out and a review of the formal budgetary cycle which might illustrate the presence of incremental change and fragmented decision-making on a theoretical as well as empirical level will follow in chapters V and VI. The apolitical nature of the budgeting process as assumed by the incrementalist school would seriously relativize the theory of 'electoral cycles', i.e. the assertion that public expenditures are influenced by time perspectives, the intensity of party competition, and re-election constraints. But the review of the German budgetary process and an assessment of the importance of organizational factors for budget preparations will show that the incrementalist approach does not hold true to the extent suggested in the literature, thus leaving enough room for the plausibility of emphasizing political factors for the development of annual budget plans. The incrementalist approach in general seems to underestimate such problems as an explicit conflict between ministries which might be more important than a conflict between savers and spenders in one area of policy-making. Moreover, the approach is a bit biased insofar as it rests on ongoing economic growth - a not very realistic assumption as we know.

### **C. Restrictions to active policy-making: limited flexibility**

A third group of studies relevant for our general research question concerning the determinants of policy outputs concentrates on several restrictions and limits of governments in the active shaping of policy commitments. As important restrictions are generally regarded the structural requirements of a capitalist system, the structure of the bureaucracy, and legally fixed expenditures<sup>20</sup>. This theoretical debate at the beginning of the 1970's has led to two basic empirical studies attempting to measure the actual extent of public expenditure flexibility<sup>21</sup>. The concept was operationalized by defining 'flexibility' as the scope of action of legislative and executive

organs to vary public expenditure according to size and purpose over time<sup>22</sup>. Both studies emphasize the frequency of negative growth rates as the important indicator of expenditure flexibility over time<sup>23</sup>. Maass (1973), for example, quantifies the restrictions governments are faced with as resulting from three sources: 1) political-sociological factors, i.e. generally accepted economic and social targets and political group interests; 2) economic-technical factors related to the economy's structure of production; and 3) material and legal factors such as legally fixed expenditures and long-term expenditure commitments<sup>24</sup>. Ewringmann (1975), on the other hand, emphasizes only the restrictions due to material and legal factors.

The results of both studies indicate that the dominance of political decision-making and the dependency on the individual situation are the most important characteristics of flexibility, i.e. a general rule of flexibility for government expenditures can hardly be deduced and a certain scope of action seems always to be present. Even a downward flexibility in the sense of expenditure cuts, such as in interest group dominated areas, are feasible and actually carried through. This result was confirmed by Treiber (1984)<sup>25</sup>. Our own results - presented in chapter VI - will also show that governments apparently do have the ability to actively shape policy commitments and use this scope of action to enhance their re-election chances.

### Notes Chapter III

<sup>1</sup> See Easton 1953; Dye 1966; Dawson/Robinson 1963.

<sup>2</sup> Hofferbert, 1974:144.

<sup>3</sup> See Rakoff/Schaefer, 1970:51.

<sup>4</sup> Hofferbert 1974; Godwin/Shepard 1976; Lewis-Beck 1977; Hibbs 1977; Cameron 1978; Castles/McKinlay 1979; Kristensen 1980; Treiber 1980; Schmidt 1978, 1980, 1982; Castles 1982.

<sup>5</sup> 'Using political variables in this manner is inconsistent with those models of representative government which view representation as a process through which the demands of the citizens are linked to policy outputs. Political process attributes should be viewed as determinants... but as modifying variables which either facilitate or inhibit the accurate translation of demands into outputs, i.e. as mediational', Goodwin/Shepard, 1976:1129.

<sup>6</sup> Hewitt 1977.

<sup>7</sup> Castles/McKinlay 1979.

<sup>8</sup> Peters 1978.

<sup>9</sup> Cameron 1978.

<sup>10</sup> Castles, 1982:25

<sup>11</sup> Castles, 1982:88.

<sup>12</sup> Treiber, 1980:3.

<sup>13</sup> Treiber, 1980:14. So far the 'party control does matter' hypothesis is almost exclusively related to public expenditures in general and welfare expenditures in particular. But in some studies it is also used in the context of the analysis of the determinants of the observed variation in macro-economic outcomes in Western democracies. It has been argued that the partisan composition of governments is one of the most important factors accounting for differences in economic policy and macro-economic outcomes; see Hibbs 1977; Tufte 1978; von Beyme 1981.

This line of reasoning is by no means supported by all analysts. In his recent study on the basis of 21 OECD countries, Schmidt seriously modified this conclusion. What seems to emerge from the analysis is a pattern of selective and partial political control of the economy without a clear-cut dividing line between bourgeois and left-wing governments; see Schmidt, 1982:159.

<sup>14</sup> Schaefer/Rakoff, 1970:59ff.; Schaefer, 1972:271.

<sup>15</sup> See Klein 1976; Kristensen 1980.

16 See Eichenberg 1981

17 Wildavsky, 1979:15.

18 Klein, 1976:409.

19 Kristensen, 1980:249.

20 In the following we concentrate on external restrictions, i.e. political and economic restrictions, and not on internal restrictions related to the preparation and implementation of policy programmes; in this context see Mayntz/Scharpf 1973; Ronge/Schmieg 1971; Treiber 1984.

21 Maass 1973; Ewringmann 1975.

22 See Maass, 1973:13.

23 Maass, 1973:55; Ewringmann, 1975:53.

24 Maass, 1973:80ff.

25 Treiber, 1984:112 'Zusammenfassend können wir festhalten, daß sich die Behauptung mangelnder 'Flexibilität nach unten'... keinesfalls aufrechterhalten läßt'.

#### IV. Determinants of policy outputs II

The studies of Maass and Ewringmann pointed out that the government's deliberate influence in the course of the economy is restricted due to limited flexibility of public expenditure. At the same time, however, both studies emphasize that governments have realized the importance of electorally appealing expenditure categories and systematically try to influence them.

The purpose of this chapter is to consider the second set of studies which analyse the determinants of policy outputs: the studies within the 'New Political Economy'. In principle, these studies underline as well the 'politics does matter' hypothesis of the policy output studies but are operationalized quite differently as they refer to a different theoretical conception, namely the rational choice approach.

##### A. General elements of the rational choice approach

Each analysis, each conceptual formation makes use of limited data collections, shortened problem definitions and selective recording of reality. This is the only way for research and theory formation to come to terms with the multitude and complexity of available data. The logic of the research process has led to specialization and differentiation of research fields which attempt to analyse from different aspects the same object of inquiry. In other words, empirical and normative approaches are characterized by a high degree of variation in order to contribute to a cumulative growth of knowledge and meaningful general explanations.

With respect to research into parties and party competition, that process of differentiation has led to the adoption of a paradigmatic way of thinking which will be used in this study: the intentional action paradigm or more precisely the rational choice approach, which is the main development of the intentional action paradigm. 'Rational choice' when used by social scientists is usually defined as an action that can be defended by reasoned argument and is directed towards some goal, whereby the choice is considered as being likely to lead to the attainment of the goal in question. The reasoned arguments to justify the choice are generally restricted to

those establishing its utility<sup>1</sup>. Rationality is seen as a 'procedural norm' in a defined means-end-context. That means that a decision is a deliberate choice between alternative possibilities, with the goal to find the seemingly most favourable alternative and make it the basis for action. An assessment of possible consequences of the relevant alternatives is done with the help of a decision-based criterion. The choice of an optimal strategy requires balancing the possible advantages/disadvantages against maximal goal attainments. On the very important condition that such utilities can be established, this restriction of rationality to the means-end relationship 'increases our understanding and predictive capability'<sup>2</sup>.

This formal principle of rationality is modified with the help of different 'homines rationales' which express in this ideal form specific assumptions about human behaviour: this is the 'homo oeconomicus' of traditional economics and the 'homo politicus' of Anthony Downs. This 'homo politicus', or, in this context, a political decision-maker, acts rationally if he maximizes his political profit within the given structure of decisions. The operationalization of this political 'profit maximization' varies: for Downs (1957), the possession of office is the most essential element, while Budge (1982) postulates that politicians put preferred policies above office: 'Given the poor overall fit between office-seeking models and the actual behaviour of parties in government, the obvious way to build a new and more satisfactory theory is to turn the original formulation on its head, and give primacy to policy considerations'<sup>3</sup>.

As stated earlier, the basic unit of the rationalistic approach is the goal-oriented rational actor. This rationality implies that in attempting to further their goals, actors always try to maximize their attainment with minimum expenditure of resources.

One of the political phenomena to which rational choice models have been most consistently applied is party competition. The concept of party competition has its roots in a market model of democracy which has power-seeking elites in view, competing in order to govern with the public consent<sup>4</sup>. The pace was set, however, by Schumpeter (1950) in his famous definition: 'A party is not... a group of men who intend to promote public welfare upon some principle on

which they all agreed... A party is a group whose members propose to act in concert in the competitive struggle for political power' <sup>5</sup>. The definition given by Downs is very much in accordance with Schumpeter's definition given above: 'a political party is a team of men seeking to control the governing apparatus by gaining office in a duly constituted election. By team, we mean a coalition whose members agree on all their goals instead of on just part of them' <sup>6</sup>. On the whole, simplifying assumptions regarding the nature of actors, the goals they pursue and the environment in which they operate are posited. Many of these assumptions were later relaxed to obtain a closer fit with reality.

## B. Econometric and politico-economic models

As stated above, the purpose of this chapter is to consider the second set of studies which analyse the determinants of policy outputs: the studies within the 'New Political Economy'. Theoretically they are based on an understanding of democracy, which primarily goes back to Anthony Downs (1957); methodologically the overwhelming part is based on multivariate regression analysis - and only occasionally on other statistical techniques like time series and spectral analysis <sup>7</sup> - and uses aggregate data on actual voting results, government popularity, and economic developments to explain voter and government behaviour. In this context the existence of so-called 'electoral cycles' is asserted, i.e. a systematic fluctuation in economic time series in combination with elections. As the advocates of the New Political Economy assert a strict relationship between electoral cycles and government expenditures for Western democracies, a detailed presentation will be given of the electoral and popularity cycle theory. One of the main implications of these studies which is relevant in our context is that government behaviour is determined by national elections and government expenditures are dominated by electoral cycles. The characteristic fluctuations of market economy systems are no longer seen as a consequence of the economic process of production but arise due to fiscal policy interventions of the state. These theories do not adopt the monetarist position that the reason for a lack of stability lies in a misbehaviour of the state, but they hold

the position of a political destabilization with the explicit assumption that the state has sufficient fiscal policy means and uses them adequately for the respective goal attainment<sup>8</sup>. The 'terminus technicus' for this explanation of business fluctuations is 'political-business cycle'. While business cycles were originally explained primarily in economic terms and federal economic policy had to stabilize economic developments, it is now regarded as being the cause of economic instabilities. More and more political factors are included in the explanation of these cycles. Within the New Political Economy, business cycles are explained neither in a monetarist way nor in the Marxist perspective<sup>9</sup>, but the state is regarded as being able to control the economy. Even in this case political business cycles will arise or existing ones will not be removed as they are in the interest of governments and are therefore initiated deliberately and consciously.

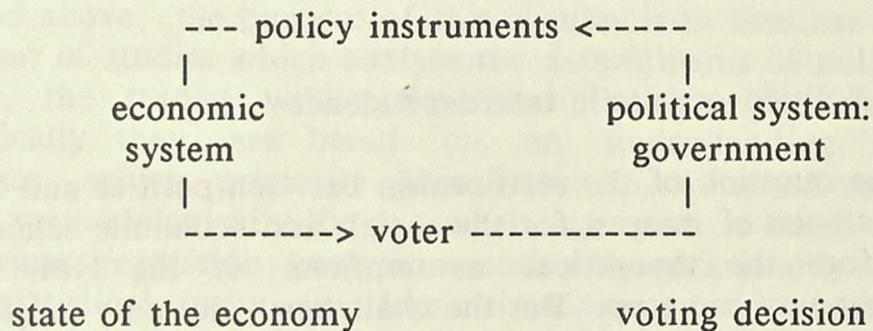
### 1. Politico-economic interdependence

The question of the relationship between politics and economy has been of interest for the social and economic sciences long before the theoretical assumptions of the New Political Economy came up. But the challenge - not only existing since Keynes - to clarify the relationship between economy and political action has not been addressed for a long time. According to H. Abromeit (1976), this was due to the scientific predominance of the theory of pluralism, which postulated a harmonious conception of a balanced interdependence<sup>10</sup>. New impulses came, especially in Germany, from the debate concerning the possibilities and limits of federal planning<sup>11</sup>. Both Systems theory<sup>12</sup> as well as Marxism<sup>13</sup> tried to develop an approach to explain the mutual penetration of political and economic processes. Marxist as well as non-Marxist authors agree at least on the point that there exists an interdependence between economy and politics in capitalist market economy industrial societies; the point in question, however, is the extent of this interdependence.

The studies of politico-economic interdependence, which can primarily be traced back to A. Downs, have to be seen as an essential further development and a consolidation of the main

assumptions of the New Political Economy <sup>14</sup>. The studies stress the interacting links between the political and economic sector in highly industrialized Western democracies: 'Models of politico-economic interdependence are understood here as formalized and empirically oriented analyses in which the economic and the political sectors of society are interrelated by interaction equations describing how the economic sector influences the political one, and how the political sector influences the economic one' <sup>15</sup>. As economic decisions are partly determined by political influences and political decisions depend on economic factors, the mutual influence is of main interest.

Figure 1: Basic outline of a politico-economic model <sup>16</sup>



Frey and Schneider (1975) classify politico-economic models according to the following main areas of study <sup>17</sup>:

1. Party competition
2. Popularity and election functions
3. Reaction functions
4. Partial politico-economic models
5. Models of total politico-economic interdependence

The studies on party competition go back to Hotelling (1929) and Downs (1957) and have already been discussed. Popularity and election functions describe the relationship between economic variables and actual election results or popularity figures of parties and the government. They do not take the governmental reaction to actual or expected changes into consideration. But although both functions are presented by

Frey and Schneider under one heading, they are by no means identical as will become clearer later on. Reaction functions on the other hand stress the opposite loop of this interdependence: the attempts of governments to influence the economy according to their own interests. Taking together popularity or election functions and government reactions, we get a closed politico-economic cycle with a complete loop of interdependence between the political and economic sector, either in the form of a partial politico-economic model or in the form of a model of total politico-economic interdependence. These models will be investigated more closely in a later section of this chapter.

## 2. The relationship between political and economic variables

Before discussing theories and models of electoral and popularity cycles, a short presentation will be given concerning the results of research on vote and popularity functions. This is necessary as these studies constitute the basis of those political business cycle models which will be dealt with later on. The pioneer study of econometric estimations of the effects of economic issues on voting behaviour was Kramer's analysis of changes in congressional election results in the US between 1896 and 1964 (Kramer 1971). His null hypothesis was that fluctuations in the percentage change in real and nominal per capita income, prices, and simple changes in unemployment rates during the year prior to an election were all uncorrelated to the parties' shares of popular votes. His results indicated a significant, positive relationship only between percentage changes in real income in the year prior to the congressional election and the share of votes of the incumbent party. His results with respect to fluctuations in the price level were mixed, and the change in the unemployment variable was not found to be significant.

Stigler (1973) refuted Kramer's overall findings 'not only by welcoming the lack of effect from fluctuations in unemployment but also by trying to demonstrate that no economic variable influenced vote'<sup>18</sup>. He used almost the same equation as Kramer, but the economic variables were lagged by two years and not by one as in Kramer's study.

Arcelus and Meltzer's model differed from the previous

studies by permitting the voter to abstain and using slightly different measures of changes in the economic variables<sup>19</sup>. After these changes, none of the economic variables (with the possible exception of inflation) affect neither the participation rate in congressional elections nor the relative strengths of the two parties: 'Neither our model of rational behaviour nor the evidence implies that voters respond to short-term changes in employment or real income by voting for, or against, the party in power'<sup>20</sup>.

Goodman and Kramer (1975) reanalysed the Arcelus/Meltzer model and confirmed the basic findings of Kramer's study suggesting that all three economic variables influence congressional elections, and that 'Arcelus and Meltzer's nonfindings on income and employment can be attributed to the problem with their data and methods'<sup>21</sup>.

Bloom and Price (1975) developed a model which assumed the existence of asymmetric effects of prosperity and recession. Their results showed that declining real income adversely affected the party in power, while rising real income was of no particular benefit to them. They supported an asymmetrical version of Kramer's original model and demonstrated that Stigler's model of averaging the percentage change in income during the two years preceding each election dilutes the apparent importance of income change in the year directly preceding each election. They concluded that 'voters primarily consider economic conditions which occur the year immediately preceding each election,... and the contradictory findings of Arcelus and Meltzer and Stigler can be explained by problems in their methodologies'<sup>22</sup>.

Recent studies of the impact of aggregate economic variables on either voting or government popularity in the US conducted by Frey and Schneider (1978,1980) and Schneider (1978) show that inflation, unemployment, and the growth rate of disposable real income exert a systematic influence upon government popularity.

In summary, of the studies presented here, Kramer (1971), Stigler (1973), Arcelus and Meltzer (1975), and Bloom and Price (1975) did not find that unemployment had important effects on election outcomes, while Goodman and Kramer (1975), Frey and Schneider (1978, 1980), and Schneider (1978) found unemployment rates to have significant effects. The important point here is that the basis on which political

business cycle models rest (e.g. the models of Nordhaus (1975) and MacRae (1977)) find mixed support within the econometric studies themselves.

The best way to further clarify the question of the robustness of vote or popularity functions might be to look at the results in other countries. Research in this area has also been carried out in Britain, starting with the article by Goodhart and Bhansali in 1970. The authors used monthly popularity series for parties and party leaders from 1947 to 1968. They formed the hypothesis that the popularity of the two parties would be largely determined by two sets of factors: domestic economic conditions (measured by unemployment and inflation) and a regular inter-election swing in party popularity. They found that these two sets of factors were able to explain a large proportion of the variations in the poll series: 'Indeed, the apparent sensitivity of political popularity to economic conditions, as shown by the equations, seems almost too much to credit' <sup>23</sup>.

Frey and Garbers (1971) made a number of technical criticisms of the Goodhart and Bhansali paper, arguing that the existence of a correlation between unemployment and popularity does not indicate which variable causes the other <sup>24</sup>. Their second argument is that the popularity series could be adequately represented simply as an autoregressive process <sup>25</sup>.

Miller and Mackie (1973) presented an alternative explanation in this context: 'When two series are correlated either may indeed cause the other, but a third explanation is that they are both dependent on some third variable. Cyclical patterns in both popularity and unemployment can account for the correlation between them and also for the autoregressive nature of the popularity series' <sup>26</sup>. Their results confirm a basic asymmetry of government and opposition shares of the poll, i.e. a cyclical nature of government popularity contrasted with a non-cyclical nature of opposition popularity. Consequently any economic variable which follows an electoral cycle will correlate with government popularity: 'When the electoral cyclical component is removed from the government popularity series, none of our performance measures added much to the prediction of popularity, though collectively they explained about a third of the remaining variation' <sup>27</sup>.

Frey and Schneider (1978,1982) may be cited as providing some evidence that voting intentions in Britain are systematically influenced by key economic indicators.

Whiteley (1980,1986) and Pissarides (1980) found no significant relationship between change in economic variables and electoral support or when trying to forecast movements in government popularity outside the sample period.

For the Scandinavian countries Madson (1980) found mixed results. The fluctuations in the vote share for Swedish incumbent parties are consistent with the proposition that the electorate responds to changing economic conditions; the Danish and Norwegian electorates have shown little or no systematic response to changes in economic conditions as measured by aggregate indices.

For France the conclusion drawn by Kramer et. al. is confirmed by Rosa (1980) and Lafay (1981), for Japan by Inoguchi (1980). For Germany Kirchgässner (1976), Schneider (1978), and Frey and Schneider (1979,1980,1982) emphasize the influence of the unemployment and inflation rate and the growth rate of real disposable income on voting intentions, while Rattinger (1980), Rattinger and Puschner (1982), and Schmidt (1983) refute the assumed relationship.

Paldam (1981) notes that economic indicators on average explain around one-third of the variations in party popularities or voting intentions, and that the main drawback of the models on vote and popularity functions is their lack of stability. Moreover, the distinction between party popularities, voting intentions, and actual voting results is often not clear enough, and correlations are generalized from one to the other. The discrepancies among the studies presented here do not allow for the conclusion that economic variables are the determining factors for voting behaviour. This implies at the same time that the basis of political business cycle models is not a particularly strong one. Our suggestion would be that only variables that directly affect a voter's economic well-being (e.g. real disposable income) should enter the equation instead of a combination of those with other general variables such as unemployment or inflation. This suggestion is deduced from our own results which will be presented in chapter VI.

The studies published since 1983 (e.g. Kirchgässner 1983, Norpoth and Yantek 1983, Schmidt 1983, Schneider and Frey

1984, Whiteley 1986) have not shed any more light on this controversy. Central for the present debate seems to be the question of methodology, i.e. the appropriate statistical techniques which become more and more sophisticated. Hopefully this will not lead to a situation where the results are predetermined by the choice of even this 'appropriate' technique.

### 3. 'Electoral cycles' and macro-economic policy

From the beginning of the 70's a rapidly growing body of literature has discussed the party-political and electoral character of economic policy measures. The discussion may have originated as a result of increased steering functions of the state as well as the far-reaching economic and political changes, e.g. much lower growth rates and higher and persistent unemployment and inflation figures. Since Kramer's paper in 1971 the assertion of a direct relationship between electoral politics, economic policy, and political and economic developments has again and again been made. The formulated hypotheses sound simple and at the same time plausible: politicians either try to win elections or try to secure re-election; the election outcome is largely determined by economic factors; the voter punishes or rewards the government according to its economic performance, and politicians can increase their re-election chances with a good economic situation - i.e. high growth rates and full employment - just before an election. The basic idea is that voters react to economic conditions and hold the government responsible for their development. This responsibility hypothesis is often taken as the logical outcome of Downs' theory of rational behaviour <sup>28</sup>.

Because of a different way of looking at the economic sector, electoral cycle studies can be divided into two groups: a) the development within the economic sector is described by single indicators, usually unemployment and inflation, and their optimal combination on the so-called Phillips curve <sup>29</sup>: 'These models analyse the complete loop of interdependence between the political and economic sectors but are partial with respect to the economic system in which only one aspect - typically a trade-off between competing variables - is

considered' <sup>30</sup>, b) the economy as a whole is studied in its interrelationship with the political sector; in these studies popularity data are used instead of actual election results.

The most essential presupposition for influencing the economy in a pro-cyclical way is the assumed perception of politicians that: '... the pre-election economic tactics of some incumbent governments.. reflect the political assessment that the electorate as a whole possesses a steep economic-dose-political response curve' <sup>31</sup>. What they are attempting to measure is, of course, short-run economic development. According to Paldam (1981), 'the distinction between the short and the long-run is close to that between swing and core voters' <sup>32</sup>. The floating voter concept implies that such voters are not influenced by party identification and party ideologies; their voting is primarily related to economic conditions. Moreover, it is assumed that the group of floating voters is large enough to be decisive for the election outcome. The mechanism producing electoral cycles can be described in the following way: at the beginning of an electoral period, governments pursue a consciously restrictive policy and/or unpopular policy measures in order to attain such a good economic situation at the end of the electoral period that the majority of voters will reward the government for its good economic performance shortly before the election. This assumption has been modified in the meantime in that most of the recent studies emphasize a punishment for bad economic performance whereas a good performance is not necessarily rewarded by the electorate (Jung 1985).

Politico-economic models of government behaviour can be divided into models of optimal government behaviour as developed by Nordhaus (1975) and MacRae (1977) and models of actual government behaviour as for example developed by Frey and Schneider (1979). Models of optimal government behaviour describe the optimal run of the economy, where the development of the target variables, mostly inflation and unemployment, is explained. Models of actual government behaviour describe the interventions of governments with the help of reaction functions. In these studies a description and explanation of instrumental variables, like public expenditures, is intended. In the following we will briefly describe four of the most influential studies in this area.

Nordhaus (1975) developed the first formal model for the

theory of electoral cycles. It consists of a long-run equilibrium and a short-run model, whereby political business cycles are formulated only for the short-run version. The choice or trade-off between inflation and unemployment over time is investigated because 'some recent investigations of voter behaviour indicate that voters are sensitive to both these variables in their electoral choice'<sup>33</sup>. He distinguishes between an economic and political sector: the economic sector is characterized by a dynamic relation between inflation and unemployment, as it is 'conventional macroeconomic wisdom' that there exists a short-run trade-off between these two variables.

The political sector is characterized by periodic voting between two alternative political parties. Individual voting behaviour proceeds as follows: 'At time  $t$ , each voter compares the economic performance of incumbents during the last electoral period ... with the voter's subjective standard for performance ... If the incumbent did better than the standard, the individual votes for the incumbent; if the incumbent did worse than the standard, he votes for the opposition'<sup>34</sup>. The subjective standard of performance is determined by the expected performance of the party in power. The voters are assumed 'to have well-behaved ordinal preference orderings over economic variables'<sup>35</sup>. In the short-run model voters do not take averages of economic variables over the last election period, but have a decaying memory of past events. It is assumed that the government knows the preferences of the voters perfectly and 'therefore chooses economic policies during its incumbency which maximize its plurality at the next election'<sup>36</sup>. The political business cycle itself is described by Nordhaus as follows: 'Immediately after an election the victor will raise unemployment to some relatively high level in order to combat inflation. As elections approach, the unemployment rate will be lowered until, on election eve, the unemployment rate will be lowered to the purely myopic point'<sup>37</sup>. Due to the assumptions, the cycle maintains itself.

In order to find some historical evidence for his macro-economic policy-making model, Nordhaus tests his theory with annual data on unemployment rates for nine countries from 1947 to 1972. His explicit assumption is that during an electoral period, the unemployment rate should rise in the first two years and fall in the second two years. His

results show that 'for three countries - Germany, New Zealand and the United States - the coincidence of business and political cycles is very marked' <sup>38</sup>. For Germany he cites in five cases a falling unemployment rate before elections and for no election a rising unemployment rate. After the elections, the unemployment rate rises and falls in two cases respectively. On the whole, he obtains for Germany seven cases which conform with the theory and two cases which do not conform <sup>39</sup>.

It is unclear, however, which elections from 1949 to 1972 have been taken into consideration. Moreover, only a simultaneous development of both indicators - unemployment and inflation - could be taken as sufficient empirical evidence. Dinkel (1977) reviewed and criticized the results obtained by Nordhaus and stated that this simultaneous development has never occurred in Germany <sup>40</sup>.

Our own results concerning the development of unemployment and inflation figures in West Germany will be presented in the context of the general discussion on the difficulties of corroborating the existence of electoral cycles in section B.4 of this chapter. A more detailed theoretical critique of the Nordhaus model will follow at the end of this chapter together with a general critique of electoral cycle models, as many crucial elements of this model will come up again in the models which we will deal with now.

In 1977 MacRae developed a model of a political business cycle which is similar to Nordhaus' short-run model. Once again the economic sector is characterized by a dynamic trade-off between unemployment and inflation. The possible combinations of current unemployment and inflation in the short-run trade-off are determined by past inflation. Expansionary policy can reduce unemployment, but only at the expense of increasing inflation; whereas price stability can be achieved by a restrictive policy, but only at the sacrifice of full employment. But there is a possibility of trading off temporarily low inflation and low unemployment in one year for temporarily high inflation and unemployment in the preceding year.

The political sector and the goal of government in MacRae's model differ from Nordhaus' conception. The main objective of the party in power is still to secure its re-election, which means to satisfy the desires of the electorate. The higher the

inflation and unemployment rate during the electoral period, the higher will be the number of votes against the government. The goal of the government is not to maximize votes, but 'in any year of the election period the problem of the government is to minimize the vote loss from inflation and unemployment during the remaining years of the period' <sup>41</sup>. This means that the government not only tries to minimize the vote loss function in an election year but over the whole period.

One of the critical points of this conception of a total vote loss minimizing behaviour of the government during an election period is that it implies a vote lead for a government after the election, which decreases 'cyclically' and cannot be regained later. This means, the higher inflation and/or unemployment figures, the more votes are lost. Why, then, should the government even attempt to induce such a cycle?

In order to provide some evidence of his politically motivated business cycle, MacRae examines data on inflation and unemployment in the US during four presidential election periods from 1957 to 1972. He finds that two governments follow the pattern and two do not. MacRae's interpretation as well as that of Nordhaus ignore the problems of the empirical relevance of the Phillips curve and of the assumed consistency of their macro-economic indicators over time for voting behaviour. But we will come back to these points later on.

One of the most cited studies in this field is Tufte's of 1978. Tufte also seeks to demonstrate the existence of an electoral-economic cycle: 'While it (the government) cannot always dilute the consequences of exogeneous shocks, reduce unemployment or inflation below certain levels, or protect its citizens from the vicissitudes of world markets, the government's control over spending, taxes, transfers, money stock, and the like enables it to direct the short-run course of the economy to a significant degree' <sup>42</sup>. It is obvious for Tufte that incumbent politicians desire re-election and that they believe that a booming pre-election economy will help to achieve it. He takes it as a 'political commonplace' that economic performance affects the electoral fate of the government.

The politicians' economic theory of elections <sup>43</sup> emphasizes the impact of short-run economic shifts on election outcomes. Taking the significant effect of economic events in the

months before elections as a given, Tufte suggests that fluctuations in real disposable income might be a good aggregate indicator of pre-election stimulation of the economy. He concludes that 'during the Truman, Kennedy, Johnson, Nixon, and Ford administrations, the short-run growth in real disposable income per capita tended to swing up in election years and drop down in odd-numbered years' <sup>44</sup>. For the US he finds an electoral-economic cycle from 1948 to 1976 which consists of: a) a two-year cycle in the growth of real disposable income per capita, and b) a four-year cycle in the unemployment rate. Then Tufte enters into the 'old' question of the policy output studies, regarding the relationship between political parties and macro-economic outcomes and emphasizes these elements as an initiating cause for electoral cycles: 'Political parties differ on what they consider desirable economic policy. Parties of the Right favor low rates of taxation and inflation along with modest and balanced government budgets, oppose income equalization, and will trade greater unemployment for less inflation most of the time. Parties of the Left, in contrast, favor income equalization and lower unemployment, larger government budgets, and will accept increased rates of inflation in order to reduce unemployment. Such differences between Left and Right appear in country after country' <sup>45</sup>.

But there is no concrete formulation of the interaction between electoral cycles and partisan specific economic policy in Tufte's work. He merely notes that the content and timing of macro-economic policy is influenced by a) the state of the economy itself, b) the political-economic ideology of the governing party, and c) the electoral calendar <sup>46</sup>. Taking these elements into account would imply that different electoral cycles might be expected, but Tufte discusses in general only the role of ideology and party priorities. The conclusion of his study is that 'the effect (of short-run changes in real disposable income) is a strong and persistent one, statistically secure and politically significant. There is no doubt why politicians have come to believe that short-run economic performance has so much to do with deciding their tenure in office' <sup>47</sup>.

Kirchgässner (1976), however, investigates this particular development of electoral cycles, i.e. the development of a vote-maximizing electoral cycle as well as an ideology-

maximizing electoral cycle of Left and Right government parties. This means that the structure of political business cycles is dependent on different assumptions about government behaviour. The specifications are explained with the help of simulation results. The actors involved in the politico-economic model are: a) the voters, who judge government performance during the election period with respect to their own utility conceptions (Kirchgässner adopts, like MacRae, a quadratic loss function); b) the government, either trying to maximize its vote share at the next election or trying to maximize its ideology with a re-election constraint. As long as re-election is not endangered, the government will try to pursue its ideology. Starting point is a two-party system with a (social-democratic) party of the Left and a (conservative) party of the Right. For parties of the Left, the primary goal to attain is full employment whereas parties of the Right primarily seek to attain price stability; c) the economic sector, again characterized by a modified Phillips curve.

Optimal government behaviour in the case of a vote-maximizing strategy induces a political business cycle of the Nordhaus variety. The models of different political business cycles for governments of the Left or Right imply a different development of the unemployment rate, inflation rate, and public expenditures due to the party political colour of the incumbent party. The exact course of the cycles, however, depends on the assumed lag-structure of the effects of public expenditures on inflation and unemployment. The respective cycles have the following development: governments of the Left will raise public expenditures immediately after the election in order to combat unemployment which is highest in the post-election year. The resulting inflationary tendencies lead to a restrictive policy and lower public expenditures in the middle to the end of the electoral period. These restrictive measures become effective only with a two-year's time-lag. The election year itself is characterized by a lower inflation rate, low public expenditures, and a slightly increasing unemployment rate. Governments of the Right, on the other hand, seek to attain a low inflation rate immediately after the election and pursue a restrictive policy in the beginning of the electoral period. The increased unemployment figures are lowered due to an expansive policy

in the middle of the electoral period, which shows effect shortly before elections <sup>48</sup>.

The important point of Kirchgässner's study is the different development of electoral cycles as soon as the hypothesis about different ideological goals of governments is taken into account. This means that it is not possible to equate the cycle postulated by Nordhaus with *the* political business cycle.

#### 4. The difficulty of corroborating the existence of 'electoral cycles'

In this section the literature on electoral cycles will be discussed in the light of empirical findings. The explanation of such cycles is primarily based on the maximizing behaviour of governments aiming at re-election. A dynamic economic model is assumed, steered by a policy which maximizes a specified vote function. Two of the main variables specified for vote functions are, as we have seen, inflation and unemployment.

##### 4.1. Various countries

Systematic studies of electoral cycles start with the Nordhaus model where unemployment is minimized shortly before elections while inflation is high. In MacRae's quadratic version both unemployment and inflation are at a minimum just before elections.

In order to test the stability of these results various studies have been carried out for a number of countries. With regard to Nordhaus' results, Paldam (1981a) argues: 'For the whole OECD-area there is a clear downward trend in unemployment between 1947 and 1972, and, when this is taken into consideration, the total results for all Nordhaus' data appear rather weak' <sup>49</sup>. Schmidt (1983) analysed the relationship between political business cycles and the electoral calendar for ten OECD-countries and found no evidence for a synchronization <sup>50</sup>. Paldam's study of 1979 covers current growth, real growth, and growth in implicit price deflators for eight main national account series for seventeen

OECD-countries from 1948 to 1975. His results show that it was not possible to find an election year effect in the data <sup>51</sup>.

For the US more evidence is provided by Tufte (1978) and Frey (1978) but recent studies of Monroe (1979), Golden and Poterba (1980), and Beck (1982) cast substantial doubt on the importance and even the existence of the political business cycle as an explanation of macro-economic policy in the US. For France and the UK, Monroe (1980), Alt and Chrystal (1978), and Alt (1980) confirm the lack of any clearly recurring evidence for the existence of electoral cycles. For Germany, Dinkel (1977), Freyer (1978,1980), Freyer and Widmaier (1979), and Dinkel and Lenk (1979) reach rather negative conclusions as well. Austria has been analysed by Hubka and Obermann (1977) who find significant signs, while for example Breuss (1979) finds very weak signs of a cycle. From Israel a strong cycle has been reported by Ben-Porath (1975).

In summary, until now no unequivocal indications could be found for electoral cycles as measured by the development of macro-economic indicators over time. An interesting point in this context is that even when the same data bases are used, different results can be obtained due to different methods of analysis <sup>52</sup>. But on the whole even different analytical methods do not yield more obvious results concerning the existence of electoral cycles in this form.

Some attempts have been made to prove the existence of electoral cycles with the help of direct indicators, i.e. the number of social policy laws or subsidies; these studies will be dealt with in chapters V and VI of this study in the context of our own analysis of the relationship between policy outputs and election dates.

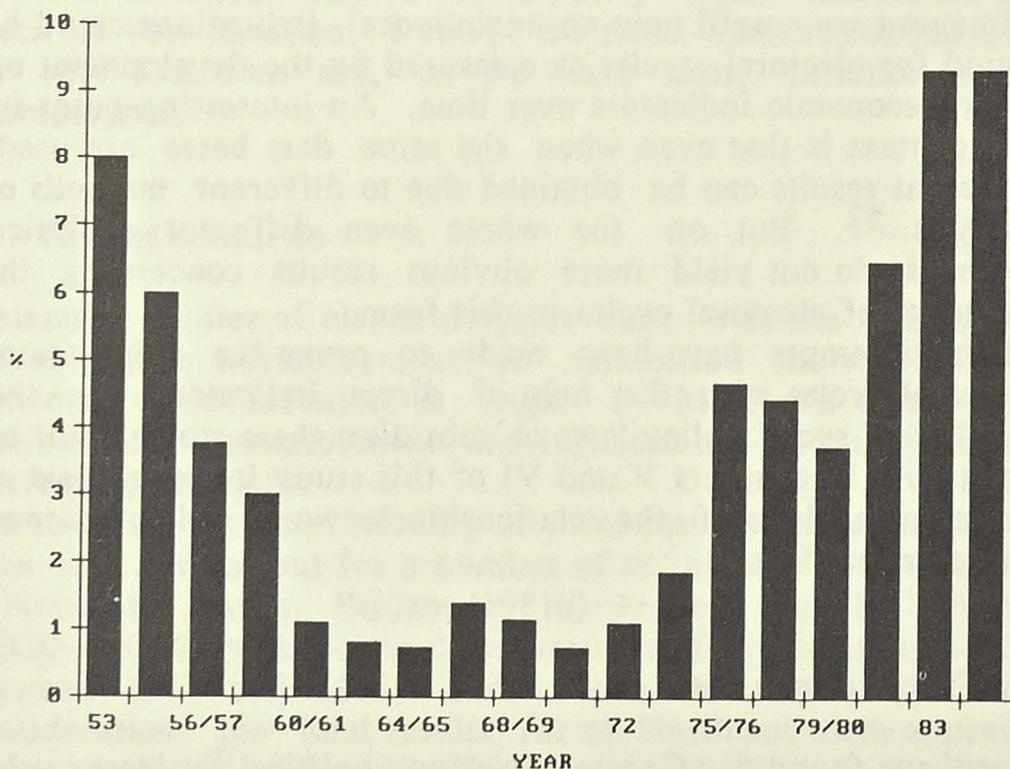
#### 4.2. The German case

Nordhaus found for Germany a strong political business cycle, with a falling unemployment rate before elections in five cases and in no case a rising unemployment rate before elections; for the time after the elections the unemployment rate rises and falls in two cases respectively.

Regarding German unemployment data from 1953 to 1984, the results of Nordhaus cannot be confirmed. The

unemployment rate falls indeed in the second half of the election period in five out of eight cases and only rises in three cases (1972, 1976, 1982); but it also falls after the elections have taken place until 1973 - with the exception of 1967, the first short recession in Germany after World War II. Since 1973 the unemployment rate rises not only after elections but in general except for a short stabilization at the end of the 1970's. Unemployment is characterized by a clear downward trend until 1972. Then it increases until 1976 and decreases until 1979. In 1980, an election year, it remained the same. Since 1981 it has increased considerably. On the whole, there is no evidence for an electoral cycle with yearly unemployment data.

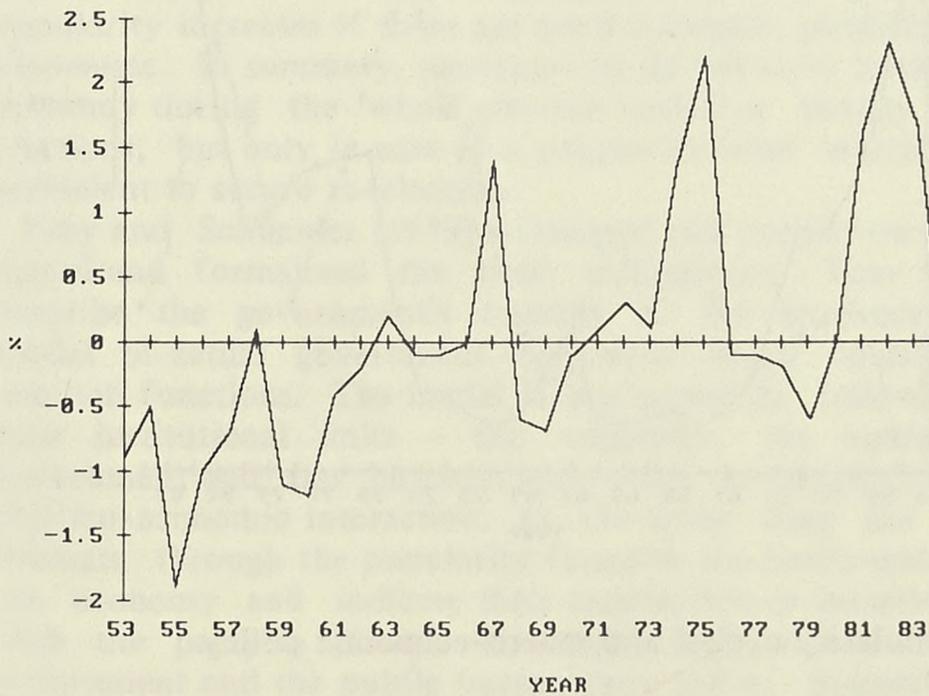
Figure 2: Unemployment rate in the first and second half of the election period in Germany from 1953 - 1984 <sup>53</sup>



Neither does a comparison of the differences between the unemployment rates in the year before an election, the election year itself, and one year after an election show any systematic variations. Regarding the first differences, i.e. the unemployment rate at time  $t$  minus the unemployment rate at

t-1, the results of Freyer (1978) <sup>54</sup> can be confirmed as the increment decreases before elections with the exception of 1972, 1980 and 1982. But again, this is due to a general trend of a falling unemployment rate until 1972 and a rising one since then.

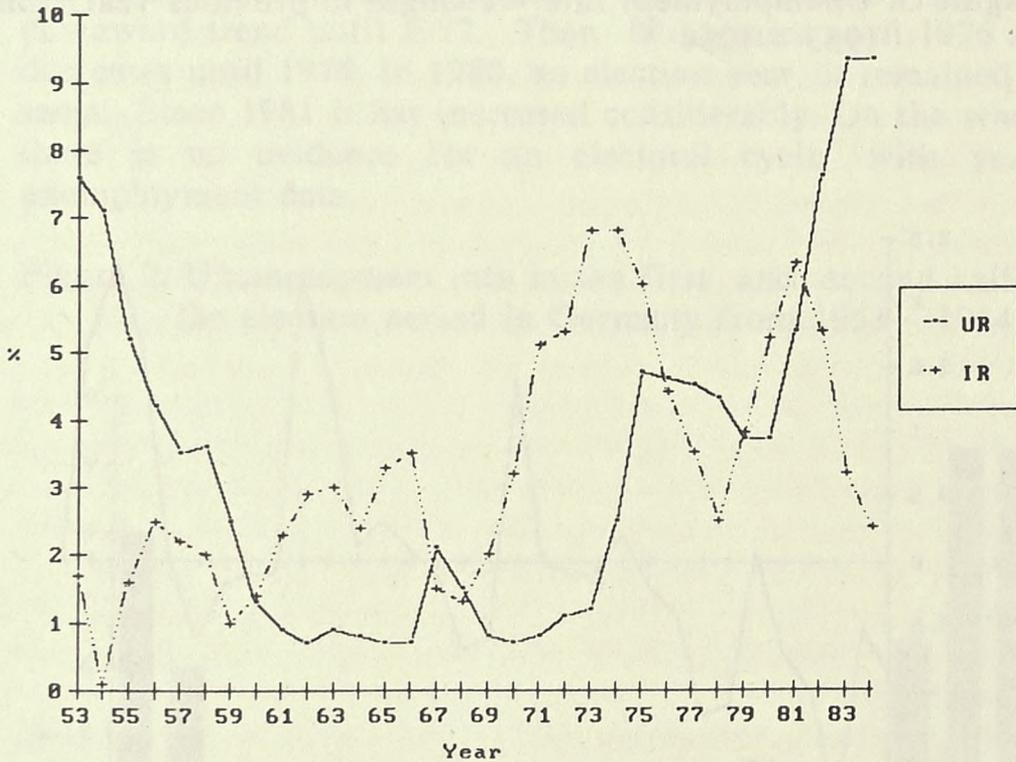
Figure 3: Unemployment rate - changes to previous year from 1953 - 1984 <sup>55</sup>



To take these results even as a weak corroboration of the theoretical reasoning seems more than questionable. The development of the inflation rate in Germany from 1953 to 1984 also does not confirm the political business cycle hypothesis of a synchronization with election dates. A comparison between the variables shows that in 1961, 1965, and 1969 the unemployment rate decreases at the expense of inflation; in 1972 both variables increase and in 1957 and 1976 both indicators decrease. In 1980 unemployment remains stable and inflation increases whereas in 1982 the unemployment rate

rises and the inflation rate falls. Thus, at least with the help of these data, no inference of a political business cycle or the directing impact of elections is possible.

Figure 4: Inflation rate and unemployment rate in Germany from 1953 to 1984<sup>56</sup>



##### 5. 'Popularity cycles' and macro-economic policy

The construction of politico-economic models (Gesamtmodelle) is an attempt to give another political explanation of cyclical developments within the economic sector. The cycles no longer arise from government behaviour which is oriented towards elections but towards levels of popularity. Popularity cycle theory implies a specific model conception of political and economic interactions. Besides the direct relationship of politics and economy, the feedbacks are of particular interest. The so-called 'popularity function' connects the political and economic system. It catches the levels of popular agreement or disagreement with the government. The popularity of governments is once again

dependent on the economic situation. The actors involved are the same as in the electoral cycle models, namely voters and the government.

The point which is new is that governments study their levels of popularity during the election period to calculate their re-election chances. Current popularity indices are taken as indicators of the likely election outcome. If government popularity is lower than a given limit so that re-election is potentially endangered, the government reacts with specified economic policy instruments in order to improve the situation decisively until the next election. If the level of popularity is sufficient to secure re-election other policies or policy goals can be pursued. A basic assumption is that government popularity increases if there are good economic conditions and vice versa. In summary, governments do not have to steer the economy during the whole election period or shortly before elections, but only in case of a popularity level which is not sufficient to secure re-election.

Frey and Schneider (1979) developed this politico-economic model and formalized the basic assumptions. They try to describe the government's steering of the economy with a model of actual government behaviour based on estimated reaction functions. The model is interpreted as follows: 'The four institutional units - the economy, the voters, the government and the bureaucracy - form a closed circle of politico-economic interaction. In the lower loop the voters evaluate through the popularity function the performance of the economy and indicate their satisfaction or dissatisfaction with the party in power. The upper loop shows how the government and the public bureaucracy jointly determine the use of the instruments through the policy equation which in turn affect the state of the economy' 57.

Following the traditional rational choice reasoning, governments maximize their utility subject to constraints. The most important constraint is again the need to secure re-election. The second constraint refers to budget constraints indicating that the government cannot increase expenditures too far relative to revenues. Four policy instruments are differentiated as being available for the government in order to reach its goals:

- current public expenditures for goods and services, being the most important instrument;
- government transfers to wage earners;
- the wage rate of public employees;
- employment in the public sector.

The policy equation in a linear formulation for each instrument (INSTR<sup>i</sup>) is:

$$\text{INSTR}_{t+1}^i = a_0 + a_1 \text{INSTR}_{t+1}^i + a_2 \text{TAX}_{t+1} + a_3 (1-Q)(\text{POP}_t - \text{POP}_0)^2 + a_4 (1-Q)T + \text{ID}$$

with:  $a_0 - a_4$  = parameters  $a_1, a_2, a_3, a_4 > 0$

$Q$  = dummy variable equal to 1 in case of a popularity surplus and 0 otherwise

$\text{POP}_t$  = current popularity

$\text{POP}_0$  = given limit of popularity

$T$  = time available before the next election

$\text{ID}$  = ideology

The difference between  $\text{POP}_t - \text{POP}_0$  is squared in order to indicate the growing urgency of directing the economy when there is an increasing popularity deficit. The ideology variable reflects the influence of government ideology in the case of a popularity surplus and the ideological bias of the incumbent party. The popularity function in a linear formulation is:

$$\text{POP}_t = c_0 + c_1 \text{UR} + c_2 \text{IR} + c_3 \text{YDG} + c_R \text{R} + c_C \text{C} + c_L \text{L}$$

with:  $c$  = parameters  $c_1 < 0, c_2 < 0, c_3 > 0$

$\text{UR}$  = unemployment rate

$\text{IR}$  = inflation rate

$\text{YDG}$  = growth rate of disposable income

$\text{R}$  = right-wing party

$\text{C}$  = grand coalition period

$\text{L}$  = left-wing party

The model is tested for Germany with annual data from 1951 to 1974. The results show that 'expenditures of all categories (except the government wage rate) are significantly raised when an election comes nearer which the government fears to lose. In particular, the empirical analysis lends some support to the hypothesis that 'right-wing' governments tend *ceteris paribus* to spend less than left-wing governments'<sup>58</sup>. The popularity function yields that there are significant effects of economic factors upon government popularity.

The empirical findings of Frey and Schneider emphasize that public expenditures are dominated by policy cycles, i.e. that public expenditures do respond systematically to popular support of the government. That public expenditures are indeed used to influence popular support has been confirmed by Schneider/Pommerehne/Frey (1981) for Switzerland. These findings, however, are not unchallenged. Alt and Chrystal (1981) report that fiscal policy actions in Britain cannot be regarded as following in connexion with election timing or political popularity. Dinkel (1981) as well does not support the hypothesis of electorally motivated fiscal expansions for the US and Germany. Comparing ten OECD-nations, Schmidt (1983) refutes the synchronization of public expenditures with elections for nine out of these ten countries - the exception being Sweden. In their 1984 article Schneider and Frey again emphasize that governments in Australia, Germany, Great Britain and the United States use fiscal policy instruments if their re-election is endangered.

In summary, empirical work on this topic has produced mixed results and remains controversial as in the case of electoral cycles and even in the case of explaining the effects of economic variables on voting behaviour.

## 6. Critique of 'electoral and popularity cycle' models

'All political history shows that the standing of the government and its ability to hold the confidence of the electorate at a General Election depend on the success of its economic policy'<sup>59</sup>.

The assumed causal relationship of this statement and the theories of electoral cycles and politico-economic models based on it were the central concern of this chapter.

The most obvious starting point for critique seems to be the inadequate use of the word 'cycle'. Cyclical concepts in social science have always attracted considerable attention among students aiming at explaining social change. Cyclical concepts have been for example discovered in the economy, value changes, partisan realignments, participation, demographic developments (Bürklin 1985) and - as we have seen - by the studies of the 'New Political Economy'. All the authors (and even their critics) who deal with electoral or popularity cycles use the concept of cycles without questioning the adequacy of the term for what they want to show. Without going into too much detail as this was done elsewhere (Weber 1987) we suggest that the term 'fluctuation' or at best 'cyclical trend' is more appropriate for the description of empirical phenomena as encountered in macro-economic or public expenditure time series. The question here is to detect fluctuations or deviations from a trend in election years but not a mechanistic process always leading to the same outcomes.

The Downsian approach used as a method for the analysis of political processes has often been criticized as 'measurement without theory'<sup>60</sup>, but using it as a method to explain economic phenomena - in this case business cycles - seems at least equally problematic. It is defined as being rational for a government to steer the economy in relationship to election dates. The critique focuses on the assumption concerning the government's control of the economy and its ability to manipulate the short-run course of the economy so that good economic conditions occur just before elections and bad ones just after. Moreover, the theory assumes the electorate to be myopic in perception and maximization and to be remarkably obtuse in not recognizing the government's 'macro-bribery' for political profit.

The vote-maximizing strategy - as put forward in these studies - relies on 'cheating' the electorate by providing it with inflationary consequences just after the elections. This conception of a 'rational-myopic' voter seems to us highly questionable and unrealistic. The implications for the economy if the electorate is not so naive but pursues a strategic tactic<sup>61</sup> are pointed out by MacRae (1977). The result of strategic voting is that economic cycles caused by the government are penalized, and the government is forced to pursue a long-run equilibrium policy instead of a short-run

cyclical policy. Strategic voting implies, of course, complete information on both sides. The argument that there is no scope for political business cycles when the actors involved are rational and have complete information about the economy is supported by the rational expectations school. Any attempt to manipulate voters will be fully anticipated and exactly offset by the actions of the private sector. There is no intention to discuss the rational expectations school argument in greater detail here; the important point is that if governments and voters do not act rationally in the myopic way defined by the electoral cycle theory, then there is no basis for such politically motivated cycles at all. A pre-election boom could only be explained economically or as being due to counter-cyclical fiscal policy but totally independent from national elections. But as the economic sector is regarded as being stable, cyclical developments occur only within the political sector. The impact of economic issues on voting and government behaviour is postulated without any concrete reasoning about the kind and size of this impact. This means that election outcomes and government popularity are related to economic performance in an ad hoc manner and lack a satisfactory theory of individual voting behaviour.

Given that economic outcomes affect voting behaviour and government popularity, a government will attempt to manipulate the economy in order to secure its re-election - if office is more important than say ideology.

Two approaches to economic policy-making have been considered in this chapter, the optimizing and the satisfying approach. The studies of the optimal political business cycle (Nordhaus, MacRae) focus on a political trade-off between unemployment and inflation, where the employment level is perfectly controlled by the government. The effects of such factors as disposable income, taxation, or the balance of payments<sup>62</sup> on election outcomes are ignored. Moreover, the policy instrumentarium necessary to attain the optimal political strategy, i.e. the government's reaction function is not discussed, so that 'what Nordhaus and Tufte actually examine in testing for the existence of electoral-economic cycles is not whether the government tries to or succeeds in manipulating the economy but whether economic conditions actually *do* improve right around election time'<sup>63</sup>. Although this is certainly a necessary pre-condition, it is by no means clear

whether the empirical evidence of the studies by Nordhaus, MacRae and Tufte simply describe purely ideological economic preferences of the government or whether they have found evidence for politically timed effects on macro-economic policy. A common objection to a permanent unemployment-inflation cycle is that it implies more or less foolish governments, acting against their own long-term interest: 'If an incumbent party ever reaches a point on a long-run trade-off curve associated with more than 50% of the vote, it will be assured of an everlasting majority. There will never be any incentive to leave such a point of political honeymoon' <sup>64</sup>.

MacRae gives a different definition of the government's election function in that it is not to be maximized but that the vote loss between elections is to be minimized. Nevertheless MacRae's analysis must also be criticized because it implies a vote lead for the government after the election which decreases during the entire period and cannot be regained later. This means that the worst policy a government could pursue would be to start with high unemployment or inflation as it implies an unnecessarily high vote-loss compared with a more balanced steering of the economy <sup>65</sup>. Moreover, MacRae's model is observationally equivalent to a conventional revealed preference exercise as no explicit vote data are used.

Another critical point is the assumption of a short-term vote maximization just for one legislative period which depends essentially on the time-horizon of the government. Assume that a government aspires to win the election after a second term in office <sup>66</sup> or that re-election is not endangered, then it might not be advisable for a government to create a political business cycle in order to avoid the inflationary consequences, and not to spoil its re-election chances. Moreover, the assumption of an ex-ante optimal economic strategy does not necessarily seem realistic; economic policy should be seen as well as an ex-post reaction of the government to given political-economic and ideological goals.

One of the most important weaknesses of the electoral cycle theory - the same critique is valid for the popularity cycle theory - lies in the assumption of 1) the homogeneity of voters' preferences over time, i.e. the invariant impact of macro-economic variables on voting behaviour over time, and 2) the homogeneity of voters' preferences among different

occupational groups. Only recently have these two arguments been taken into consideration. Borooah and van der Ploeg (1982) showed that the criteria of economic success can change over time and actually did change over the sample period for the UK. But if a model specification is needed that allows for changes in perception over time, the stability of vote and popularity functions and their empirical results must be called into question even more, as they might be due to serious mis-specification errors<sup>67</sup>.

Another approach used to quantify net shifts in voting produced by the varying impact of issues, identified on the basis of campaign reports, is the saliency theory of party competition and electoral response (Budge and Fairlie 1983). An incorporation of these elements in the electoral cycle theory would probably provide far more realistic assumptions and better results.

Hibbs (1982a) points out that fluctuations in macro-economic variables are not likely to have the same effect on the government's political support among different electoral groups because the effects associated with economic fluctuations are distributed unevenly within the electorate. This holds true for Germany insofar as we know that a recession affects the Social Democrats and their voters much stronger than say the Christian Democrats. The preferences of the electorate and their objective economic interests in macro-economic issues and outcomes appear to be class-related. If the electorate is not treated as a group with homogeneous preferences, the government might wish to satisfy the interests of special pressure groups perceived as being decisive for the election outcome; research in this area is still neglected and will thus be a central point in our next chapter.

The second approach to economic policy-making considered in this chapter is the popularity cycle or satisfying approach. It is primarily concerned with analysing the government's ex-post reaction functions to an economic or political crisis. The government pursues a vote-satisfying strategy whenever it experiences a popularity deficit. In this context the first logical difficulties arise with the term 'popularity cycle' theory because Frey and Schneider do not concentrate on cyclical aspects at all. They include the distance to the next election as a variable in the reaction function and thus imply an impact

of general elections on the economy, but hardly regular cycles<sup>68</sup>. The model of Frey and Schneider which is taken as being representative for the satisfying approach can be criticized for many reasons<sup>69</sup>.

Their empirical estimation of the popularity function yields<sup>70</sup>:

$$\text{POP} = -2.50\text{UR}_{t-1} - 1.40\text{IR} + 0.91\text{YDG} + 51.88\text{R} + 82.63\text{C} + 52.19\text{L}$$

(-2.91)      (-2.10)      (2.94)      (3.41)      (16.54)      (2.19)

$$R^2 = 0.96 \quad \text{D.W.} = 1.65 \quad \text{d.f.} = 18 \quad \text{t-values ( )}$$

This relationship between economic variables and the government's popularity shows that: the basic vote share for the CDU is 51.88%, for the Grand Coalition 82.63%, and for the SPD 52.19%. Already this equation contradicts all results of German electoral sociology in assuming a higher basic vote share for the left-wing party. Moreover, a one percentage point increase in the unemployment rate reduces popularity by 2.5 percentage points; a one percentage point increase in inflation reduces popularity by 1.4 percentage points; and in case of one percentage point increase in the growth rate of disposable nominal income, popularity is increased by 0.9 percentage points. This example shows the problems of multiple regression analysis in this context which are obvious in the interpretation of the estimated equation: the different forms of government experience the same decrease in popularity; this is not very realistic as the expectations of a CDU-government performance probably differ from the expectations of a SPD-government performance. The lack of stability of those indicators over time is again ignored. The decrease of popularity in times of full employment during the 60's is the same as in times of high unemployment during the 70's. The theory assumes that public expenditures are raised whenever there is a popularity deficit, i.e. even if inflation is the cause for a popularity deficit. The critical point here is that the causes for a lack of popularity are not differentiated and hence an increase of expenditures might be exactly the wrong policy strategy in order to secure re-election. The same argument holds if the positive relationship between expenditures and popularity deficits is due to a reverse

causality: higher expenditures are mostly financed by greater public debt, but the latter is negatively estimated by the public and thus might be the cause for the popularity deficit of the government <sup>71</sup>. Furthermore, the possible conflict between government and bureaucracy has not yet received much attention. As the government is dependent on re-election whereas the bureaucracy is not, there might well be conflicting interests with regard to the 'best' policy strategy. Schneider and Frey (1984) themselves postulate in the meantime a more complex model and the incorporation of actors such as organized interests, central bank and trade unions.

Another objection can be raised against the use of popularity data instead of election data. The advantage of popularity data lies in their quarterly or even monthly availability. The objections, however, to equating popularity data with election data are numerous - ranging from a subjective bias in samples to the existence of a popularity cycle independent from the individual economic situation <sup>72</sup>. The existence of a cyclical development of government popularity, independent from economic indicators, has been confirmed by Dinkels (1977) for Germany, and was previously documented for the UK by Goodhart and Bhansali (1970) and Miller and Mackie (1973). But if this cycle exists and taken as given that governments know it, there is no need for an additional steering of the economy to attain a popularity surplus, as the popularity would increase anyway shortly before elections.

In summary it is questionable whether the correspondence of estimated and actual election results is able to say anything about the theoretical value of these models and can therefore justify their application. This points to the limited possibilities or even inappropriateness of taking current popularity indices as indicators of a likely election outcome. Research done in electoral sociology emphasized that economic variables are not the only determinants for individual voting behaviour as is assumed in the electoral and popularity cycle theory. Recently, however, they document the rise of potential floating voters and the erosion of traditional social milieus which once had a strong and predetermining influence on electoral choice <sup>73</sup>. The lack of a satisfactory theory of individual voting behaviour within rational choice theory is all the more deplorable.

On the whole, both approaches to economic policy-making do not succeed in providing a consolidated corroboration of politico-economic cycles; the informational content of these models remains far behind the instrumental display. For one thing it is doubted that democratic governments have the political capability and the economic knowledge to produce a periodic political business cycle in the macro-economy. Others deny that voters react in the simplistic ways assumed by the various models.

Yet even granting the validity of such criticisms, it does not imply that there is no relationship between elections and the economy. The absence of evidence for electoral cycles in the above defined way does not necessarily include any evidence of this absence. Much of the controversy in the literature could probably be avoided by foregoing the concept of regular cycles. Even if governments cannot reliably manipulate the development of macro-economic variables, they can manipulate transfer payments for example. And even if voters are not as myopic as presumed, there is no doubt that economic issues are of great help in explaining the voting behaviour of floating voters.

In order to take into account the deficiencies of aggregate vote and reaction function estimates, a better attempt might be made by looking more closely at the micro-level basis of voting behaviour and government policy. Roth (1973, 1977) shows that an evaluation of the general economic situation has no impact on voting decisions and has to be interpreted as a correlate of party identification, whereas personally experienced or perceived economic effects have an impact on voting decisions<sup>74</sup>.

The voting model presented by Fiorina (1981) confirms the indirect effect of personally experienced economic conditions on the vote, which are 'effects channeled through evaluations of executive performance, through the formation of future expectations, and through modifications in party identification'<sup>75</sup>. The applied voting model is more complicated than those underlying aggregate studies of the political business cycle, but considerably more realistic as well. The potential explanatory power of these models, including contextual information, seems to be considerably higher than that of a model which simply looks at isolated effects of economic variables on the basis of aggregate data analysis.

Research of governmental policy on a micro-level has been almost completely ignored so far, and thus will be the central concern of the next two chapters.

The last point of criticism which shall be dealt with here is concerned with the implications of the political business cycle theory for fiscal policy. The assumptions of the New Political Economy and the theory of politically motivated cycles contain in principle heavy accusations against the political decision-making process<sup>76</sup> and are generally linked with a negative connotation and evaluation of empirical results: politicians are assumed to pursue cyclical policies according to their own interests, thereby ignoring the interests of their electorate. But governments are often required by law to use their budgetary instruments as counter-cyclical tools. In Germany, for example, this counter-cyclical conception of Keynesian policy prescriptions is laid down in Article 109 of the Basic Law<sup>77</sup> and the 1967 'Law on Economic Stability and Growth'. As the New Political Economy emphasizes the goal of re-election as being the most important one for governments, an implementation of counter-cyclical policy instruments would often require politicians to act in a way which they may consider as being not at all conducive to being re-elected. The public choice dilemma between 'economic stabilization' and 'securing re-election' would consequently have to be solved in giving priority to the latter and thus reformulating fiscal policy goals. Dinkel and Lenk (1979) have pointed out that the overwhelming number of the German budgets from 1949 to 1976 had clearly counter-cyclical effects and were in accordance with the normative claim of fiscal policy, i.e. to stabilize the economy<sup>78</sup>. Neither the theory of political business cycles nor the intention of governments to induce such a cycle was confirmed.

Generally, both short-term economic planning and fiscal policy management as suggested in the studies presented above do not necessarily hold true in the German context. While the introduction of the concept of free market economy (Soziale Marktwirtschaft) by Ludwig Erhard cannot be regarded as a short-term economic policy conception, a neglect of the importance of the German central bank for fiscal policy-making is a further serious mis-specification.

Especially this latter point requires much more attention in future research.

But a budget may well create systematic fluctuations in ways other than through the regulation of aggregate demand. They may not be apparent in the total budget, but only in its components on a micro-budgetary level of analysis. One might assume that government expenditures do not show great variations in their total amount but are varied in a very differentiated manner for electoral or popularity purposes. What is needed is a differentiation between particular types of expenditures in order to obtain more reliable results. A more promising hypothesis of the impact of general elections on public expenditures seems to be that those expenditures which are necessary but do not contribute to the election outcome are neglected or even cut back in order to allocate these means along more relevant issue dimensions useful in a time of uncertain electoral outcome.

#### Notes Chapter IV

- <sup>1</sup> See Böhret 1970; Budge/Farlie/Laver 1983; Robertson 1976.
- <sup>2</sup> Budge/Farlie/Laver, 1983:4.
- <sup>3</sup> Budge, 1982:17.
- <sup>4</sup> See chapter II.
- <sup>5</sup> Schumpeter, 1950:283; see also Schattschneider, 1942:35 'A political party is first of all an organized attempt to get power...'. According to Wiesendahl 'ist es das Verdienst Webers und Schumpeters, mit den wichtigen Aspekten der Konkurrenz und des Partei-Machtkampfes auf der Basis freier Werbung zwei Elemente benannt zu haben, die als zentrale Variablen in ein Marktmodell von Demokratie einfließen sollen, das nach den strengen Prämissen und Kategorien liberaler Wirtschaftstheorie konzeptualisiert ist', Wiesendahl, 1980:120.
- <sup>6</sup> Downs, 1957:25.

- <sup>7</sup> As examples for time series analysis see Hibbs (1977), Beck (1982); spectral analysis is used e.g. in Goodhart and Bhansali (1970), Miller and Mackie (1973).
- <sup>8</sup> See Freyer 1978.
- <sup>9</sup> 'The goal of macropolicy is not to eliminate the (business) cycle but to guide it in the interests of the capitalist class', Boddy and Crotty, 1975:10. In the Marxist perspective the mechanism generating business cycles is class conflict based on conflict over the division of profits, with the government aiding the capitalist class and organized labour constraining their ability to do so. In the following we forgo the presentation of Marxist studies as this would go beyond the scope of this chapter.
- <sup>10</sup> Abromeit, 1976:4.
- <sup>11</sup> Mayntz/Scharpf 1973; Ronge/Schmieg 1973; see chapter III.C.
- <sup>12</sup> Jenal 1977.
- <sup>13</sup> See Freyer, 1978:25f.
- <sup>14</sup> Frey 1972; Frey/Schneider 1975.
- <sup>15</sup> Frey/Schneider, 1975:339.
- <sup>16</sup> Source: Frey, 1978:209.
- <sup>17</sup> Frey/Schneider, 1975:340.
- <sup>18</sup> Budge/Farlie, 1983:2.
- <sup>19</sup> Arcelus/Meltzer 1975.
- <sup>20</sup> Arcelus/Meltzer, 1975:1239.
- <sup>21</sup> Goodman/Kramer, 1975:1264.
- <sup>22</sup> Bloom/Price, 1975:1251.

- 23 Goodhart/Bhansali, 1970:86.
- 24 The use of OLS estimation in this context involves incurring simultaneous equation bias which makes the estimates unreliable, see Johnston, 1978:341-43.
- 25 This means that the effects of autocorrelation are ignored and refers to the correlation of error terms over time; correcting for autocorrelation might well make the estimate disappear.
- 26 Miller/Mackie, 1973:263.
- 27 Miller/Mackie, 1973:279.
- 28 See Paldam, 1981:183.
- 29 While the Phillips curve has attracted a lot of scientific attention, it still remains highly significant but unstable, see Zahn 1973; Ramser 1975.
- 30 Frey/Schneider, 1975:344.
- 31 Tufte, 1978:105.
- 32 Paldam, 1981:182.
- 33 Nordhaus, 1975:169.
- 34 Nordhaus, 1975:173.
- 35 Nordhaus, 1975:172.
- 36 Nordhaus, 1975:174.
- 37 Nordhaus, 1975:184.
- 38 Nordhaus, 1975:186.
- 39 Nordhaus, 1975:186.
- 40 Dinkel, 1977:180 'Dies ist aber in der BRD in dieser Form kein einziges Mal erfüllt: Bis 1957 fiel die Arbeitslosigkeit

permanent (sie nahm nach den Wahlen von 49 und 53 nicht zu, wie es die Theorie erfordert), anschließend herrschte bis zu den Wahlen von 72 Vollbeschäftigung. Wiederum ergab sich keine zyklische Schwankung mit Steigerungen nach den Wahlen von 61, 65 oder 69'.

41 MacRae, 1977:245.

42 Tufte, 1978:3.

43 Tufte, 1978:9, 'a) Economic movements in the months immediately preceding an election can tip the balance and decide the outcome of an election; b) the electorate rewards incumbents for prosperity and punishes them for recession; c) short-run spurts in economic growth in the months immediately preceding an election benefit incumbents'.

44 With few exceptions, mainstream research points to change in real income as the major economic influence over congressional voting, e.g. Kramer 1971; Bloom and Price 1975.

45 Tufte, 1978:71; see in this context the 'politics does matter' hypothesis in chapter III and especially Hibbs, 1977:1475.

46 See Tufte, 1978:100.

47 Tufte, 1978:136.

48 Kirchgässner, 1976:174,178 'Linke Regierungen wünschen generell eine sehr niedrige Arbeitslosenquote. Dazu werden sie ihre Staatsausgaben gleich nach der Wahl erhöhen und haben eine Periode später eine niedrigere Arbeitslosenquote. Als Folge davon ergibt sich eine höhere Inflationsrate, die sie durch eine restriktive Politik in der Periode 2 zu bekämpfen versuchen. Der Erfolg zeigt sich aber erst zwei Perioden später ( $t=4$ ), wo eine niedrigere Inflationsrate, aber eine wieder erhöhte Arbeitslosenquote existiert. Entsprechend ist auch der Verlauf der Staatsausgaben relativ hoch nach der Wahl und niedriger in der Mitte der Legislaturperiode, da dann auch Inflationstendenzen vermieden werden sollen'. 'Analog ist die Argumentation für Rechtsregierungen, wobei hier das wesentliche zusätzliche Argument darin liegt, daß Rechtsregierungen unmittelbar nach der

Wahl eine niedrige Inflationsrate haben wollen. Dazu werden sie zu Beginn ihrer Amtszeit eine restriktive Politik betreiben, die zwei Perioden später zu niedrigen Inflationsraten führt. Verbunden damit ist allerdings eine höhere Arbeitslosenquote während der Legislaturperiode, die durch zusätzliche Staatsausgaben vor der nächsten Wahl bekämpft wird'.

49 Paldam, 1981a:296.

50 See Schmidt, 1983:182.

51 Paldam, 1979:338. Paldam (1979, 1981) emphasizes on the contrary a 'second year effect' in his series, i.e. real government activity increases the most in the second year, most likely because governments actually carry out electoral promises. The emphasis is shifted from an electoral cycle to an 'electoral promise' cycle.

52 See Freyer, 1978:201, 'Ähnlich sind auch die Ergebnisse bei Freyer, 1977, zu bewerten, der bezüglich Arbeitslosigkeit und Inflation in Deutschland die These des Abfallens dieser Indikatoren vor Wahlterminen für Zweijahresdurchschnittsdaten (analog zu Nordhaus) sowie für Halbjahresdaten ablehnt, allerdings für Veränderungsdaten nicht bestritten hat'.

53 The data are taken from the Jahresgutachten des Sachverständigenrates zur Begutachtung der wirtschaftlichen Entwicklung, different years.

54 Freyer, 1978:211.

55 Source: own calculations.

56 Inflation is measured by the change of the Consumer Price Index, taken from the Jahresgutachten, different years.

57 Frey/Schneider, 1979:34.

58 Frey/Schneider, 1979:35.

59 Prime Minister Harold Wilson, March 1968; reported by David Watt in the Financial Times, March 9, 1968; see Hibbs 1982a.

- 60 See Mattfeld, 1973:718.
- 61 A rational voter simply withdraws support on election eve if the government pursues a vote-maximizing strategy. This would eliminate the optimal political business cycle.
- 62 The importance of the balance of payments variable for the UK is emphasized by Nordhaus (1975) himself and by Pissarides (1980), Borooah/van der Ploeg (1982), Hibbs (1982a).
- 63 Monroe, 1979:6.
- 64 Dinkel, 1981:212.
- 65 See Dinkel 1977, 1981.
- 66 The government may be maximizing the expected uninterrupted length in office, see Frey/Ramser 1976.
- 67 Borooah/van der Ploeg, 1982:62 pointed out mis-specification errors of two kinds: 1) - variables may be omitted from the analysis because, estimated over the sample period, they had insignificant coefficient estimates, but are found to be significant over part of the period; 2) - variables included in the equation are postulated to exert a uniform influence over the period, though in fact their influence may have been changing.
- 68 See Freyer, 1978:285; Paldam, 1981:297.
- 69 It is not intended to repeat the critical points of electoral cycle theory, even though most of them are relevant in this context as well.
- 70 See Frey/Schneider, 1979:37.
- 71 See Freyer, 1978:271.
- 72 See Dinkel, 1977:143, 'Zum einen sind sie stark subjektiven Einflüssen (durch die Art der Fragestellung, Auswahl der Stichprobe oder der Interviewer etc.) unterworfen, so daß nicht von ungefähr verschiedene gleichzeitig laufende Befragungen zu unterschiedlichen Ergebnissen kommen. Zum anderen kann man nicht

trennen zwischen zyklischen Eigenschwankungen und solchen Bewegungen, die durch die ökonomische Entwicklung induziert sind. Man ist damit nicht sicher, ob mit Popularitätsdaten ein Popularitätszyklus oder ein gleichlaufender ökonomischer Zyklus beobachtet werden, oder ob ein Kausalzusammenhang besteht'. See also Gibowski 1973; Freyer 1978.

<sup>73</sup> Kaase (ed.) 1976; Kaltefleiter/Nissen, 1980:125, 'Bisher scheint in diesem Bereich der Forschung die Suche nach Korrelationen und Regressionskoeffizienten weitgehend an die Stelle der Entwicklung und Überprüfung plausibler Hypothesen getreten zu sein'. For recent developments see Jung 1985.

<sup>74</sup> Roth, 1977:547, 'Wird Arbeitslosigkeit dagegen als sozialstrukturelles Element verstanden und die tatsächliche Betroffenheit erfasst, so wird ein Einfluß von Arbeitslosigkeit auf die Wahlentscheidung offenbar'.

<sup>75</sup> Fiorina, 1981:99.

<sup>76</sup> See in this context Aldrup, 1970:165 who points out that the approaches of an economic theory of democracy are '... möglicherweise auch gefährlich, weil sie die Arbeitsweise der demokratischen Methode faktisch und normativ in einem höchst irreführenden Licht erscheinen lassen und - meines Erachtens weit schlimmer noch - eher einer zynischen Gegnerschaft als einer kritischen Anhängerschaft der Demokratie dienstbar zu machen sind'.

<sup>77</sup> See Article 109 Abs.2 GG: 'Bund und Länder haben bei ihrer Haushaltswirtschaft den Erfordernissen des gesamtwirtschaftlichen Gleichgewichts Rechnung zu tragen'.

<sup>78</sup> This opinion, however, is not unchallenged from the economists' perspective: Streit, 1981:19 on the other hand, states a poor performance of demand management, particularly during the 70's: 'Forecasting problems, particularly erroneous estimates of the likely impact of instrument variations did reveal a serious lack of knowledge'. Sarrazin as well emphasizes that the wrong projections of the Ministry for Economic Affairs with respect to mass unemployment were of great consequence for the actual development, see Der Spiegel, Nr.13, 1983.

## V. Analytical design

### A. The rational choice approach to the study of resource allocation

As we have seen, in the study of budgetary resource allocation there are several distinct theoretical approaches<sup>1</sup>, all varying in focus, time-span covered, and range of explanatory variables<sup>2</sup>. In the following we concentrate on the political system approach, which means on the rational choice approach to decision-making and resource allocation. Rational decision-making in this context means expenditure for those programmes that optimize the benefits relative to the costs. This strategy seems consonant with a normative view of budgeting where the budget is the optimal solution to the problem of allocating scarce resources. The - mainstream economics - rational choice theory of public expenditure perceives the government as being an autonomous actor, assessing the needs of both recipients and allocators and examining the dynamic between the reasons for a particular resource allocation to voters and the voters' reasons for supporting the political system. We can see that collective actors - such as the cabinet or government - are perceived as making budgetary decisions although the rational choice approach in general is strictly individualistic in its premises. The government is viewed as a group of individuals whose cohesive team behaviour in terms of the production of policy outputs has to be explained.

But this has not yet lead to many empirically testable propositions for budgetary resource allocations. This point can perhaps be best illustrated by examining the model set up by Anthony Downs (1960) in order to explain resource allocation as a function of party competition and vote-maximizing behaviour of the government. But before discussing the Downs model, from which we will derive our own model of budgetary allocations, we will briefly consider the model of Herder-Dorneich as a 'forerunner' of the actual development.

1. Herder-Dorneich's view of the relationship between expenditures, taxes, and elections in a democracy

In 1957, Herder-Dorneich, alias F.O. Harding, developed a theory of democracy almost identical with that of Downs, and also based on Schumpeter's famous definition of the democratic method. His reasoning and basic assumptions are almost the same as Downs' conception of individual behaviour. They both emphasize the importance of public expenditure and taxes as a means of obtaining political support from the electorate. Herder-Dorneich developed a politico-economic model to explain the provision of public goods and the level of employment in terms of competition for power. The disposable instruments used by the government to influence the economy in order to secure re-election are: a) public expenditures for goods and services, and b) taxes. The deliberate use of these two instruments produces a GNP which is optimal for the government, in the sense that it yields a maximum number of votes in the next election. The GNP is manipulated by varying the degree of employment with the help of these two instruments. The second task of a vote-maximizing government is to attain a vote-optimal share of the GNP. In order to test the effects of a specific share of the GNP on votes, the notion of political indifference curves (curves of equal votes) is introduced. All possible combinations of the two instruments in connexion with unemployment and inflation lie on these curves. It is the government's goal to discover an optimal policy which will yield a vote-optimal GNP as well as a vote-optimal division between expenditures and taxes. According to Herder-Dorneich, the result lies in an equilibrium, with the government offering an optimal GNP and obtaining maximal votes.

Herder-Dorneich's study has been heavily criticized because of its simplifying assumptions and deductions. Certainly one of the sharpest attacks was G. Schmölder's critique: 'was der Verfasser damit bietet, ist also lediglich eine banale Theorie der Wahlgeschenke, eine Theorie, der jede Bezugnahme auf die Probleme der budgetären Eigendynamik, des administrativen Verhaltens und der weltanschaulich-normativen Bindung des Politikers fehlt und die infolge dessen kaum mehr erklären kann als einige krasse Sonderfälle

politischer Entscheidungen in Wahljahren' <sup>3</sup>. Thus, the model is described as a banal theory of election gifts, which can only explain some special budgetary decisions in election years. Although Schmölder's criticism seems to be a bit exaggerated, it provides us with the opportunity to re-emphasize the focus of this study.

In order to account for budgetary decisions of politicians, one has to have some idea about the goals involved so that the costs and benefits of these decisions can be assessed in terms of these goals <sup>4</sup>. A useful analytical distinction might be drawn between public and private goals. Access to public goals can be easily obtained by looking at party programmes or election manifestos. The latter will be used in this study, particularly in relation to those public policy areas where one might expect a directing impact of general elections. Private or personal goals, on the other hand, are much more difficult to discern as no politician would name the 'lust for power' or the high salary level as the motivating force behind his political career. Therefore the various motivations must be assumed, and attempts then made to project what the politician will do to pursue a particular goal. The degree to which hypotheses and policy outputs actually coincide will then tell us something about the usefulness of theory and goals in order to explain financial decision-making.

The most common behavioural assumption for politicians has been that they are interested in getting (re-)elected <sup>5</sup>. They therefore pursue vote-maximizing behaviour - subject to constraints - as an instrumental tool to realize whatever ideological, organizational or public policy goals they might have. As stated before, we do not deny that budgetary allocations are shaped by a multitude of forces, including the limited capacities of governments to behave as if they were autonomous actors, as well as the constraints deriving from belief commitment, institutions, credibility, and responsibility as seen by electors. This study focuses on the question as to whether these assumed re-election goals are actually so important for governments as to coincide with public policy priorities and systematically affect particular government expenditures in relation with election dates.

## 2. The Downsian model of resource allocation reconsidered

The importance of public expenditures and taxes as means of buying electoral support has been picked up again by Downs (1960). In his model the government party pursues whatever policies <sup>6</sup> it believes will enhance re-election chances: 'According to the economic theory of democracy, each government sets both expenditures and revenue collection so as to maximize its chances of winning the next election... Since expenditures and taxes are two of the principal policies of government, they are set so as to maximize support. Out of this rational calculation by the governing party comes the budget' <sup>7</sup>.

In an attempt to determine testable hypotheses in the field of public finance - a minor part of Downs' whole endeavour - three propositions about governmental budgetary behaviour are deduced <sup>8</sup>:

- governments tend to redistribute income from the wealthy to the poor;
- governments tend to favour producers' interests over consumers' interests;
- the size of the government budget is smaller than the 'correct' one.

Downs argues in his first hypothesis that vote-maximizing politicians can always improve their re-election chances by redistributive policies that favour the majority at the expense of the few rich. But due to uncertainties, governments can never be sure whether the kind of redistribution they propose will be electorally popular. In practical terms this means that every possible policy output can be explained in terms of the dominance of one or the other of the two countervailing forces, with the result that the hypothesis is not testable.

With the second hypothesis we run into similar difficulties. The main problem with this hypothesis is that it contains a number of hidden assumptions: if governments invariably favour producers' interests over consumers' interests due to an information threshold of rational voters, this requires very specific assumptions about the structure of the economy: 'the economy that needs to be pre-supposed is a free-market economy which is highly diversified in both domestic

production and consumption but in which the majority of the population has only one important source of income'<sup>9</sup>. This means that the hypothesis is limited to advanced capitalist democracies. In this context, however, Downs' prediction is wholly consistent with the Marxist view of governments having a strong bias for the dominant capitalist interests. So we cannot discriminate between the Downsian and the Marxist theory of resource allocation<sup>10</sup> which reduces the interpretation of potential results to purely a matter of taste.

The criticism of his third hypothesis is done by Downs himself. He assumes that voters are more ignorant about the benefits than about the costs of public expenditure, which leads him to the conclusion that the size of government budgets in a democracy will be less than optimal - in the sense of being smaller than it would be if all citizens had perfect information<sup>11</sup>. Downs himself adds: 'admittedly, no one has perfect information hence no one can say what budget would exist if there were no rational ignorance in politics. This fact prohibits use of the 'correct' budget for detailed criticism of actual budgets'<sup>12</sup>. To classify actual budgets as 'too small' or 'too big' by such a standard is therefore in no sense a testable proposition regarding resource allocation in a democracy.

On the whole, we see that each of Downs' hypotheses on public finance becomes problematic with regard to its testability or explanatory power concerning the allocational process of public expenditures in a democratic system. However, Downs' third hypothesis seems promising - provided that its empirical assumption about the relative visibility of benefits and costs is reversed. As Downs himself points out, 'voters will underestimate the costs they are paying for special benefits received, and parties will build this bias into their budgets'<sup>13</sup>. The third hypothesis is the most useful one for us, but not because of its assumptions about the size of the budget but because of its implications for the manner in which governments will raise and spend their money. The reversed model suggests that it is much more attractive for governments to spend their money in areas where it is possible for voters to assign a particular benefit to themselves, than in those areas which mainly serve to provide for group indifferent public goods<sup>14</sup>. Our hypothesis is that governments spend money on those services where there is a

clearly visible benefit - in particular, measurable cash payments to particular groups. In addition to the Downs model we posit that one of the main features of the vote-maximizing behaviour of governments is a four-year pattern in the development of resource allocation in those electorally appealing areas. This hypothesis is derived from the financial reactions of governments to approaching elections and their limited financial possibilities<sup>15</sup>. The solution to this problem is a resource allocation that follows a cyclical trend. These fluctuations in allocations produce as a consequence an over and underprovision of state achievements. The origins of these fluctuations lie in the behaviour of governments in that they concentrate their flexible resources on the perceived areas of political gain and neglect other areas<sup>16</sup>. Moreover, short-term effective measures are preferred to long-term effective measures, as seen in the answers given to the question of declining governability in the elite study presented in chapter II.

But before discussing in detail the concrete hypotheses derived from our model for the budgetary items chosen for analysis, another point should be illustrated: a review of the German budgetary process and an assessment of the importance of organizational factors in budget preparations will show that the incrementalist approach to the explanation of public expenditure development might not hold true to the extent suggested in the American literature, thus leaving enough room for the plausibility of cyclical fluctuations in budgetary allocations over time.

## **B. The German budgetary process and incrementalist theory**

Is the budgetary process characterized by competition among the various ministries and programmes, or is it basically a process of incremental and apolitical resource allocation? This question - frequently dealt with in the literature and already introduced in chapter III - requires closer scrutiny. Why should it be the case that incremental behaviour is always determined by bureaucratic or organizational processes?

It might very well be the case that political factors determine the incrementalist output<sup>17</sup>. But this apolitical nature of incrementalist assumptions about the budgetary

process is normally taken as given. Similarly not taken into consideration is the application of the concept of 'muddling through' - confirmed by Davis, Dempster, and Wildavsky for the US, the UK, France, and Japan<sup>18</sup> - to the German case, and the empirically untested results are taken as given: 'Resource allocation is incremental, with existing expenditure treated as the base from which bargaining proceeds'<sup>19</sup>. This statement ignores the fact that when the first budgetary requests emerge from the ministries, it is likely that a large measure of politically relevant conflict has already been played out, undoubtedly in the form of interest participation.

The German budgetary process normally begins in November or December<sup>20</sup> in order for the budget to be implemented one and a half years later. The budget law and the 1967 'Law on Economic Stability and Growth' are basically responsible for fixing the pattern of the budgetary process: the departments formulate their requests; the Finance Minister exercises control and produces a draft budget; the government passes the draft bill and presents it to the Bundestag and Bundesrat for approval and enforcement<sup>21</sup>. Most of the initial bargaining is specialized and uncoordinated and may well be accompanied by conflict. The results of the first bargaining round are presented to a cabinet committee (Finance, Economics, Interior, Chancellor's office) which attempts to bring expenditure requests into line with estimates of available resources. This leads to further negotiation with the ministries, the results - now a draft budget - being returned to the cabinet budget committee. Actual practice demonstrates that consensus on the final budget is dependent upon prior ministerial participation<sup>22</sup>. Final allocations are worked out within the cabinet where the Finance Minister and the Chancellor play the dominant roles with respect to programme priorities. Political budgetary decisions are taken at this cabinet level, where a detailed evaluation of expenditure items is unlikely to occur. The draft budget is then presented to the public, long before the first reading of the budget in the Bundestag takes place. The first reading in parliament is a general debate on government policies with clear divisions along party lines. After this reading, the draft budget is referred to the parliamentary budget committee. Changes at this stage do occur but are rarely of major significance. Comparing the 1982 draft budget of social and

research and technology expenditures with the official budget, one can see that for example on the chapter level all allocations had been modified - but only marginally and without setting new priorities. According to Sturm (1985) the members of this committee perceive the modifications of details as being the main part of their work <sup>23</sup>. In setting up the budget, the committee members are obliged to accept the fact that the government has an obvious advantage in terms of information, and that their control over the budget is also affected by their own time limitations. Thus the predominant type of decision-making in this committee is an incremental one, with additional priority of party political reasoning over general cooperation <sup>24</sup>. Of course during the fiscal year it happens that the expenditure amounts listed in the budget law are not necessarily those that are actually expended <sup>25</sup>.

On the whole, spending decisions on lower administrative levels are the result of political bargaining, and the outcome - as Zunker (1972) puts it - are sets of 'lonely decisions' taken in isolation from other policy areas. As the German ex-Finance Minister Strauss said, ministry officials defend their programmes with 'ideological zeal, with absolute water-tight, almost theological argumentation, with the highest legal precision, and with striking strength of substantive reasoning that declares for false what the finance minister expects of him' <sup>26</sup>.

This implies that overall coordination is problematic in the German system, that comparison of expenditure alternatives is lost in organizational specialization <sup>27</sup>, and a competitive evaluation of expenditures is hindered. This lack of coordination <sup>28</sup> in German budgeting provides Eichenberg (1981) with additional confirmation of the sources of incrementalism: 'When spending advocates claim existing expenditure as their legitimate 'base', finance officials are forced to choose between a thorough 'zero-based' evaluation and control through negotiation over incremental change. Given the large number of requests - and the interests surrounding them - the latter strategy is obviously a realistic one' <sup>29</sup>. Although not implausible, Eichenberg's conclusion seems to be a bit hasty as it underestimates the government's role in setting political priorities.

Intra-organizationally, a marginal change contributes above all to the minimization of conflict among the actors over

diverse priorities and to a reduction of complexity. The organizational decision-making process establishes rules, continually applied to all decisions. This school of thought is above all represented by the studies of Davis, Dempster, and Wildavsky (1966,1974) concerning the American and other budgetary processes of highly industrialized countries. They discovered that the budgetary process for individual agencies could be successfully modelled by a set of stable linear decision-making rules<sup>30</sup>. Their main result is that the magnitude of changes in allocation is an incremental one<sup>31</sup>.

In order to test for incremental changes over time, Danziger (1978) operationalized three relatively naive decision models and assessed their explanatory adequacy for four British county boroughs. His results show that none of the models - grounded in decision rules that might explain the process of budgetary incrementalism - has an exceptional level of adequacy<sup>32</sup>. His results were confirmed for Britain by Klein: 'the incremental approach has only limited explanatory power... it is quite clear that even the most generous interpretation of this term would not explain what happened in some of the major programmes'<sup>33</sup>. These assessments were reinforced for Germany in two studies which pointed out that incremental decision rules cannot explain much of the variations in expenditure change<sup>34</sup>. Concerning the magnitude of change in nominal growth rates for German budgetary allocations, Treiber (1984) concludes that incremental decision-making is present in the German context but to a more limited extent than, for example, in the US or the UK<sup>35</sup>. The most serious theoretical challenge of budgetary incrementalism was raised by Natchez and Bupp (1973) who argued that stable budgetary allocations to bureaus conceal a much more unstable allocation process to programmes, which is basically characterized by competition. 'But because administrative categories have formed the basis of budgetary analysis, the entire process in which public policy is produced has been obscured'<sup>36</sup>.

This shows very clearly where the difference between the two theories lies: the choice of the unit of analysis is the most crucial factor, whereby stability is associated with the organizational level and competition with the programme level. The results of the two schools, however, are not as incompatible as it might seem at first sight. Davis, Dempster,

and Wildavsky did not find stability among programmes because they simply did not examine programmes. Natchez and Bupp on the other hand did not find competition among organizational units because they did not examine organizations. In a first attempt to bring the two theories together, Gist (1982) concluded that his data support either theory of budgeting if one adopts the theoretical constructs and budget measures peculiar to each theory <sup>37</sup>.

This short discussion of the 'politics' of the budgetary process leads us to the conclusion that there are possibilities for a political variation of expenditure change <sup>38</sup>. Fortunately, our data also allow for a distinction of expenditures on the organizational and programme level. The results concerning the question of incremental change and the abilities of governments to shape policy outputs, i.e. an assessment of the flexibility of these expenditures, will be presented in the next chapter.

### C. Data and method

After having presented one of the explanatory factors of this study - the 'electoral cycle' - in greater detail in the previous sections, we will concentrate now on the other side of the equation - the expenditure variables. The analysis covers three areas of public expenditure: subsidies from 1962 to 1982 <sup>39</sup>, labour and social welfare from 1952 to 1984, and research and technology from 1956 to 1984 <sup>40</sup>. In section C.1 we discuss the selection criteria for the different areas, followed by a description of the different expenditure levels at our disposal (C.2). Finally, the statistical techniques will be presented in section C.3.

#### 1. Selection criteria for the different areas

The reasons supporting to the selection of the three areas are their different political importance for governments and for the societal system. In the case of subsidies, we start from the established fact that in Germany a considerable number of subsidies are paid, despite the fundamental objections raised regarding their theoretical justification and foundation. The

reasons for this kind of state intervention are generally seen in a failure of the market mechanism<sup>41</sup>. The government does not intervene directly in this case but places resources at a recipient's disposal. An exact definition of what should properly be regarded as subsidies is lacking thus far<sup>42</sup>. Because we have taken the data from the official government Financial Report, edited by the Ministry of Finance, we take the definition advanced by this Ministry in the governmental Subsidy Report as a basis. Financial subsidies are defined as 'Bundesmittel für bestimmte Zwecke an Stellen außerhalb der Bundesverwaltung'<sup>43</sup>. This definition of financial subsidies does not only include financial assistance to business enterprises and industrial branches, which - following the example of public finance literature - would be regarded as subsidies, but also includes social transfer payments. The subsidies given to the economic sector should thereby satisfy the following objectives: a preservation or adaptation to new conditions of production or achievements in enterprises or economic branches; and a promotion of productivity progress and growth of enterprises and branches<sup>44</sup>.

The expansive development of federal subsidies, a favourite object of public and scientific criticism, eventually resulted in admonitions to the government at the end of the 1960's to present a concrete plan cutting back federal subsidies<sup>45</sup>. But even the governmental proposals did not yield any notable results. This state of affairs has remained unchanged even twenty years later. When the cabinet passed the 1987 draft budget it was characterized by the opposition as a budget which would become famous for all the subsidies it entails. This would suggest that the political importance of subsidies has been underestimated by the critics and that subsidies are supported by vital political interests.

Given this reasoning as a basis, we will attempt to analyse the considerable role played by subsidies in the political process with the help of a model which assumes that subsidies are a useful tool enabling governments to steer political behaviour. The idea that cash transfer payments or financial aids are entirely rational instruments for this goal achievement is due to the politician's uncertainty, for example, as to the effects of their measures on potential voters and groups of voters. Today, above all lobbyists and interest groups have a dominant position as interest mediators, and are willing to

support government policies either financially or idealistically in return for government compliancy with their own demands.

In the case of subsidies, this leads to group-specific payments and anticipated votes for the governing party as equivalents. Subsidies are a particularly good and useful instrument due to the fact that the benefits are immediately visible whereas the costs can be shifted imperceptibly to the society as a whole. A synchronization between subsidies and elections has, for example, been described by Maass (1973), who emphasized in particular the subsidies paid to the agricultural and the industrial sector, and social transfers. We assume that the granting of subsidies is a 'cyclical' one as tactical considerations speak in favour of a cutback in post-election years: 'nur wenn die Parteien die Subventionen nicht auf einen unvertretbar hohen Anteil am Gesamtbudget steigen lassen, haben sie überhaupt die Möglichkeit, den Verbänden in den kommenden Wahlperioden wieder neue Wahlgeschenke zu präsentieren, um damit dann aufs neue deren Stimmenpakete und Wahlhilfen 'bezahlen' zu können' 46.

Generally, either a direct or an indirect influence of subsidies on voters can be assumed. The intended direct way of influence, whereby the recipient is supposed to vote for the governing party in return for the money received, has been described above. An indirect way of influencing an even greater number of voters comes into play as soon as jobs are at stake. The government would in this case indirectly influence all those voters who are dependent for their main source of income on the development of income in a particular area, as for example the retail or catering trades. Moreover, the mass media could influence voters, even on the national level, to vote for the government in the case of a positive assessment of the government's policy of preserving jobs 47.

Therefore, our hypothesis runs as follows: seen from a politician's perspective, subsidies are a useful instrument to buy electoral support and they are steered in a four-year pattern for tactical reasons.

The decision to analyse social and welfare expenditures in relation to election dates results from the sheer volume of this budget. In 1982, for example, 22.4% of the total outlays were provided for social expenditures. This budget item is the

largest item of the budget, followed by defence expenditure which yielded 18.4% in 1982. Due to the extension and preservation of the social security system, social policy has always played an important role in the history of Germany. The rapid development of the welfare state as a guarantor of individual and social protection against risk was coupled with a prosperous economic development until the middle of the 70's. Since that time, however, Germany has been faced with far-reaching economic and political changes. It no longer enjoys the beneficial economic and socio-political conditions which have produced increased welfare services and an increasing security against personal risk. It now confronts much lower growth rates, higher unemployment figures, and public debt. These changed economic conditions and scarce resources generated a debate over the extent of social achievements during the last years. With the CDU take-over of government in 1982 far-reaching changes in the system of social security were announced.

An analysis of federal social expenditures within the framework of our research question seems to be promising because of a high sensitivity for socio-economic or demographic factors as well as for political factors. Since many programmes in the social policy area refer to a large group of voters and are, as transfer payments for the recipients, immediately visible and accountable, it is assumed that they also provide a useful instrument for governments seeking to buy electoral support. In the literature, social expenditures are frequently discussed as being the 'classic' field for election gifts. The study of micro-budgetary behaviour is reinforced by Bank's research on social policy-making and social spending<sup>48</sup>. He examined the frequency of social policy legislation under the CDU-government from 1949 to 1968 and found out that social policy laws passed by the government followed an electoral cycle, i.e. the number of social policy laws increased as elections approached and dropped off afterwards. As a result the percentage of laws increasing benefits (Leistungsgesetze) rose shortly before elections. This qualitative change due to the electoral calendar was confirmed by some studies on a quantitative basis. The studies from Alber<sup>49</sup>, Kleinherz and Lampert<sup>50</sup> about the development of social expenditure and Liefmann-Keil's<sup>51</sup> analysis about the timing of redistributive

allocation decision-making provided further evidence of the assumed relationship between elections and social expenditures. In order to examine the directing impact of elections within the chosen paradigm, a necessary precondition is that politicians perceive the social policy area as being a useful instrument for obtaining political support. Two sources of information may help to indicate whether this is the case. The first is public opinion data which enable governments to detect policy areas of widespread popular concern, thus providing them the opportunity to respond to the electorate's desires and needs. Evidence that social policy issues actually do enjoy high priorities among the population and are reflected in electoral behaviour has been presented in chapter II.

If governments now perceive the political preferences of the electorate as being a potentially useful area for gaining votes, their responsiveness to these priorities should be reflected in official government statements, for example in election manifestos. As election programmes assess the importance of current political problems and specify the government party's ideological position and course of action, the relative importance of thematic concerns with regard to social policy issues should correspond with public opinion data. The conclusion that this is actually the case can be inferred from looking at the respective governing party's election programme<sup>52</sup>. Three policy domains explain almost half of an 'average' election programme's content: the economy (16,0%), welfare and the quality of life (16%), and external relations (15%)<sup>53</sup>.

Summing up, we assume that social expenditure is perceived as being a helpful tool for governments in order to secure re-election and is implemented in accordance with the timing of elections in order to achieve this goal. The hypothetical development of expenditures - as in the case of subsidies - stems from the necessity of satisfying very diverse demands during the course of the electoral period, so that cutbacks in electorally appealing programmes in post-election years are inevitable. The relative importance of research and technology issues for governments - included above under the heading of 'economy' - might best be explained by contrasting them with the importance of social policy issues.

Thematic concerns in election programmes in % <sup>54</sup>

	WELFARE			TECHNOLOGY		
	SPD	FDP	CDU	SPD	FDP	CDU
1949	10.2	10.4	7.9	0.0	1.6	5.0
1953	18.0	15.9	12.6	2.7	3.7	0.0
1957	10.3	11.4	7.2	5.9	1.3	0.0
1961	8.8	21.8	14.1	5.2	11.6	7.0
1965	5.9	----	9.6	12.6	----	0.0
1969	21.7	18.0	15.3	8.5	0.7	8.9
1972	20.6	8.1	19.6	7.2	0.0	8.0
1976	22.5	21.7	21.5	3.4	5.3	2.7
1980	26.4	24.4	16.0	7.9	9.0	3.1

As expected, the importance of research and technology issues lags far behind the importance of social policy issues. The relatively low figures until 1957 may correspond to the global and uncontroversial promotion of research at that time <sup>55</sup>. In the election programmes of 1961 and 1965 more concern may have been given to technological issues because of the build-up and expansion of nuclear energy installations and state supported aerospace research. The platforms of 1969 and 1972 may have been an indicator of the German economy becoming less internationally competitive in the areas of data processing and new technologies. The task then was to compensate for that loss. The low interest of the two big parties in 1976 may be due to Germany's aggravated economic situation - produced by the rise in oil prices - which led to a concentration on economic and social issues. The increased importance of research and technology from 1976 to 1980 may help to account for the heated debate in which both of the governing parties were involved concerning the limits of an 'acceptance of technology', not only in the area of nuclear energy, but also concerning the initial consequences of rationalization due to the development of new technologies <sup>56</sup>.

Research and technology policy in Germany is mainly directed towards privately organized, state-supported research institutions and big business enterprises. This policy area was selected for study because of its entirely different importance

for the political system in comparison with subsidies and social expenditure. We intend to contrast research and technology with the two other areas and test the hypothesis that there are considerable variations with respect to the assumed directing impact of elections.

Research and technology policy in Germany is generally regarded as structural policy, i.e. a political steering process claiming to actively shape the structural changes of the economy. It will briefly be illustrated that this political claim does not coincide with reality. The ministry of research and technology is dominated by two interest groups: economy and science. The two groups have similar interests insofar as they both want to receive as much money as possible in exchange for minimal state intervention, i.e. they seek to avoid any steering or controlling claims on the part of the ministry. Interest intermediation does not only take place on the political level but mainly on a technocratic level in the form of so-called 'forschungspolitische Beratung', an expert counselling on research matters. The administration internalizes the interests of these economic and scientific groups via this expert counselling<sup>57</sup>.

The process of internalization begins with the problem perception, and refers to the problem handling, research institution involved and project steering. The structural directing process is not initiated by the political or administrative sector but starts with an initiative of the recipients. The main share of state promotion is for the benefit of three industrial branches - electrical engineering, aeronautics, and data processing - which have structurally ensured their interests in expert counselling. Research and technology policy is thus a process of an external goal determination of organized interest intermediation which results in an administrative and political steering incapability. As Berger (1978) writes, 'hat das politisch-administrative System vor dieser horizontalen "Interessenkumpane" längst resigniert, und die Forschungspolitik ist bei einer fast ausschließlich input-orientierten Forschungsfinanzierung angekommen'<sup>58</sup>. This would suggest that research and technology policy is far from fulfilling its claim of political steering.

Thus, our derived hypothesis assumes that there is no relation between the change in research and technology



expenditures and elections, as the government cannot hope for any advantage in taking into account those interests which are saturated anyway in the decision-making process.

## 2. The different expenditure levels

At the end of chapter III we presumed that cyclical trends might not be apparent in the total volume of expenditure but only in its composition on a micro-budgetary level of analysis. In order to detect continuities or changing priorities in resource allocation, it seems to be more promising to disaggregate budgetary totals into their components or programmes.

From the number of subsidies we chose three areas and disaggregated two of them into their main components:

area: agricultural subsidies

components: improvement of agrarian structures  
income stabilizing measures

area: industry

components: energy, water, cultivation  
mining, building trade, manufacturing industry  
regional promotion measures

area: social transfer payments

The disaggregation is based on the divisions which appear in the federal financial report <sup>59</sup>. The federal subsidy reports additionally specify expenditures for aeronautics under the heading of 'industrial subsidies' <sup>60</sup>. These expenditures will not be considered here, as they are part of the research and technology budget. Social transfer payments are only analysed at this relatively high level of aggregation, because the classification given in the financial report is still relatively undifferentiated and they can be better analysed within the classification scheme of the social budget. Social transfers - as they are investigated here - include the following categories: a) social and unemployment insurance; b) family, poor, and youth relief; c) social benefits due to war and political events,

and d) stimulation of private wealth and subsistence <sup>61</sup>. The analysis of subsidies provides the first clues as to the plausibility of our hypotheses; particularly the analysis of social transfer payments combines with that of budgeted social expenditures, i.e. the analysis of budget plans. The institutional classification of the budget provides information on the yearly expenditures on four levels:

- total volume of the budget;
- volumes of specific budget items, e.g. the social budget, the budget for research and technology;
- volumes of single chapters in these budget items, e.g. general appropriations or social insurance contributions in the social budget;
- volumes of titles in the individual chapters.

A first analysis of the budget plans will cover an investigation of the total budget and the budget items for labour and social order as well as research and technology. Subsequently we will analyse the chapters of the respective budget items which are structured as follows:

#### Chapters of budget item 11 - labour and social order <sup>62</sup>

- chapter 01 : Ministry expenditures
- 02 : General appropriations
- 03 : Federal Enforcement Agencies for Accident Insurance in Wilhelmshafen
- 04 : Federal Institute for Labour Protection and Accident Research in Dortmund
- 05 : Federal Labour Court in Kassel
- 06 : Federal Social Court in Kassel
- 07 : Federal Insurance Office in Berlin
- 08 : Federal Office for Civil Service in Cologne <sup>63</sup>
- 09 : Integration of foreign labour
- 10 : War victim pensions and similar benefits
- 11 : War victim welfare and fare allowances
- 12 : Benefits under the promotion of employment law and similar services
- 13 : Social insurance

## Chapters of budget item 30 - research and technology

- chapter 01 : Ministry expenditures
- 02 : General research promotion
- 03 : Natural science technical research and development
- 04 : Information technologies <sup>64</sup>
- 05 : Energy research and technology
- 06 : Aerospace research, transport systems
- 11 : German Historical Institute Rome
- 12 : German Historical Institute Paris
- 13 : Art History Institute Florence
- 14 : Biological Institute Helgoland

This disaggregation allows us to focus more closely on two types of budgetary change. Firstly, we can examine the patterns of resource allocation to the organizational units as such. Secondly, as the chapters can be divided into administrative and programme chapters, we can differentiate between purely administrative outlays for the various bureaucratic units and purely programme costs. In the labour and social welfare budget, the chapters 1,3,4,5,6,7,8 would be considered as generally containing purely administrative outlays, whereas the remaining chapters fall under the heading of programme outlays <sup>65</sup>. Administrative allocations consist of wages, salaries, and additional employee benefits on the personnel level, and expenditures for work-related materials, construction, publications, advisory or other expert counselling etc. on the 'non-personnel' level. In the research and technology budget chapters 1,11,12,13, and 14 belong to this group. These administrative outlays are allocated to quasi-autonomous agencies, which are officially responsible to their respective ministries, but have their own budgets within the ministries <sup>66</sup>. As the budget needs of the various chapters vary considerably over time, we might be able to obtain some interesting results with respect to our hypothetical cyclical trends in the development of expenditures. The most disaggregated level of public expenditure according to the institutional classification scheme is the level of individual titles. As all the data from 1952 to 1984 were collected on that basis, it was possible to group and systematize them differently from the official scheme <sup>67</sup>. The data now allow

for a further differentiation of programme costs according to various purposes and recipients. In the following we will concentrate on the purposive aspect of resource allocation<sup>68</sup>. Four characteristic areas have been chosen for further analysis: in the labour and social order budget, we have considered allocations for social security and jobs and job conditions; in the research and technology budget, the allocations for economic development and infrastructure, energy, resources, and environment were selected<sup>69</sup>. The systematization of expenditures in this way allows for a deeper analysis of budgetary structures and patterns of change.

Another category chosen for analysis is part of the administrative side of the budget and deals with the costs of disseminating information. This category contains expenditures for the preparation of information, including publication and informational reports in daily newspapers. We assume that these expenditures follow a cyclical trend as well. Shortly before elections, governments will try to emphasize their achievements during the election period, thus hoping to convince a few more voters to cast their votes in favour of the governing party.

After having described the data in detail, the last section of this chapter will deal with the statistical techniques used in order to grasp the presumed relation between certain public expenditures and election dates.

### 3. Operationalization and statistical methods

As noted above, the German budget law is usually voted on early in the year in which expenditures are to be made, which can lead to an adjustment to changing conditions during the course of the fiscal year.

As a result, budgeted expenditures (Soll-Ausgaben) may not be the same as final expenditures (Ist-Ausgaben) reported in the final accounts. In this study we use final expenditures in the case of subsidies and budgeted expenditures for social welfare and research and technology. The reasons for this are due to the fact that the data from the financial report on subsidies are only available in the form of final expenditures; thus, budgeted expenditures are not at our disposal. The reasons for taking budgeted expenditures into account to

analyse the two budget items are that this phase of the resource allocation process is the more relevant one for the investigation of our research question. As we place more emphasis on the analysis of social and research and technology expenditures, these allowing for a much more disaggregated investigation, and perceive budgeted expenditures as a purposive commitment of governments, we decided to tolerate the possibility that there might be a difference between final and budgeted expenditures for subsidies <sup>70</sup>.

We specify the yearly change in expenditures as being the relevant criterion and indicator of budgeting priorities - rather than absolute levels of increase or decrease <sup>71</sup>. We assume that yearly growth rates best reveal the short-term perspective that dominates the budgetary process in Germany.

But despite the often assumed 'evidence' that politicians calculate their new requests and presumed appropriations in current prices, we have based our calculations on changes in constant prices. This specification is guided by the consideration that the use of current price data might lead to spurious associations because of the dependence of the expenditure variables on the inflation rate. As we concentrate on the patterns of change over time, only the deflated series can provide some information about real changes in resource allocation <sup>72</sup>. On the other hand, the legitimation of financial allocation by parliamentary approval is done on the basis of current price data. In order to avoid a mis-specification of our model, the analyses were carried out with nominal and deflated growth rates. As the results and estimated parameters were almost identical, we decided to stick to the original argumentation and chose the deflated series as a starting point <sup>73</sup>.

The measurement of 'electoral cycles' in the literature is normally straightforward. In the older econometric studies either a dummy variable with a 1/0 coding is used, i.e. all election years have the value 1 and all other years are coded 0, or a biennial period is analysed <sup>74</sup>. More recently, the variable is defined as the number of years since the last election and takes values from 1 to 4 <sup>75</sup>. Thus, as elections approach, the values increase. A positive association is expected between this variable and the change in spending. The variable is referred to as 'electoral cycle'. The statistical technique most often used in this context is multivariate

regression analysis. As we have seen in chapter IV, these studies focus exclusively on the relationship between economic policy and government popularity or election results. But the informational content of these models remains far behind the instrumental display. Rather than examining regular 'cycles', these studies seek to determine whether public expenditures increase within a given electoral period and whether economic conditions improve right around election time. Yet even granting the validity of such criticisms, they do not imply that there is no relationship between elections and the economy. Even if governments cannot reliably manipulate the development of macro-economic variables, they can, for example, manipulate transfer payments. A more appropriate way of modelling an electoral cycle seems to be a method which allows for testing in a systematic way the change in resource allocation between the pre-election year, the election year itself, and the two post-election years. In order to test for systematic differences in the yearly change of public expenditure, we used three distinct - though theoretically and empirically mutually overlapping - statistical techniques: a traditional analysis of variance, multiple regression and discriminant analysis, a special case of canonical correlation analysis. A short discussion of these techniques will show that they are all related and almost amount to the same thing as far as numerical outcomes are concerned. They differ, however, in interpretation.

Analysis of variance involves a collection of statistical methods which deal with whether the means of a variable differ from one group of observations to another. It is usually the appropriate method when the groups of observations are constructed by using a nominal or categorical variable as the independent variable in the analysis. This means that each observation is assigned to one of a set of mutually exclusive categories that are not ranked. Our independent variable - the 'electoral cycle' - can be conceived as resulting in four groups of observations, i.e. the election year and the first, second and third post-election years. The task now is to determine whether the groups differ in their average level of the dependent variable - the allocation of public expenditure.

The dependent variable in an analysis of variance is almost always measured on an interval level and public expenditures do indeed fulfil this requirement. As we are dealing with only

one predictor variable, a one-way analysis of variance in the context of a fixed-effects model was performed. The first step was to test the overall hypothesis of no differences in the means for our different groups representing the election period. If this omnibus test turned out to be 'significant', the second step was a follow-up test to explain these differences. In order to determine specifically which of the group means are different, one of the a priori methods for multiple comparisons between means was applied. The results of such an analysis of variance are identical with those obtained in a multiple regression analysis with a dummy variable as the independent variable. This is due to the fact that both methods are special cases of the so-called general linear model<sup>76</sup>. But their interpretations usually differ. While a significant  $F$  ratio in an analysis of variance means that the differences between means are statistically significant, it means in regression analysis that  $R^2$  is statistically significant, i.e. the relation between  $X$  and  $Y$  and not only the differences between the  $Y$  means. The main difference between these two techniques is that a regression analysis yields numerical values for the importance of each factor concerning the total variation in our expenditure series, whereas in analysis of variance only a partitioning of this variance occurs. In this sense multiple regression analysis accomplishes the same as one-way analysis of variance, but will provide us with more specific information as to which year in the election period leads to what kind of allocation.

Discriminant analysis also aims at statistically distinguishing between two or more groups of cases. Again we have defined four groups, pre-election, election, and two post-election years of which we will compare two at a time. To distinguish between the groups, we use the expenditure variables - the discriminating variables - that measure the characteristics in which we expect the groups to differ. The mathematical objective of this procedure is to weight and linearly combine the discriminating variables in such a way that the difference between the groups is maximized relative to the within-group variance<sup>77</sup>.

As we are only dealing with two groups at a time, the discriminant function is nothing more than a multiple regression equation with the dependent variable a nominal variable representing group membership<sup>78</sup>. Ideally, the scores

for the cases within a particular group should be fairly similar. Once the discriminant function has been derived, the two research objects of this technique can be pursued: analysis and classification. The analytical aspect allows us to measure the extent to which the discriminating variables actually discriminate between the groups. The classification aspect comes after the initial computation. We will use it here as a check of the adequacy of the discriminant function. The original set of cases is used to see how many cases are correctly classified <sup>79</sup>. The procedure for classification involves the use of a separate linear combination of the discriminating variables for each group. These produce a probability of membership in the respective group, and the case is assigned to the group with the highest probability <sup>80</sup>.

The relative importance of the expenditure variables to the discriminant function can be assessed by looking at the standardized discriminant function weights or coefficients; however, these weights are highly affected by multicollinearity and can change drastically with the addition or deletion of variables <sup>81</sup>. An alternative way of interpreting the results is to use the canonical structure matrix, i.e. the correlations between the discriminant function and each of the independent variables. The overall results should be fairly similar to those obtained with multiple regression analysis.

All three techniques were used as sort of a mutual check of the results. This was interesting insofar as it showed discriminant analysis as an applicable method in this context. However, all these statistical techniques are dependent on a number of assumptions. A multivariate normal distribution of the dependent or discriminating variables within each group is assumed as well as a common within-group population covariance matrix. But it has convincingly been shown that violating these assumptions does not necessarily invalidate the results. Another basic assumption is that the value of the error term in one period is independent of its value in any other period. When dealing with time series data, this assumption is often violated and autocorrelation is present, which results in a wrong estimation of the variance of the estimators. As a result, the tests of hypotheses are no longer valid <sup>82</sup>. There are several possibilities of correcting for autocorrelation. The most common suggestion to detrend a series is to calculate first differences. As we only use growth rates, we have done

this already. We then tested the data for autocorrelation and conclude that the problem is not present; there is no trend in our growth rates over time <sup>83</sup>.

Generally speaking, the statistical analysis will help to test three basic research questions:

- can we discriminate between the changes in resource allocation to the different group combinations using our set of expenditure variables?
- how well do the three policy areas and the categories discriminate?
- and
- which variables or expenditure level are/is the most powerful discriminator(s)?

### Notes Chapter V

<sup>1</sup> J.Danziger, for example, makes a distinction between rational-process models, cognitive-limits approach, organizational-process approach, econometric models, and the demographic approach, see Danziger, 1978:18-23. I think this typology is a bit misleading as it makes a distinction between approaches which actually belong to the same group. A reduction to three explanatory modes - the societal, political, and organizational system approach - seems sufficient and covers the whole range; see also Klein 1976.

<sup>2</sup> For an explanation of long-term developments of public expenditure in Europe see Alber 1983 and Kohl 1979. It should once again be emphasized that even if the long-term development of public expenditures is/might be largely determined by socio-economic factors, that does not mean that political considerations cannot have a considerable impact for the short-term development.

- 3 Schmolders 1968:33.
- 4 I am aware of the tautology which is involved here; this has also been pointed out by Katz, 1986:51 'if behaviour is the operational indicator of goals, then hypotheses explaining behaviour on the basis of goals are nonfalsifiable'.
- 5 Katz, 1986:52 'While an obvious simplification, the assumption has been defended on three grounds: the first is the importance of the desire to be reelected as the mechanism on which democratic theory relies to make office holders accountable to the general public. Politicians with no desire to be reelected would have no necessary incentive to worry about the needs or desires of their constituents. Secondly, whatever the other goals of politicians, reelection is an instrument to their realization. Finally, the assumption that politicians are single minded seekers of reelection is defended on the ground that it works. A significant range of real world behaviour can be explained in this way'; with reference to the second point of Katz's reasoning see chapter IV.
- 6 For a general historical and descriptive characterization, see Budge/Farlie 1983.
- 7 Downs, 1960:542.
- 8 The first two hypotheses are taken from Downs 1957:291; the last hypothesis was developed in Downs, 1960:541ff.
- 9 Toye, 1976:437.
- 10 For approaches to the problem of discriminating between different theories, see Toye, 1976:437.
- 11 A contrasting view is provided by Brittan, 1975:129-59; he argues that voters are more aware of the benefits than of the costs and that excessive expectations produce a budget that is too big. With reference to the general 'government overload' discussion see Lehner 1976.

- 12 Downs, 1960:545.
- 13 Downs op.cit.
- 14 See also Schmidt 1966; Klein 1976.
- 15 See Maass 1973; Ewringmann 1975.
- 16 Lehner, 1979:92 'Dies führt langfristig zu unzureichenden staatlichen Investitionen, Versorgungslücken und Überlastungseffekten, wie die gegenwärtige Finanzierungsproblematik in der Rentenversicherung in der BRD eindrucksvoll zeigt'.
- 17 See Treiber, 1984:97.
- 18 Davis/Dempster/Wildavsky, 1975:241.
- 19 Eichenberg, 1981:70; Ronge/Schmieg, 1973:235.
- 20 Zunker, 1972:108/109.
- 21 For a more detailed discussion see Zunker op.cit.
- 22 See Zunker op.cit.
- 23 Sturm, 1985:259.
- 24 Sturm, 1985:265 'Der Entscheidungsprozeß im Haushaltsausschuß verläuft inkremental und zum größten Teil reaktiv. Seine Außenbestimmtheit beginnt beim Informationsfluß und reicht bis zur von außen geforderten Gruppenloyalität'.
- 25 Reasons might either be a delay of the implementation of programmes due to various reasons, the actual need developing differently than expected, or the Finance Minister altering the appropriations during the course of the fiscal year due to changing economic conditions.

26 Quotation taken from Eichenberg, 1981:79.

27 See Mayntz/Scharpf 1975.

28 This became apparent in 1966/67 and led to a major legislative reform - the 1967 Law on Economic Stability and Growth. The law introduced a system of medium-term budgetary planning that included a five-year 'rolling' budget. The results of the law have been mixed. The goal of a 'forward looking' budgetary planning was not very effective.

29 Eichenberg, 1981:78.

30 For a critique see Smith, 1976:150 ff.; Wanat, 1972:1221 ff.

31 The basic formula simply states that the allocation for a particular expenditure item at year  $t$  is a marginal alteration from the allocation at  $t-1$ . The analyses start from nominal data and calculate the annual change. One problem that arises is to make sure that this 'incrementalism' is not just a function of the size of a particular expenditure unit. Another problem is to give an exact definition of 'incremental'. Wildavsky set the parameter by asserting that any change is incremental if it is within the range of  $\pm .3 \text{ ALLO } t-1$ . Danziger comments that the issue seems subjective and hence unresolvable. For him, any change is incremental if it falls within the range of  $1.05 \text{ ALLO } t-1$  to  $1.15 \text{ ALLO } t-1$ . Relatively incremental is a change between 1.16 to 1.30 and .90 to 1.04; not incremental are changes which are  $<.90$  or  $>1.30$  cp. Danziger, 1978:131; Treiber on the other hand defines a 10% change as a threshold for incrementalism, see Treiber, 1984:97.

32 Danziger, 1978:142.

33 Klein, 1976:426.

34 Lehner/Wildenmann et.al. 1980; Danziger,R./Treiber/ Schreiner 1981.

- 35 Treiber, 1984:107 'Vielmehr zeigt sich gerade in der beträchtlichen Häufigkeit von Wachstumsraten über 20%, daß Spielräume nicht nur vorhanden sind, sondern auch politisch genutzt werden!.
- 36 Natchez/Bupp, 1973:955.
- 37 Gist, 1982:870 f.
- 38 See in this context chapter III.
- 39 The data stem from the government financial report. In contrast to the budgeted expenditures for labour and social order and research and technology, these expenditures are final expenditures. An extension of the time series was impossible due to methodical problems, as earlier figures are available only in five year intervals. Moreover, the summary classification scheme for 1949 to 1962 differs considerably from the new one. Final expenditures for 1983 and 1984 were not yet available when the computations were done.
- 40 The data for the ministries of labour and social order and research and technology were collected by a research team of the University of Mannheim on the basis of the federal German budgets from 1952 to 1980. The project was lead by R.Wildenmann and F.Lehner; collaborators were R.Danziger, H.Treiber, and S.Schreiner. I worked in the project for three years as an undergraduate part-time assistant and took part in the data collection. At the European University Institute, I collected the data from 1981 to 1984. The expenditure figures include extraordinary budgets and supplementary budgets. The values are added to the respective volumes and given in units of 1000 DM. The budget year 1960 is generally referred to as a rump financial year for stock. It runs from the 1.4.1960 to the 31.12.1960, because during this year the financial year was adjusted to the calendar year. In order to avoid distortions, the figures for 1960 were raised by one fourth.

- 41 Welfare economic theory is preferably cited as a justification: Subsidies help to minimize or to remove any deviance from the Pareto-optimum and thereby increase public welfare. Another normative argument for subsidies uses the concept of merit goods, i.e. the private production of goods according to public policy goals.
- 42 See Gröbner, 1983:10 ff.
- 43 Bundesministerium der Finanzen, 1978:13; the second possibility of state subsidizing - tax reliefs - will not be considered here.
- 44 Bundesministerium der Finanzen, 1978:14.
- 45 From 6,23 Mio DM in 1969 to 12,2 Mio Dm in 1974, cp. Ewringmann/Hansmeyer, 1975:67; the government was urged to cut back subsidies in the 1967 'Law on Economic Stability and Growth'.
- 46 Ewringmann/Hansmeyer, 1975 :67.
- 47 Gröbner, 1983:100 'Streiks und Entlassungen könnten den Eindruck nähren, sie sei nicht in der Lage, auftretende Probleme zu meistern'.
- 48 See Bank 1970; in this context there is obviously a difficulty in deciding which law is an actual election gift or just an 'intended policy anyway', passed at the end of the legislative period because of a general orientation of the decision-making process towards the end of the electoral period. Our replication of Bank's study in the next chapter will help to answer this question.
- 49 Alber, 1980:325.
- 50 Kleinherz/Lampert, 1971:145
- 51 Liefmann-Keil, 1974:183 ff.

- 52 The data stem from a research project 'Party Policies and Popular Preferences in Modern Democracies'; principal investigators are I.Budge, H.-D.Klingemann, and D.Robertson. The degree of importance of the respective thematic concerns is measured as the number of times a theme is mentioned. It is inferred that the more space is devoted to a theme the more importance it should have for the party; see Klingemann, 1984:27.
- 53 Klingemann, 1984:29.
- 54 The data are taken from a 'basic calculation' of the variables for the German case. The technology issue variable corresponds to category 411 from the coding scheme, the welfare issue is composed of the categories as suggested by Klingemann, 1984:38; as the Free Democrats could not decide on a common platform in 1965, this case is omitted.
- 55 The following interpretation is based on a division of the development of research and technology policy into four phases. This classification is usually applied to all highly industrialized countries (Bräunling 1983); in the German context see Bruder/Ende 1980; Kommission für wirtschaftlichen Wandel und sozialen Wandel 1977; Treiber 1984.
- 56 See Treiber, 1984:53.
- 57 Berger, 1978:171.
- 58 Berger, 1978:187.
- 59 See Finanzbericht, 1982:158.
- 60 Subventionsbericht, 1978:56.
- 61 See Finanzbericht op.cit. The classification of expenditures corresponds to a functional division into various areas which show the relation between political priorities and public expenditures. This functional plan exists since the budget reform in 1969 but covers expenditures systematically since 1962 (cp. note 39). The plan is divided into nine big areas: 0 General Services, 1 Education, Science, Research, Cultural Affairs; 2 Social Security; 3 Health and Sport; 4 Housing; 5 Agriculture, 6

Industry; 7 Traffic and Communication; 8 Business Enterprises, General Property and Capital Assets; 9 Public Finance. The assignment of single outlays to the various areas is done with the help of so-called 'Funktionskennziffern' whereby the assignment sometimes seems to be quite arbitrary, see Treiber, 1984:58 and cited literature.

62 The structure of chapters for both items is taken from the 1984 budget.

63 Since 1982 this heading has been estimated under budget item 15, Federal Ministry Youth, Family, and Health.

64 Before 1982 the chapter was called: data processing, information engineering, documentation.

65 With the exception of chapter 8 which also contains payments to private persons and public law institutions.

66 The budgetary status of these agencies is defined in detail in the Bundeshaushaltsordnung from 1969.

67 The different categories of administrative and programme costs have been developed in the course of the 'Haushaltsprojekt'.

68 With respect to our research question it is more plausible to assume that governments decide to spend more money for job creation measures etc., than to give more money to public law institutions.

69 A detailed presentation of the respective titles and groups is given in the appendix.

70 Deviations in final expenditures versus budgeted expenditures may indicate changing political priorities but it is equally plausible to assume that they occur because of mechanical, bureaucratic features of budget implementation or other unforeseen changes, see note 25.

- 71 Eichenberg, 1981:135 'Overwhelming evidence suggests that changes on spending - rather than absolute levels or shares of the total - are the focus of expenditure planning and bargaining'.
- 72 The task, however, to choose the correct deflator for public expenditures is a bit problematic; cp. Littmann 1975, Treiber, 1984:71. The deflator which is used here is the index of government consumption with 1970 = 100; the values for 1981-84 were added as the SVR change the base year in 1982; source: Jahresgutachten des Sachverständigenrates, different years.
- 73 The results underline the assumption that the presumed inflation rate is taken into account, i.e. budgeters are not victims of the so-called fiscal illusion.
- 74 See Frey 1976; Tufte 1978; Nordhaus 1975.
- 75 Frey/Schneider, 1979:32; Eichenberg, 1981:141; Treiber, 1984:262. In this context it is important to mention that 1972 is usually coded with the value 3, i.e. as a pre-election and not as an election year. Surprisingly, the reasons leading to this decision are lacking. Nevertheless, this classification is justified as the government had to be convinced up to the summer of 1972 that the next election would take place in 1973. The pension reform was passed before the vote of no-confidence and both CDU and SPD tried to sell this reform as 'their product' during the electoral campaign. The 1972 budget was passed on the 21.12.1972, i.e. after the election. In the following we also will classify 1972 as a pre-election year when comparing the expenditures of 1972 with 1973.
- 76 See Iversen/Norpoth 1976, Kerlinger 1973, Urban 1982.
- 77 For a mathematical discussion see: Tatsuoka 1971; Lachenbruch 1975.
- 78 See Kerlinger, 1973:650; with three or more groups, however, discriminant analysis goes beyond multiple regression methods.

79 The other possibility for use of the classification technique is: once a set of variables is found which provides satisfactory discrimination for cases with known group memberships, a set of classification functions can be derived which will permit the classification of new cases with unknown memberships; see Klecka 1975.

80 In the case of unknown observations, 'discriminant analysis is concerned with the problem of assigning an unknown observation to a group with a low error rate. The function or functions that are used to do that assignment may be identical to the ones used in the MANOVA procedures'; Lachenbruch 1975:introduction.

81 See Bray/Maxwell 1985.

82 Kelejian/Oates, 1981:206; Johnston 1972; Maddala 1977.

83 We used the Box-Jenkins procedure in SPSS release 9.

## VI. Budgetary politics and elections: empirical results

One of the main hypotheses of the rational choice approach and of central importance for our study is that politicians adjust their decisions to approaching elections. With respect to the development and growth of public expenditures, we argued that the budget is a useful tool for politicians aiming at re-election and that tactical considerations and scarce and limited resources speak in favour of cyclical fluctuations in the allocation of resources in electorally appealing areas. Fluctuations in those areas are more or less perceived as the product of the routine patterns of political life in marketing politics. As convincingly demonstrated by Tufte (1978), but also through the responses of the political elite presented in chapter II, many politicians obviously agree that the vote function has important economic elements and that politicians attempt to steer the short-term development of expenditures according to their interests.

These statements run contrary to long-term approaches to systematizing the determining factors of the development of public spending. These cover some classic public finance theorems such as Wagner's law (1931) of increasing state activities as well as several theoretical concepts which discriminate between two or more 'main groups' of factors such as economic, demographic, institutional and accidental factors like wars, economic crises etc.<sup>1</sup>. As they are mostly put forward by economists, they all emphasize the predominance of economic factors in the explanation of public expenditure growth. Political factors are neglected, although their principal importance for a positive explanation of expenditure developments is not denied. Political science approaches to a theory of expenditure growth, on the other hand, rely more on the structural elements of political systems which shape the political decision-making process and hence budgetary decisions. These elements are above all political parties, interest groups and organizations, and the bureaucracy.

One of the rational choice approaches to the study of public finance, the Downsian approach, states that governments will raise expenditures as long as the vote-gaining potential of additional expenditures will be higher than a potential vote loss, inevitable due to the necessity of raising higher taxes to

finance these additional expenditures. For a positive explanation of the size and structure of resource allocation, however, these suggestions are too general and even tautological, as they imply that budgetary decisions are always taken to guarantee a maximization of votes, with maximization simultaneously taken as the operational indicator of decisions. Thus, as long as more specific assumptions and conditions are not introduced into the model, the consequences of maximizing behaviour for the development of public expenditures, i.e. temporary and perhaps systematic variations in size and structure, remain open questions.

The specific hypotheses which Downs deduced from this general model seem on the whole to be a more appropriate description of government behaviour than of the development and structure of the budget. We argued in the last chapter that there is a greater incentive for governments to spend their money in areas where it is possible for voters to assign a particular benefit to themselves, than in those areas which mainly serve to provide for group-indifferent public goods. We reversed the Downsian model insofar as benefits are more visible for voters than costs, and governments are assumed to spend their money on those services where there is a clearly visible benefit, in particular, measurable cash payments to defined groups. The electorally salient characteristics of economic benefits are certainly their timing and location. In addition to the reversed Downsian model we thus posit that one of the main features of the government's vote-maximizing behaviour is the synchronization of resource allocation in electorally important areas with the timing of elections. The model now allows for testing our derived hypotheses concerning the extent of the assumed development of the three budget areas in Germany.

The strategy of analysis and the presentation of results will be as follows: in chapter III we argued that the apolitical nature of the budgeting process as assumed by the incrementalist school would seriously relativize the theory of 'electoral cycles', i.e. the assertion that public expenditures are influenced by time perspectives and re-election constraints. Our review of the German budgetary process, however, seemed to indicate that both competition and bargaining are characteristic features in the German system. In order to obtain some insight into this question, a first step will be to

assess the actual extent of incremental change in our three policy areas.

Closely connected with incremental change is the question regarding the government's room for maneuver in actively shaping policy commitments. This refers to government restrictions due to scarce resources and limited flexibility of public expenditures. As both factors, apolitical incremental change and limited flexibility, would seriously hinder the possibilities of cyclical variations in resource allocations, these questions will be answered before the statistical results will be presented. They will be dealt with on a purely descriptive level in terms of expenditure patterns and developments over time.

In section A the results of our research on German expenditure patterns for subsidies from 1963 to 1982 will be presented, followed by the results obtained for the social budget from 1953 to 1984 in section B. Section C will then deal with research and technology outlays and their relevance concerning the relationship between expenditure patterns and general elections in West Germany.

### **A. Subsidies and elections**

Before discussing the results of the various statistical analyses, a description will be given of the empirical development of the time series and growth rates of this area and the respective components over time. From this purely descriptive analysis we will get some insight as to the question of incremental change and flexibility of these expenditures, which is defined as the scope of action of legislative and executive organs in the variance of public expenditures according to size and purpose over time <sup>2</sup>. This means that the extent to which output variations occur will be seen as an indicator of the government's ability and/or restrictions in the active shaping of policy commitments. The frequency of negative growth rates is taken as the most important indicator of this flexibility over time.

Generally speaking, the political system has to fulfil two different tasks: on the one hand, in order to obtain the necessary diffuse and specific support, it has to produce outputs which satisfy general societal needs and realize

generally accepted targets; on the other hand it cannot neglect specific group interests which are put forward constantly by diverse groups and with varying intensity. One might assume that the 'downwards' flexibility - in the sense of expenditure cuts - decreases as soon as election dates approach and both the general and specific support of governments has to be documented; a vote-maximizing government might attempt to solve that conflict by a general 'upwards' flexibility before elections and vice versa.

By looking at the nominal outlays for subsidies from 1962 to 1982, we find that the annual expenditures vary considerably. Despite a generally increasing tendency, agricultural and industrial subsidies show nominal cuts in comparison over time. In the case of agricultural subsidies, however, one has to take into consideration that the European Community established its own financial system from 1971, i.e. the EC raises its own funds and compensates the expenditures of the national member states according to fixed market arrangements<sup>3</sup>. But even if we add these EC payments to the reported national figures<sup>4</sup>, some discontinuities in the annual allocation remain. A continuous annual increase can only be found in the case of social transfer payments. By looking at the deflated series, the discontinuities in the respective areas become even more apparent. Particularly in the agricultural sector we find quite extensive cuts in recent years. Also the development of social transfer payments is no longer as uniform as in the case of nominal data, but still exhibits a strong upwards tendency.

That subsidies are nevertheless clearly in line with electoral cycles has been confirmed for example by Maass (1973) who pointed out that there was a significant relationship between agricultural and industrial subsidies in Germany from 1956 to 1967, whereby the highest positive changes in annual growth rates always fell in election or pre-election years. His result was confirmed by Deininger (1974) who noted that the subsidies for agriculture, the mining and power industry, and the traffic and manufacturing industry were particularly high in the individual pre-election years from 1952 to 1968. Finally, Hubka and Obermann (1977) reached the conclusion that subsidies in Austria from 1962 to 1975 were paid in accordance with the vote-maximizing hypothesis of the rational choice approach.

### 1. Agricultural subsidies

In order to get an impression about flexibility and incrementalism in agricultural subsidies, the largest positive and negative changes in annual growth rates from 1963 to 1982 will be compared. As a criterion and operationalization for quantitative flexibility, the growth rates of the total budget were taken. This means that an expenditure item was assessed as being flexible if the increment in any given year was higher than that of the total budget, or if a cutback in absolute terms was implemented<sup>5</sup>. This classification will give an impression of incremental change at the same time, as the percentage figures of annual change ideally should be quite low according to incrementalist theory:

Table 1: Highest and second highest positive (HI) and negative (LO) increments and decrements in annual growth rates of agricultural subsidies from 1963 to 1982

	HI	2nd HI	LO	2nd LO
agriculture	39.5%	20.3%	-22.7%	-20.4%
	(1968)	(1971)	(1974)	(1981)
improvement of agrarian structures;	9.3%	9.2%	-32.9%	-26.4%
income stabilization;	(1964)	(1967)	(1972)	(1981)
	91.5%	20.1%	-63.5%	-52.5%
	(1968)	(1967)	(1971)	(1974)

An assessment of the positive flexibility, i.e. the highest and second highest increments in growth rates from one year to another, might suggest a generally high upwards flexibility. With regard to the timing of the highest positive increments in annual growth rates, we see that these fall in pre-election years. The highest negative growth rates, on the other hand, do not exhibit a uniform pattern but mostly occur in post-election years. This concentration of high positive growth rates on pre-election years seems consonant with the findings

of Maass and Deininger. A possible explanation might be the relatively short time-span between the enactment of budgets in election years and the election dates themselves. In order to assure or reassure the desired political support, politicians seem to rely more heavily on the steering capacity of pre-election year stimuli. It will become more apparent later on that this - so far - speculative interpretation actually describes a systematic phenomenon.

Compared with the observed low flexibility of the total budget<sup>6</sup> from 1963 to 1982, the much higher flexibility of these categories might be interpreted according to the lines of argument of the incrementalist school, i.e. incremental changes occur far more often on a highly aggregated level of expenditures and have in this case to be seen as a function of the size of the analysed budget item.

Thus, the scope of action for varying policy outputs on a more disaggregated level of analysis seems to be considerably higher. If we accept a +/- 10% margin - the criterion usually taken - as the threshold for marginal increments or decrements, we find that 95% of the annual growth rates of total budget allocations are clearly below this threshold, i.e. incremental decision-making seems to be present. With only one exception in 1975, all other growth rates from 1963 to 1982 are smaller than the +/-10% margin.

With respect to agricultural subsidies, however, only 50% of all growth rates are within the limits. For the individual components - improvement of agrarian structures and income stabilizing measures - 57.9% and 52.6% can be reported. These figures suggest that the usually accepted criterion of +/- 10% as an indicator of incremental change cannot account for much of the variance in the pattern of increments and decrements in annual growth rates in the agricultural area in Germany from 1963 to 1982. It seems much more to be the case that as soon as one goes below the inflexible and highly aggregated level of total expenditures, competition and possibilities of varying the political output become greater.

In chapter V we emphasized the importance of associations for the policy-making process in Germany. Probably one of the best examples in this context is the German farmers association, the 'Bauernverband'. Since the early years of the Federal Republic, agriculture has been one of the most highly organized sectors of the economy. As in the Weimar Republic,

the cohesion of agricultural associations was not destroyed by conflicting interests<sup>7</sup>. It is well documented that the 'green front' was not seldom aggressively engaged in politics<sup>8</sup>. Kaiser (1956) explains the exceptional and successful position of the Bauernverband by pointing out that the assessment of the peasantry is traditionally characterized by a certain indulgence which is not always free of exaggeration and idealization. The political influence of this association has always been considerable and consequently its representatives were able to gain a permanent channel of influence via political parties and the parliament. Usually the majority of farmers vote for the CDU. The way in which they actually claim their interests has been pointed out by Hirsch-Weber (1967): 'In farmers' associations there is, however, discontent with certain aspects of the CDU's agrarian policy. This moved some officials of farmers' groups to ask members to vote for other bourgeois parties, such as the FDP'<sup>9</sup>. A similar call occurred in 1986 when part of the farmers decided to abstain from the communal elections in Schleswig-Holstein and the Länder-elections in Lower Saxony. The results were high increases in subsidies.

The example of the German farmers association points to the fact that they can exert influence on the budgetary decision-making process, which leads presumably to an upwards flexibility of subsidies shortly before elections. At the end of the 70's and beginning of the 80's, however, a change seemed to have occurred. From 1979, growth rates are negative and quite extensive cuts have been carried out. These cuts might have been due to a changed perception of politicians as to the actual possibilities of cutting back agricultural subsidies without losing too much support or endangering their re-election chances.

But in 1984 the political attitude towards farmers changed again. At the end of March 1984 the EC-counsel of agrarian ministers decided to reduce the positive German 'border compensation' (Grenzausgleich) which had meant for Germany since 1969 a cheapening of exports and a raising of prices on imports. Germany was allowed by the EC-counsel to support the German farmers and 'unter Verwendung des Instruments der Mehrwertsteuer eine besondere Beihilfe zu gewähren'<sup>10</sup>. However, the farmers' associations took the Finance Minister by surprise and achieved a drastic increase in national

subsidies. The 1986 pre-election year certainly fits the assumption of a high upwards flexibility shortly before elections.

## 2. Industrial subsidies

As laid out above, we assume that the simultaneous action of parties and associations leads towards a relatively high upwards flexibility in areas relevant to government prospects of re-election. It is often assumed that it is almost impossible for governments to cut subsidies either because the permanent influence of associations would not admit it, or because governments themselves try to anticipate their demands and increase subsidies as a precaution <sup>11</sup>. Our results so far show that this is not the case and quite extensive cuts have been carried out. This result is equally valid for industrial subsidies <sup>12</sup>:

Table 2: Highest and second highest positive (HI) and negative (LO) increments and decrements in annual growth rates of industrial subsidies from 1963 to 1982

	HI	2nd HI	LO	2nd LO
industry	39.2% (1978)	37.2% (1964)	-19.9% (1976)	-13.6% (1969)
energy	61.0% (1970)	38.6% (1975)	-34.9% (1981)	-27.6% (1969)
mining	180.0% (1964)	111.8% (1963)	-33.1% (1969)	-22.2% (1976)
regional promotion	44.1% (1968)	28.9% (1974)	-26.9% (1981)	-24.6% (1975)

The interpretation of these increments and decrements in annual growth rates from 1963 to 1982 suggests that this area is also quite flexible with respect to possible political variations of resource allocation. The generally lower values for negative flexibility may indicate that political factors again tend to limit or restrict government abilities to cut subsidies but take effect on a higher upwards flexibility. Four of the highest positive growth rates fall in pre-election years but none in the election year itself. The highest negative growth rates fall almost exclusively in two election years 1969 and 1976, and the 1981 post-election year.

This concentration of high negative growth rates in these two election years might again be due to the relatively short period - 4 to 5 months in this case - between the actual enactment of the budget and the election. One could argue that this time-span is too short to provoke any negative reactions of potential voters, as these cuts would become effective only after the election had taken place. The empirical evidence so far suggests that the pre-election year is particularly important for politicians aiming to enhance their re-election chances.

Concerning the question of incremental change, we find that only 40% of the subsidies paid to the whole area fulfil the inclusion criterion of +/- 10% increments or decrements; the percentage figures for the energy sector also yield 40%; for the mining sector only 25% can be reported and again 40% for regional promotion measures <sup>13</sup>.

Comparing these percentages with those obtained for the agricultural sector, we conclude that the margins established by the incrementalist school cannot explain the development of the deflated growth rates in these two areas. A plausible interpretation of these findings seems to be that competition and political and economic factors become more apparent as soon as a less highly aggregated level of public expenditures is analysed.

Certainly an important reason for this non-incremental resource allocation in this field is economic factors. All subsidies dealt with here - and particularly those for mining, building trade, and regional promotion - are characterized by high positive growth rates in 1967 and 1968, the two years following the 1966 recession, the first economic slump after World War II. Extensive cuts on the other hand, occur after

the 1973/1974 oil-crisis. The worsening economic conditions since 1980 have also shown great effect on the development of subsidies. In 1981 the growth rates for all subsidies were negative - with the exception of social transfer payments where a cutback in nominal outlays only occurred after the CDU take-over of government in 1983. Therefore one has to bear in mind that the development of this sector is largely dependent on the national and international economic situation. But despite this dependency, the distribution of growth rates for industrial as well as agricultural subsidies shows a certain concentration of high growth rates in pre-election years. With reference to the presumed relationship between increasing expenditures in election years and election dates, the descriptive analysis does not yield any evidence. It may be anticipated at this point that the particular importance of pre-election years will be confirmed in all following analyses where a directing impact of elections was assumed. Again, this may indicate that the time-span between the budget enforcement in election years and the actual election is perceived as being too short to influence voters via an increase of visible benefits. The time-span between the enactment of the budget in election years and the respective election dates varies between 2 and 6 months before the election takes place. As the implementation and enforcement of policy programmes only becomes effective with a certain time-lag, it seems to be more promising for governments to concentrate their re-election efforts on the pre-election year in order to enhance their chances and make sure that target groups receive their benefits in time.

These purely descriptive findings receive support from Deininger (1974) and in particular from authors such as Kramer (1971) and Golden and Poterba (1980) whose studies were presented in chapter IV.

### 3. Social transfers

The special importance of social transfer payments for political parties and governments seeking electoral support was deduced from the fact that they affect a large group of voters and are immediately visible and accountable to the recipients. The assumption is that political factors are again at work,

favouring an upwards flexibility, i.e. high increments of expenditures shortly before elections.

As anticipated, the largest increases of 34.6% in 1975 and 8.7% in 1964 occur in pre-election years whereas the greatest drops of -5.1% in 1973 and -4.6% in 1969 occur in a post-election year and an election year respectively. The very high positive increase of 34.6% in 1975 (a pre-election year) is an exception, however. It is the only growth rate exceeding the assumed +/- 10% threshold of incremental resource allocation. All other growth rates of social transfer payments from 1963 to 1982 are clearly below this margin <sup>14</sup>. Comparing these figures with those obtained for total budget allocations, we get exactly the same result, i.e. 95% of the annual deflated growth rates are smaller than the +/-10% margin usually interpreted as marginal increments or decrements. This shows that both analytical units are quite inflexible, i.e. incremental decision-making is present and both units increase more or less steadily over time. The fact that social transfer payments range at the lowest level of positive and negative flexibility - meaning that they show much less variation over time in comparison with agricultural and industrial subsidies - is actually not very surprising. Although highly relevant for politicians, the flexibility of social transfers has also to be seen as a function of the size of these transfer payments. The flow of transfers affects millions of citizens but also billions of DM are involved so that mathematical plausibility certainly favours marginal increments on such a highly aggregated level of public expenditure. In Germany, social transfers make up a considerable portion of the federal budget:

Table 3: Social transfers as a percentage of total spending <sup>15</sup>

	1952	1969	1975	1980
social security	9.4%	13.9%	17.7%	16.5%
family allowances	2.9%	4.1%	9.0%	9.2%
war victim benefits	15.7%	9.6%	7.9%	7.0%
civil servants	4.3%	3.9%	4.9%	4.5%
all transfers	34.3%	35.1%	41.3%	40.4%

As we can see, social transfer payments in 1980 make up a bit more than 40% of that year's total allocations. Agricultural subsidies, on the other hand, only amounted to 1.0% in 1980 and industrial subsidies to 3.1% of total allocations.

Considered in this general context, the relatively low growth rates are quite plausible. Higher resource allocation to this area would severely limit the general possibilities of varying policy outputs. The rather small negative growth rates might be due to the fact that 'ein einmal erreichtetes Volumen des Sozialhaushalts praktisch den Charakter eines kulturellen Mindestbedarfs annimmt'<sup>16</sup>, i.e. cuts are almost impossible as social expenditures are perceived as some kind of active social property. This conclusion is not always or perhaps no longer correct, especially since the CDU take-over of government in 1982 when far-reaching changes in the system of social security were actually carried out.

Our results so far confirm the research results of the 'New Political Economy' which emphasize that governments use the budget as a means of obtaining political support. But the 1983 election in Germany - and in other countries as well - seemed to indicate that 'rational' strategies had changed. At least at the beginning of the 1980's it was more rational to promise or pursue a policy of extensive budgetary cuts in order to gain political support, instead of allocating additional resources along electorally important issue dimensions. In order to win the 1983 election, the question of the size and extent of public debt became the most important campaign topic and was accompanied by a heated debate between the government and the opposition party. As pointed out in the introduction, however, the 1986 pre-election year provided a different scenario. The strategy of increasing expenditures and lowering taxes in order to win votes had become popular once again.

As all increases or cuts of social transfers have to be seen as resulting from legislative processes, it seems to be advisable to scrutinize this process in more detail. We will therefore investigate German social policy laws and their timing from 1972 to 1983 in the next section of this chapter.

#### 4. Social policy laws and elections

A central hypothesis of this study applied to social transfer payments assumes that the impact of elections is visible in the micro-budgeting process, thus systematically affecting expenditures. An investigation of social policy laws gives us the opportunity 'to correct for the quantitative bias' of entirely relying on expenditure variables in order to analyse this synchronization. As far as we know, the only study which has ever been carried out in this area is the one by Bank (1968) who examined the relationship between social policy-making and social spending in Germany from 1949 to 1968. His results show that the passing of social policy laws clearly follows an electoral cycle. The number of social policy laws increased as soon as elections approached and reached its peak in the individual election years. This was all the more valid for so-called 'Leistungsgesetze', i.e. laws increasing benefits, or in other words, social transfer payments. His results emphasize, however, a particular importance of election years for the policy-making process<sup>17</sup>.

This interpretation by Bank does not coincide with our data. Classic examples of electoral politics in Germany from 1953 until 1965 are assumed to be: the pension reform in 1957, the reform of children's allowances, and the so-called 'Pennälergehalt' in 1965. The latter provided for an election gift of 40 DM per month to parents of school-aged children as a subsidy for their education. As this law was heavily criticized from all sides, it was cancelled in 1967. In fact, however, the first two laws became effective in the pre-election year<sup>18</sup>. Nevertheless, quite a few activities can be reported for the election years themselves. But these activities have mainly to do with tax reductions and not with raising expenditures. The former chancellor, Konrad Adenauer, for example, realized the relationship between increasing prices and votes and used it systematically in election years<sup>19</sup>: the lowering of taxes on tobacco (8.6.1953) and consumers' taxes on coffee and tea (24.8.53) are examples, as is the 1957 agreement with industry to delay an increase of prices. Some producers supported the CDU with public advertisements promising to safeguard price stability. The same electoral support was given in 1961. Further examples of this kind are the postponement of tax increases in 1976, the

postponement in reorganization of the pension insurance scheme in 1976, and the rise of payroll contributions from the insured in 1981, the first post-election year.

We replicated Bank's study for the three SPD legislative periods from 1972 to 1983. The last election period was characterized by the CDU take-over of government and anticipated elections which confirmed the 'Wende', the change in government. As this period does not exhibit the normal four-year pattern it might be particularly interesting to look at.

On the whole, forty laws were passed in the social policy area from 1972 to 1976<sup>20</sup>. The first interesting result concerns the often expressed assumption of an existing 'parliamentary cycle', i.e. the assumption that more laws are passed at the end of the legislative period as the time necessary for preparation and enforcement would lead to a general orientation of the decision-making process towards the end of the electoral period. This assumption cannot be confirmed. Considering the number of laws passed in the first and second half of the legislative period, we find that 21 laws were passed in 1973/74 and 19 laws in 1975/76. For the individual years the breakdown is as follows: 11 laws were passed in 1973, 10 in 1974, 9 in 1975, and 10 again in 1976.

Bank's result - that the number of laws increased shortly before elections - certainly does not hold true in this form for this SPD period. We obtain, however, an interesting change when we no longer consider the year in which laws were announced but the year in which they became effective. As the data show, the highest number became effective in the 1975 pre-election year<sup>21</sup>: while 10 laws became effective in 1973 and 13 in 1974, the number increased to 15 laws in the pre-election year and was reduced to 9 in 1976.

This concentration on the pre-election year is even more evident for the period from 1976 to 1980. Overall, twenty laws were passed, 9 laws in the first half and 11 in the second half of the electoral period. The distribution for the individual years runs as follows: 4 laws were announced and 5 became effective in 1977; 5 were announced and 8 went in effect in 1978; the number increased to 7 announced laws and 11 laws in effect in the 1979 pre-election year and decreased to 4 laws announced and 8 laws in effect in 1980. The concentration on the pre-election year can already be seen by looking at the

number of laws passed in the individual years. When the year in which most laws became effective is also taken into consideration, we can see that this tendency is reinforced.

In the 1980 - 1983 period, 9 laws were passed in 1981 and only one in 1982/83 respectively. A comparison of all three periods shows that there is no uniform pattern for either the passing nor the timing of social policy laws. The average duration of the legislative process varies between 5.5 months (1980-83) and almost 9 months (1972-76). For the individual laws this time-span varies between 1.5 and 32 months. Moreover, the time necessary for discussion and enforcement is not dependent on whether these laws imply new or additional costs for governments.

In general we cannot find any fixed duration for the preparation and enactment of social policy laws. This means, however, that the observed concentration of laws becoming effective on the 1975 and 1979 pre-election years cannot be interpreted as a quasi 'autonomous' or fixed legislative procedure but is due to an active steering capability of this process. Governments thus seem to have the ability to direct the timing and location of - in this case - social policy laws.

##### 5. Subsidies as electoral politics - the statistical analysis

As laid out in the last chapter, we have chosen three statistical techniques for the identification and specification of the assumed synchronization of expenditure in electorally appealing areas with the timing of general elections. Firstly, we run a regression analysis with three dummy variables as independent variables, denoting the pre-election, election and first post-election year. The expenditure variables were then regressed on the different years. The intercept or constant is in this case equal to the mean of the second post-election years which were assigned 0's throughout. The regression weights are equal to the difference between the mean of each of the dummy variables and the 'control' group mean. The  $a$  and  $b$  values will tell us which independent variable leads to what kind of allocation. The  $R^2$  quantifies the proportion of variance in our expenditure data, accounted for by the different years of the election period. The  $F$  ratio associated with the  $R^2$  determines whether the groups differ

significantly. With respect to the question of statistical significance, however, we do not use tests of statistical significance in their original meaning. We do not aim at making predictions and inferences from our sample. All techniques are only used in an explorative, descriptive way. Some caution with significance tests is all the more appropriate as regression analysis assumes the dependent variables to be normally distributed within each group. This assumption is not necessary for the calculation of regression measures but is needed as soon as inferences to a population are made. A further argument against significance tests in our context is that we do not really have a sample of observations. In short, we will not put too much emphasis on these tests.

The results of the regression analysis will tell us whether the different years of the election period can account for much of the variance encountered in the expenditure series. Secondly, they will show if it is the pre-election year or the election year which is actually more important as an explanatory factor; thirdly, and most importantly, we will see if there is any systematic synchronization at all.

In order to determine which groups of years actually differ from each other, we took one of the 'multiple comparisons between means' approaches in the frame of a traditional analysis of variance. The contrasts were hypothesized prior to the analysis of data. Important comparisons were, of course, the allocations in pre-election and election years versus post-election allocations. Other values like the sum of squares, the mean squares and  $F$  are the same as those obtained with regression analysis.

Finally, discriminant analysis is also a regression technique which aims at statistically distinguishing between two or more groups of cases. The task is also to compare - for example - expenditures in election years with expenditures in the first post-election year in order to see whether they are statistically different or not. As we are only dealing with two groups at a time, discriminant analysis is nothing more than a multiple regression technique, primarily used in the econometric studies presented in chapter IV <sup>22</sup>.

The various analyses were carried out as follows: firstly, the expenditures in election years were statistically compared with the expenditures in the first post-election year. According to the literature, the two groups should be different, and the

expenditures in the election year group should be systematically higher than those in the post-election year group. Secondly, the expenditures in election years were compared with the second post-election years. The basic reasoning is the same as in the first analysis, except that the assumed relation might be even more visible and distinct in this two-year rhythm. Thirdly, the two analysed groups consisted of the pre-election and the election year itself. According to some suggestions in the literature, the expenditures of the election year should be statistically different but also higher. Fourthly and finally, the expenditures of the pre-election year were tested against the expenditures of the first post-election year. In this case the pre-election year expenditures were assumed to be higher.

This analytical scheme was used throughout the study and for all analyses. It allows for a measurement of the extent to which the discriminating variables actually discriminate between the groups. In the previous chapter we put forward three general research questions. Applying them to the area of subsidies, we will subsequently attempt to answer the following questions:

- 1) Can we discriminate between the changes in resource allocation to the different group combinations using our set of discriminating variables?
- 2) How well does this policy area discriminate?
- 3) Which variables are the most powerful discriminators?

The results of the regression analyses are somewhat mixed <sup>23</sup>. It is certainly not the case that all subsidies dealt with here exhibit the assumed systematic fluctuations in combination with election dates. The amount of variance explained by the individual years of the electoral period varies between 0.5% and 17%. Noticeable are the particularly low percentages obtained for the area of industrial subsidies and its disaggregated components. An incorporation of economic predictors would probably yield much better results for this sector.

There are, however, some indications which speak in favour of our hypotheses. Thus we find pre-election year allocations

in national agricultural subsidies - and especially those related to income stabilization - to be the most important explanatory factors. Regional promotion measures are characterized by negative growth rates or cuts in post-election years. Social transfers, on the other hand, show an upwards trend in pre-election years.

Which conclusions can we draw from these figures? First of all we can see that the election year itself does not play the role suggested by some studies within the New Political Economy, and that the pre-election year seems to be more important in this context. At least for some agricultural subsidies and the broad category of social transfers this seems to be the case.

Concerning the question of whether there are systematic differences in resource allocation to the four groups of years over time, our analysis of variance points more to the fact that this is not the case. Although the pre-election/post-election year contrast yielded best results for income stabilization, regional promotion and social transfers - that is, the variables which performed best in the regression analyses - these results are not convincing<sup>24</sup>. All other contrasts, e.g. pre-election versus election year or election versus second post-election year, did not yield any results at all.

The interpretation of the results is a bit different because in discriminant analysis the variables operate as a set and are analysed concomitantly. As we cannot test the overall categories and their components at the same time - when added, the components yield almost identical figures with the overall categories - we decided to concentrate on the components.

Here too, we can only discriminate between the change in resource allocation in pre-election years and first post-election years. All other proposed group combinations, i.e. election year versus first and second post-election year or pre-election year versus election year, do not yield any results. Only by comparing the expenditures of pre-election and post-election years do we find some empirical evidence for a systematic change in the pattern of resource allocation over time.

The results from the comparison of expenditures in election years with non-election years were much more negative than expected. The relationship which is frequently assumed between expenditures in election years and actual election

dates is clearly not in line with our own empirical results. Quite to the contrary, governments seem to concentrate their re-election efforts on the pre-election year in order to enhance their re-election chances, and thus make sure that target groups receive their increased benefits in time. Due to a given time-lag in voters' reactions, this policy strategy seems all the more plausible. The subsequent analysis therefore refers exclusively to expenditure change in the respective pre-election and first post-election years.

Concerning the actual extent of discrimination between the two groups and the expenditure variables, the analysis aspect of discriminant analysis provides several tools for data interpretation. Among these are statistical tests for measuring the success or the extent with which the expenditure variables discriminate when combined into the discriminant functions. Often the standardized discriminant function coefficients are used as gauges of discriminating power. They are, however, highly influenced by intercorrelations among the variables so that changing the set of variables can have dramatic effects on the calculations. The function estimated on the basis of the components of the agricultural, industrial, and social transfer area is statistically 'significant' using a simultaneous procedure, i.e. all variables were included concomitantly<sup>25</sup>. The fact, however, that the whole equation is highly significant but not the univariate  $F$  values for the individual variables suggests a problem of multicollinearity, i.e. the expenditure variables are not independent of each other. Generally speaking, if multicollinearity is present, the problem is the difficulty of determining the particular influence of each independent variable on the dependent variable. In our context multicollinearity substantively means that we cannot separate out the individual effects of the electoral period on the expenditure variables which are related. While exposure of the problem is relatively easy, its solution is not. However, if none of the individual regression slopes are significantly different from zero, there is still the chance that the whole line will explain a significant amount of variance of the explained variables. We know, for example, that multicollinearity has no effect on the  $F$  test which tests the significance of the overall model. As a rule, it is not possible to specify a regression model where multicollinearity is not present. Given that some multicollinearity always exists, the

question is: at what point does the degree of multicollinearity cease to be 'normal' and become 'harmful'? This question has not been satisfactorily resolved. According to the rule of thumb, multicollinearity is regarded as harmful if at the 5% level of significance, the value of the  $F$  statistics is significantly different from zero but none of the  $t$  statistics for the regression coefficients are significantly different from zero<sup>26</sup>. As an investigation of the within-groups correlation matrix showed, we in fact encounter multicollinearity among some of the variables.

This seems, however, to be inherent in the nature of our data. The reason for this interdependency lies in the nature of the budgetary decision-making process itself. As the allocation of all public expenditures has to be seen as resulting from a competitive process for scarce resources, each over-proportional increment in an expenditure item leads almost inevitably to lower expansion possibilities of other categories or areas. The conflict potential varies of course in accordance with economic growth, revenue collection, or overall inflationary budgets. Nevertheless, the limits are given, last but not least due to economic ideologies concerning the function of the budget for economic policy-making. In this regard, our data will always reflect this inherent competitive process and will never be entirely independent from each other. For the interpretation of our results, this means of course that the coefficients can only be interpreted with caution. In general the standardized canonical discriminant function coefficients can be interpreted much as in multiple regression analysis and serve to identify the variables which contribute most to the differentiation between the pre-election and post-election year<sup>27</sup>.

The discriminant function coefficients show three variables which seem to contribute most to differentiation along the respective dimension: - subsidies paid to the agricultural sector in order to stabilize income, which mainly consists of lowering oil prices; - regional promotion measures to improve regional economic structures with a negative contribution, and thirdly - social transfer payments including social and unemployment insurance; family, poor, and youth relief; social benefits due to war and political events; and promotion of private wealth and subsistence.

A last question refers to the direction of this relationship.

This question can be answered by looking at the canonical discriminant functions evaluated at group means, the so-called group centroids, and the discriminant scores for the individual cases within the two groups. We find that the growth rates in pre-election years are on the whole positive whereas those in post-election years are on the whole negative.

So far, all three techniques produced consistent results though the empirical evidence is rather weak. This can best be illustrated by examining the correlation of each variable with the discriminant function itself. This so-called structure matrix is a measure of how each of the expenditure variables independently relates to the discriminant function. The magnitude of this correlation for the three variables which best performed in the previous analyses is only 0.07 and hence almost non-existent.

Subsidies for the improvement of agrarian structures, i.e. payments for field settlement (Flurbereinigung), individual business promotion, improvement of market structures, infrastructural measures, additional payments to lower interest rates (Zinsverbilligungszuschüsse), and the joint programme of the Federal and Länder governments concerning agrarian structures and coast protection, do not exhibit any systematic difference. The same holds for the energy, water and coal-mining sector. This weak relationship of the two industrial subsidy components with the pre-election/post-election group separation seems to be due to the sector's dependency on the national and international economic situation with reference to oil prices or the national energy consumption in general. Economic factors rather than political factors seem to influence the annual allocations in this sector.

The overall conclusion can only be that there is little empirical evidence as to a systematic increase of subsidies shortly before elections and a corresponding cutback in post-election years. Analysis of variance as well as discriminant analysis was not able to provide any convincing corroboration of such a relationship. But what is the substantive meaning of this result and how can it be explained?

It means first of all that the chosen analytical categories do not vary systematically with the election period over time. There might well be individual election gifts before elections but they do not occur every four years within one and the

same time series. A few reasons for these negative findings are conceivable. The first concerns the quality of these data. Financial Reports and in particular Subsidy Reports, have often been criticized for an incomplete and sometimes arbitrary listing of allocations with reference to actual budget titles. Whether the subsidies analysed here give an exhaustive description of all subsidies undertaken in these areas remains an open question. Secondly, the level of aggregation might still be too high and not differentiated enough to trace any direct steering attempts. Moreover, the use of final expenditures might also be a hinderance to provide for a correct explanation. Final outcomes - due to various reasons - might not even come close to budgeted figures which we perceive as best expressing the government's public policy priorities.

The most important reason, however, is one that is often surprisingly overlooked in the literature dealing with subsidies and elections: the German federal system. Even when analysing federal subsidies, the Länder play an important role as administrative agencies of federal policy. The above-mentioned direct way of influencing behaviour via subsidies is institutionally connected with Länder participation. This is all the more important for so-called 'Gemeinschaftsaufgaben', i.e. joint programmes of the federal and Länder governments, which make up for a substantial amount of subsidies given to industry and the agrarian sector. Particularly under the heading of regional promotion measures, about half of the allocations flow to the joint programme 'Verbesserung der regionalen Wirtschaftsstruktur'. So it may well be that Länder governments which differ in their party-political colour from the federal government may counteract intended federal electoral politics. Of course this argument only holds, when we deal with final expenditures as they no longer reflect initial federal budget intentions. Whether the use of budgeted expenditures actually makes a difference with reference to the presumed synchronization will be examined in the next section of this chapter.

Another reason for the - in light of our hypotheses - somewhat negative conclusion might also be that we have simply chosen the wrong expenditure items. But as for example the 1986 pre-election year has shown, farmers and female pensioners undoubtedly were the preferred target

groups of re-election efforts. This observation is congruent with the results of our regression analyses which yielded a particular importance of pre-election years for allocations of agricultural and social transfers in general. Whether this is a valid interpretation will be the prime concern of our analysis of budgeted social expenditures.

## B. Social policy and elections

One of the most important options available to the FRG after World War II was Ludwig Erhard's conception of a 'free market economy' (Soziale Marktwirtschaft). Relying on individualistic premises and the innovative energies of the people, the concept entailed state interference only in those cases where market forces would not work. Wildenmann (1987) points out that 'as a pendant to the Soziale Marktwirtschaft the development of the Welfare State was necessary to decrease conflicts that might hamper the Bonn government and to create the social peace inside the country needed in order to achieve his (Adenauer's) foreign policy goals' <sup>28</sup>.

However, the idea of state provisions in support of societal groups dates back to Bismarck, who introduced the core of the present German social security network. Since then, all parties have competed in extending this net of social security. The socio-political tasks of the first German CDU government (1949-1953) were predetermined by the general situation after World War II. The question was to mitigate the immediate misery of expellees, refugees, war victims, recipients of pensions, and the huge number of unemployed. The second CDU government from 1953 to 1957 continued its social policy but - due to social and societal structural changes - announced a comprehensive social reform (Sozialreform). The most important goals were to reduce the unemployment rate and to improve the economic situation for the elderly, invalids, orphans and surviving dependents <sup>29</sup>. The ambitious plan of the social reform eventually resulted in the reform of individual branches of the social security system, the first being the compulsory pension insurance in 1957. Compared with the reformatory goals, only piecemeal reform solutions were achieved in the third CDU legislative period from 1957

to 1961<sup>30</sup>. Benefits for war victims were newly settled in 1960 and the stimulation of private wealth became an important area of social policy-making. The compulsory accident insurance was reformed in 1963 and the law on childrens' allowances was newly settled in 1964, during the fourth CDU period from 1961 to 1965. During the fifth CDU government and the following 'Grand Coalition' (1966 to 1969) the extension of social benefits was restricted due to worsened economic conditions and the 1966/67 recession. The first two SPD governments from 1969 to 1972 and 1972 to 1976 extended the net of social security to societal groups not incorporated thus far. The second pension reform in 1972 introduced a 'flexible age of retirement' and the subsequent costs of this pension reform provoked measures of consolidation in 1977 and 1978. This phase of financial consolidation also became apparent in other branches of the social security network as for example in the 'Kostendämpfungsgesetz', i.e. in the area of health insurance in 1977. The end of the 70's and the beginning of the 80's might best be characterized as a time of slowed increases and partial reductions of state achievements. Important measures were a reduction of the level of old age benefits in 1977; the promotion of education of school-aged children was cancelled in 1982; and unemployment benefits have been cut and restructured several times since 1981. Despite some far-reaching cuts introduced by the second 'Haushaltsstrukturgesetz', a 1981 law consolidating the budget, Alber (1986) shows that a change in long-term developments took place under the SPD government in the middle of the 1970's, but not since the change in government in 1982. His interpretation of German social policy in recent years points to a period of consolidation rather than social dismantling. Landfried (1986), on the other hand, emphasizes an explicit deterioration for pensioners, unemployed and other recipients of social benefits since 1982. Our own data tend to support Landfried's argumentation as we in fact encounter quite substantial cuts since the beginning of the 1980's.

Our analysis of social policy laws has indicated that the pre-election year is obviously the most important one for politicians seeking to enhance electoral support. A logical corollary with respect to social expenditures would be a significant increase in resource allocation in the individual

pre-election years. As we have seen that social transfer payments are less flexible than other subsidized areas and increase or decrease more or less according to incrementalist theory, a closer look at the empirical development of this budget item over time will be our starting point. The extent to which output variations occur is perceived as an indicator of the government's abilities or restrictions to actively shape policy outputs. Restrictions are of course again economic factors; but it is also necessary to take demographic factors into consideration.

### 1. Expenditure development over time

The development of deflated social expenditure generally shows a strong upwards tendency from 1952 to 1984. But the annual development of the social budget is only characterized by a continuous increase until 1957. Between 1958 and 1974 the allocations fluctuate quite considerably. A strong increase occurred in 1975, followed by slight variations but remaining more or less on this level until 1980. Overall allocations then increased in 1981 and 1983 with only a slight cutback in 1984. The individual chapters all reflect this strong upward tendency, the two exceptions being war victim benefits and unemployment benefits. The development of programme costs for social security and job conditions - the individual variables are documented in the appendix - no longer follows this general upwards tendency but exhibits considerable discontinuity and even lower expenditures for 1984 as compared with 1952. The development of all deflated growth rates from 1953 to 1984 is characterized by a continuous fluctuation for all units of analysis.

An assessment of the flexibility of increments and decrements in annual social expenditures indicates that the assumption of a rigid and inflexible change in resource allocation is misleading. In order not to lose the clarity of presentation, only the percentage figures of the entire social budget and the individual chapters will be reported:

Table 7: Highest and second highest positive (HI) and negative (LO) increments and decrements in annual growth rates of social expenditures from 1953 to 1984

	HI	2nd HI	LO	2nd LO
social budget	27.1% (1975)	15.8% (1964)	-18.1% (1966)	-7.4% (1958)
chapter 01	20.9% (1966)	16.7% (1971)	-14.3% (1959)	-10.3% (1960)
chapter 02	745.5% (1977)	76.5% (1970)	-64.2% (1967)	-37.8% (1972)
chapter 03	80.6% (1980)	60.9% (1954)	-31.3% (1981)	-16.1% (1969)
chapter 04	233.1% (1970)	89.3% (1973)	-32.0% (1974)	-29.4% (1972)
chapter 05	18.5% (1983)	17.1% (1982)	-10.9% (1954)	-9.1% (1974)
chapter 06	85.3% (1957)	32.9% (1983)	-38.2% (1954)	-13.6% (1984)
chapter 07	28.6% (1954)	18.6% (1957)	-16.7% (1983)	-11.0% (1956)
chapter 08	141.0% (1970)	111.7% (1969)	-8.2% (1971)	-4.6% (1980)
chapter 09	128.7% (1984)	49.5% (1971)	-8.3% (1972)	-6.2% (1976)
chapter 10	21.6% (1964)	17.4% (1960)	-17.2% (1957)	-11.1% (1967)
chapter 11	22.2% (1973)	12.3% (1972)	-13.6% (1971)	-13.5% (1984)
chapter 12	12914.6% (1975)	248.9% (1981)	-72.3% (1977)	-62.6% (1967)
chapter 13	36.4% (1953)	29.6% (1957)	-11.4% (1981)	-8.0% (1973)

The figures point to quite a remarkable potential for high positive increases in resource allocation in this area. The downwards flexibility seems comparatively limited and cutbacks generally fall in post-election years. The two highest positive growth rates of the entire social budget fall in

pre-election years and the two highest negative ones in post-election years.

The disaggregation into chapters allows for the testing of two types of budgetary flexibility. Firstly, we can examine the flexibility of resource allocation to bureaucratic units, i.e. the flexibility of purely administrative outlays consisting of wages, salaries, additional employee benefits, expenditures for work-related materials, etc. The timing of positive increments shows that the administrative chapters receive their highest increases almost exclusively in election and post-election years. The negative growth rates, on the other hand, frequently occur in pre-election years. Secondly, we examined the flexibility of purely programme outlays. Here we can see that a considerable number of high positive growth rates occur in pre-election years and a considerable number of negative growth rates in post-election years. An obvious interpretation may be that administrative outlays on the non-personnel level are cut in pre-election years in order to allocate these means along the electorally more important programme dimension and vice versa. As the bureaucracy exerts a permanent influence on government decisions while voters have this chance only every four years, another quite plausible interpretation of this relationship could be that the state bureaucracy as a group of voters will support the government on the basis of promises to increase its budget after the election has taken place, whereas the majority of voters is perceived as supporting the government more on the basis of visible benefits and achievements experienced shortly before elections. On the whole, the positive upward flexibility is higher throughout than the negative or downward flexibility. This may indicate once again that political factors such as re-election constraints tend to limit government ability to cut social expenditures but take effect on a higher upward flexibility.

The analysis of incremental change for this budget item shows that 81% of the growth rates of the social budget from 1953 to 1984 are below the 10% margin. For the individual chapters, however, we obtain quite diverse results:

Table 8: Percentages of incremental change in annual growth rates from 1953 to 1984

chapter	incremental change
budget item	81%
chapter 01	81%
chapter 02	32%
chapter 03	78%
chapter 04	44%
chapter 05	81%
chapter 06	74%
chapter 07	77%
chapter 08	48%
chapter 09	38%
chapter 10	84%
chapter 11	43%
chapter 12	25%
chapter 13	72%

Thus dividing the chapters into administrative and programme chapters, we can see that incremental change occurs more often in purely administrative chapters than in programme chapters. This result is not very surprising as the expenditures of these organizational units are mainly fixed by wages and salaries. The relatively low percentages for chapter 04 (Federal Institute for Labour Protection and Accident Research in Dortmund) and chapter 08 (Federal Office for Civil Service in Cologne) might be due to the fact that both chapters also contain programme outlays. On the programme level, the percentages vary between 25% and 84%. Very high percentages can be reported for chapter 10 (war victim pensions) and chapter 13 (social insurance). As the volumes of these two chapters by far exceed the volumes of other programme chapters, the assumption is once again confirmed that incrementalism is dependent on the size of the unit of analysis, i.e. the more money is involved, the greater the tendency towards incremental change. An investigation of the extent of incremental change of the programme costs for social security and job conditions shows that the percentage figures decrease even more if we examine the annual

increments or decrements on this - once again lower - level of aggregation <sup>31</sup>.

Summing up, we can say that flexibility and non-incremental change in the social budget increase as soon as a more differentiated and more disaggregated level of public expenditures is analysed. The annual pattern of change of social expenditures in the administrative sector is clearly in accordance with incrementalist theory whereas the change in programme costs is not. The high positive flexibility for all chapters may again be an indicator of competition and a genuine political process which influences resource allocation in this area.

Consequently the purpose of the next section of this chapter is to obtain more empirical evidence concerning the hypothesized pattern of change in this area.

## 2. Social policy as electoral politics - the statistical analysis

Election gifts and social policy-making - a genuine systematic phenomenon or just an occasional attempt of governments in order to influence voters and enhance re-election chances? The classic and oft cited examples in the German context have been reported earlier. Our question, however, is directed towards the investigation of a systematic relationship between elections and certain areas of public finance. The assumption was that the directing capacity of general elections should be visible in the micro-budgeting process.

Once again regression, analysis of variance, and discriminant analyses were used in order to investigate the assumed relationship between the timing of elections and resource allocation in the social policy area. The analytical scheme is the same as described in section A.5 and will help to answer the same basic research questions:

- 1) Can we discriminate between the changes in social expenditure with reference to the different group combinations using our set of discriminating variables?

2) How well do the different levels of analysis discriminate?

3) Which variables are the most powerful discriminators?

As already expected in the meantime, a clear discrimination can be made between the change in social expenditures in pre-election and post-election years. No other group combination yields any notable results. Thus, the pattern of resource allocation in this 'classic' field of election gifts follows a two-year rhythm; again there is no systematic relationship between election dates and social expenditures in the very same year.

Unlike the area of subsidies, however, the social policy area allows for testing the pre-election/post-election year change in allocation on a much more differentiated basis because of the different expenditure levels at our disposal. Subsequently, the results for the various levels will be reported, mostly referring to the expenditure change in the individual pre-election and post-election years. The actual extent of discrimination varies considerably between both the two groups and the expenditure variables on the different levels. In a first step we compared the growth rates of total budget allocations from 1953 to 1984 with changes in the social budget.

We could not find any reference to a cyclical pattern of changes in allocation in the total budget. This result was expected insofar as the total budget is the highest aggregated level of public expenditure and is brought about by a multitude of overlapping demands thus impeding the isolation of individual factors which lead to the total output.

The next step was an analysis of the social budget. The results of regression analysis on the varying influence of the individual years of the election period for the explanation of this budget show that both pre-election and post-election years have the greatest impact. This means that the labour and social order budget is characterized by high positive increments in pre-election years and corresponding lower or negative ones in post-election years. These findings were confirmed by the analysis of variance and discriminant analysis<sup>32</sup>.

In order to obtain further empirical evidence for this unexpected pattern on this relatively high level of aggregation, we also tested the social expenditure share of total budget

allocations. The result was that also the shares of social expenditures fluctuate according to this pre-election/post-election year rhythm.

The question now was to find the variables or components which produce this systematic development over time. Consequently the next analytical step was an analysis of the thirteen individual chapters of the labour and social order budget, the next lower level of aggregation at our disposal.

The investigation of chapters indicated that the pattern of change is not uniform for all chapters and that some chapters do not exhibit any systematic fluctuations at all. The statistical techniques produce very similar results in that they all point to three variables or chapters which follow a systematic trend: the ministry expenditures (chapter 01), war victim benefits (chapter 10) and federal social insurance contributions (chapter 13). For these ministry expenditures and social insurance contributions, however, the first post-election year seems to be the most important explanatory factor, while in the case of war victim benefits the pre-election year alone explains almost 35% of the variance encountered. It becomes immediately apparent, however, that the three chapters follow different patterns of resource allocation.

The development of the ministry expenditures follows a 'counter-cyclical' trend in comparison with the development of the entire social budget, war victim benefits and social security outlays. This means that the ministry receives more money in post-election years and has to accept expenditure cuts in pre-election years. The development of war victim benefits, on the other hand, shows a strong upwards tendency in pre-election years and much smaller or negative growth rates in the respective post-election years from 1953 to 1984. Also social security contributions, i.e. social transfers, are characterized by smaller or negative growth rates in the first year after an election has taken place.

Investigating the origins of these fluctuations in more detail, we find that the pre-election year cuts in the ministry's expenditures are mainly due to a reduction of expenditures for construction, cars, etc., i.e. investment costs. As injured persons, widows and widowers account for 90% of the expenditures of chapter 10, the upwards development goes back to higher subsistence emoluments in pre-election years. The fact that we obtain a significant result for war victim

benefits is actually not very surprising. First of all, the German associations of war victims are cited in the literature as being as influential as the farmers' associations; their interests are represented by all political parties and their demands seem to be such that 'nobody dares to contradict' <sup>33</sup>. Secondly, like pensions in general, they also belong to the group of social transfers which were hypothesized as being useful instruments for re-election endeavours.

In a next step the administrative chapters were examined, i.e. the ministry expenditures, the Federal Enforcement Agencies for Accident Research in Wilhelmshafen, the Federal Institute for Labour Protection and Accident Research in Dortmund, the Federal Labour Court in Kassel, the Federal Insurance Office in Berlin, the Federal Social Court in Kassel, and finally the Federal Office for Civil Service in Cologne.

With the exception of the ministry's expenditures, the results are that the change in resource allocation to these bureaucratic units does not follow any systematic trend. None of the possible group combinations had any discriminating effect and all the estimates were negligible. A sound interpretation of this negative result is that the annual change in growth rates for these agencies is predetermined by wages, salaries, and additional employee benefits to the level of almost 80% <sup>34</sup>. Moreover, this result coincides with our analysis of incremental change in administrative chapters where the conclusion was that the pattern of annual increments and decrements is largely determined by incremental decision-making, i.e. organizational and apolitical factors seem to dominate allocations to these agencies.

Then the programme chapters were examined, i.e. expenditures for general appropriations, the integration of foreign labour, war victim pensions, war victim welfare and fare allowances, benefits under the promotion of employment law and similar benefits, unemployment benefit, and social insurance expenditures.

The analysis of incremental change in programme chapters indicated that the percentage figures of incremental change vary between 25% and 84% on the level of individual programme chapters. This might suggest that resource allocation to programme chapters is more flexible and leaves more room for political variations in policy outputs in the sense of a deliberate synchronization with general elections.

For some programmes this seems to be the case. No uniform pattern can be stated for chapter two - general appropriations - which is a collective category and entails all expenditures not directly attached to specific programmes; also the two 'young' programmes of integration of foreign labour, war victim welfare and fare allowances, and unemployment benefits do not follow any recognizable trend.

The two remaining programme chapters, however, reveal a certain synchronization. As both programmes mainly contain transfer payments, this result is fully in accordance with that obtained for the general category of 'social transfers' analysed earlier. It seems that war victim pensions and pensions in general are mainly responsible for the observed fluctuations in the entire social budget and social transfers in general.

War victim benefits are almost unequivocally characterized by large positive increments in pre-election years and negative ones in post-election years. This observed rhythm becomes a little less evident, however, as soon as the 1980's are incorporated in the analysis. In the case of social insurance contributions we find small and often negative growth rates in first post-election years as the most obvious characterization of the time series. Analysis of variance as well as discriminant analysis identify the known pre-election/post-election year contrast, but point in addition to higher allocations in second post-election years. Especially for the 1970's this seems to hold. A possible explanation could be the actual carrying out of election promises which - due to time limitations - can only be implemented in the second post-election year.

This suggests that incumbents prefer to increase transfer payments not only because they improve voters' economic well-being at a crucial time, but also because these types of transfers go to particular organized and important interests in Germany - veterans, the retired, and the like. In chapter II we argued on the basis of public opinion data and the assessment of the West German political elite that old age security is likely to figure highly in electoral considerations. This hypothesis has now been confirmed by our empirical results. As the reversed Downsian model suggests, it seems to be much more attractive for governments to spend money in areas where it is possible for voters to assign a particular benefit to themselves, than in those areas which mainly serve to provide for group-indifferent public goods.

As discussed in the last chapter, the lowest level of aggregation at our disposal is the level of individual titles. As the data were collected on that basis, it was possible to systematize them differently from the official scheme. The data now allow for a further differentiation of programme costs, for example in allocations for social security and job and job conditions. The expenditures for social security cover such items as family allowances, pensions, cures at spas in private establishments, occupational rehabilitation and improvement of social integration of the disabled, and payments to sickness and accident insurance institutions; expenditures for job and job conditions include expenditures for job creation measures, promotion of employment in Berlin, and assistance to employees in the iron and steel industries. These categories were chosen because they provide more insight into the structure of programme outlays and their relationship with elections.

The results, however, only yielded a further confirmation with regard to pensions and the pre-election/post-election year group separation. Otherwise no systematic fluctuations were observed. Thus the most powerful discriminators are the total volume of the labour and social order budget, the ministry expenditures with a 'counter-cyclical' development, war victim pensions, and social insurance contributions <sup>35</sup>.

So far in this study, only political and organizational factors have been taken into consideration. But social policy is also very sensitive towards demographic and economic factors. In order not to rely on a too limited range of possible explanatory factors for public expenditure developments, these factors have also been incorporated in the analysis.

Pension and war victim expenditures are basically dependent on two societal factors. One is the number of persons entitled to receive these payments. It has to be stated, however, that the systematic fluctuations encountered in these two time series can certainly not be explained by the number of qualified beneficiaries alone. While the number of pensioners steadily increases over time, the number of war victims is characterized by a clear downward trend. As Treiber (1984) also notes, the number of beneficiaries only explains 3% of the variance in the development of social insurance contributions <sup>36</sup>. The second factor is the so-called 'social contract among generations' which has led to an indexation of

pensions and war victim benefits to gross wages. In this sense they are dependent on the economic situation in general. In order to test for economic factors and their influence on social expenditures, we additionally analysed German unemployment and inflation figures from 1953 to 1984.

In a first step the unemployment and inflation rates were tested for any systematic pattern in combination with election dates. As presented above, the studies within the New Political Economy advanced the hypothesis that these two macro-economic indicators are steered with reference to elections. Our results, however, were negative throughout. We cannot find any evidence for such a relationship, neither for election years nor for a pre-election/post-election year contrast.

In a next step bivariate regressions at time ( $t$ ) and ( $t-1$ ) have been calculated from our expenditure variables on these macro-economic indicators<sup>37</sup>. We started with the overall budget and the entire labour and social order budget. The results show that the explanatory power of both indicators at time ( $t$ ) and ( $t-1$ ) is virtually zero.

Then the individual chapters of the social budget were analysed. The unemployment rate at time ( $t$ ) explains on average 6% of the variations. The only high figure of 14% is obtained for the chapter for war victim welfare and fare allowances where allocations are cut back as unemployment increases. At time ( $t-1$ ) the unemployment rate explains not even 4% on average. Noticeable is only a positive relationship between unemployment and general appropriations which increase and decrease simultaneously. The inflation rate at time ( $t$ ) explains almost 13% of the variance encountered in the series. This figure is a bit misleading as high percentages only occur for three out of the twelve chapters: general appropriations, foreign labour and war victim welfare and fare allowances. The relation is a negative one for all chapters, i.e. the higher inflation the higher the cutbacks in these areas. The lagged inflation rate accounts for less than 8%. The negative relation for general appropriations and foreign labour remains more or less the same. The influence on war victim welfare is no longer existent; therefore unemployment benefits increase when inflation at ( $t-1$ ) increased. The results so far seem to suggest that the influence of unemployment and inflation on social expenditures varies considerably on a lower

level of aggregation. Cuts predominantly occur in the general appropriations chapter, i.e. this omnium gatherum category without fixed structures. Also the relatively new programmes of war victim welfare and foreign labour are preferred victims under aggravated economic conditions.

The overall explanatory power of economic indicators seems however rather limited. Evaluating these results one could reach the conclusion that all three types of explanatory factors - political, organizational and economic - contribute to an explanation of public expenditure developments. As we have seen, incremental decision-making is present in administrative outlays and agencies; political or re-election endeavours seem to be visible mostly in social transfers, while economic indicators show effects on minor policy programmes. With respect to our main question, social transfer payments provided empirical evidence supporting the hypothesis that governments try to secure re-election with the help of election 'sweeteners' in a systematic way over time.

### C. Research and technology policy and elections

The area of research and technology policy was primarily chosen in order to contrast it with the subsidy and social policy area. The central hypothesis was that the three areas vary considerably with respect to the assumed steering capacity of general elections. Research and technology policy is perceived as being at least middle-term if not long-term oriented policy involving the process of priority setting, implementation and enforcement of programmes. The 'modernization' of the economy and the importance of research and technology policy for Germany, a country poor in raw materials, has always been emphasized.

Research and technology expenditures can be seen as purposive investments in order to develop new technologies and achieve a high degree of marketability for these products. This implies that the ability of governments to cut these investments off-hand are severely limited and would always lead to a considerable financial loss. Moreover, research and technology expenditures are almost entirely fixed by so-called 'Verpflichtungsermächtigungen', i.e. long-term commitments of governments to support the financing of various projects

which are authorized by the parliament. As Maass (1973) points out, the assumption seems to be justified that these commitments are largely irreversible in practice. For example in the 1981 budget, prior commitments predetermined the volume of this budget item to 96%<sup>38</sup>. This leads to the assumption that positive and negative output variations due to electoral considerations are unlikely to occur in this budget. Thus, we do not expect a systematic synchronization with election dates in this policy area.

### 1. Expenditure development over time

The deflated development of the research and technology budget indicates a moderate increase from 1956 to 1961. Since 1962 the development is characterized by a strong upward trend which is only interrupted in 1977 and 1978 when allocations were lower than those in 1975. The overall development, however, shows a strong upwards tendency until 1982, followed by cutbacks in resource allocation for 1983/84.

The present Federal Ministry of Research and Technology is the outcome of various reorganizations and conversions of previous ministries. In 1956, the Federal Ministry for Nuclear Affairs was set up, resulting from the Ministry of 'Special Tasks' which had to be established after the 1953 election due to coalition agreements to creating a new ministry. It was followed by the Federal Ministry for Scientific Research in 1962 which was converted to the Federal Ministry for Education and Science in 1970. The Federal Ministry for Research and Technology has existed in its present form since 1973. Main research and technology areas since 1956 have been energy research and technology, aerospace research since 1962, data processing and information engineering since 1967, and natural sciences, technical research and development since 1968.

The expenditure development in all areas increases considerably over time, nevertheless a continuous growth cannot be stated. The deflated growth rates point to very high positive increases and comparatively small expenditure cuts over time:

Table 11: Highest and second highest positive (HI) and negative (LO) increments and decrements in annual growth rates of research and technology expenditures from 1957 to 1984

	HI	2nd HI	LO	2nd LO
budget item	77.4% (1957)	59.3% (1958)	-6.2% (1959)	-6.1% (1976)
chapter 01	132.1% (1974)	36.1% (1972)	-57.9% (1975)	-29.7% (1970)
chapter 02	51.1% (1965)	32.0% (1984)	-11.3% (1973)	-8.0% (1976)
chapter 03	735.8% (1972)	106.4% (1971)	-32.2% (1975)	-5.8% (1977)
chapter 04	148.7% (1969)	133.3% (1971)	-25.7% (1981)	-12.5% (1972)
chapter 05	79.8% (1957)	60.6% (1958)	-11.7% (1983)	-7.6% (1972)
chapter 06	168.0% (1963)	46.6% (1964)	-13.6% (1970)	-11.2% (1974)
chapter 11	481.4% (1970)	17.5% (1972)	-74.1% (1971)	-27.7% (1974)
chapter 12	62.5% (1970)	27.8% (1966)	-27.1% (1971)	-19.6% (1973)
chapter 13	63.5% (1980)	58.3% (1981)	-56.7% (1983)	-30.4% (1979)
chapter 14	32.0% (1972)	28.8% (1975)	-36.9% (1982)	-18.1% (1977)

In comparison with the positive flexibility of social expenditures we can see that the upwards flexibility of the research budget is much higher and the downwards flexibility more limited. All chapters show a generally higher positive flexibility than the social budget chapters. The negative growth rates of programme chapters (chapters two to six) are on the whole smaller than those for the social budget. Chapters eleven to fourteen are of minor importance in this case, as they do not amount to more than 1% of the entire budget on average.

The number of all negative growth rates in this budget is much smaller than in the social budget. This may suggest a generally low downwards flexibility of investments. For the entire research budget, for example, only 6 out of 28 growth rates are negative, i.e. 15%. In the case of social expenditures almost 40% can be stated. The assignment of growth rates to the individual years gives no information as to the particular importance of pre-election or post-election years.

Concerning the percentages of incremental change, our analysis of social expenditures indicated that the entire social budget and all administrative chapters are characterized by this pattern of annual change, while the programme chapters are subjected to greater output variations. The individual percentages for the research and technology budget are generally much lower, and incremental decision-making does not seem to provide for a good explanation of expenditure change in administrative and programme chapters:

Table 12: Percentages of incremental change in annual growth rates from 1957 to 1984

chapter	incremental change
budget item	57%
chapter 01	54%
chapter 02	60%
chapter 03	38%
chapter 04	21%
chapter 05	57%
chapter 06	45%
chapter 11	71%
chapter 12	55%
chapter 13	43%
chapter 14	38%

A closer analysis of these percentage figures shows however that high positive growth rates occur much more frequently whenever a new programme is started and promoted and become smaller afterwards. This characterization holds true for all research and technology programmes, the total volume of this budget, and even for general appropriations. Thus,

incrementalist theory seems to provide for a good explanation of resource allocation in this area concerning the development within the last twelve years.

As incremental resource allocation does not leave much room for systematic fluctuations, and investment programmes require high and stable growth rates at the beginning, this result seems to underline our hypothesis of no synchronization of financial allocations and elections in this budget.

## 2. Research and technology policy as electoral politics - the statistical analysis

The investigation of a systematic relationship between elections and public expenditures in this area was carried out according to the analytical scheme already used for the other two public policy areas. Again three research questions were set up:

- 1) Can we discriminate between the changes of research and technology allocations to different years using this set of discriminating variables?
- 2) How well does this area discriminate?
- 3) Which are the most powerful discriminators?

The results of all statistical analyses demonstrate that we cannot discriminate between the change of growth rates in pre-election and post-election years with this set of variables. But neither do all other group combinations yield any results. With respect to the importance of individual years for allocation patterns, it has to be stated that no specific year of the electoral period had any particular influence. This means that research and technology expenditures do not follow any recognizable systematic fluctuations over time.

This result holds true for all the different expenditure levels at our disposal. Neither for the entire research and technology budget, nor the administrative and programme chapters, can any results be obtained. Even the analysis of programme costs on the level of categories, i.e. the allocations for economic development and infrastructure, and energy, resources, and

environment, can only confirm the overall result. We also analysed the shares of chapters and categories of the budget item and the shares of this budget of the total budget. As anticipated, we could not find a significant relationship with respect to a systematic development. Thus, the answers to questions one and two are negative, and we conclude that the research and technology area does not make any positive contributions to our general question. According to our results, neither a positive nor a negative electoral 'cycle' exists in this area of policy-making<sup>39</sup>.

Contrary to the other two areas of analysis, research and technology expenditures exhibit a high degree of intercorrelations among the chapters and programmes. In the social budget multicollinearity is limited to administrative chapters and does not occur among programme chapters. Only in one case - social insurance contributions correlate with the Federal insurance office in Berlin - is there multicollinearity between a programme and the agency administering this programme. In the research and technology budget, however, all chapters are highly correlated. This statistical problem corresponds to the evaluation of flexibility and incremental change for this budget item. We have seen that incrementalist theory can actually provide for quite a good explanation of resource allocation in this area.

Concerning the explanatory power of our macro-economic indicators, we see that unemployment and inflation at time ( $t$ ) and ( $t-1$ ) cannot account for much of the variance of total research and technology expenditures<sup>40</sup>. On the chapter level this impression is a bit different. While the unemployment rate only seems to effect nuclear energy research and technology, the inflation rate suddenly reaches very high figures and alone explains almost 36% of the variations. To take this as a valid and reliable result, however, is highly questionable. It has been pointed out above that research and technology expenditures are almost completely predetermined by long-term commitments which seem to be largely irreversible in practice. In that sense the relation between inflation and research and technology expenditures can only be seen as a spurious one as it is more than unlikely that these expenditures are actively used as fiscal policy instruments.

The last expenditure category chosen for analysis and as yet not dealt with involves the costs of disseminating information,

i.e. publications and informational reports in daily newspapers. It was assumed that these expenditures also follow a specific trend. Shortly before elections, governments might try to emphasize their achievements during the electoral period, thus hoping to convince a few more voters to cast their votes in favour of the governing party. Analysing the patterns of deflated growth rates for the two Federal Ministries yields different results.

First of all it becomes apparent that there is no such thing as a systematic pre-election/post-election year relation. Moreover, the growth rates of this kind of information costs listed in the social budget do not seem to follow any systematic pattern at all. Only for two election years - 1961 and 1980 - strong positive increases can be reported. Therefore the overall result for this category is a negative one. For the Ministry of Research and Technology, however, the costs of spreading information exhibit a more systematic relationship with election years. The very high positive growth rates in 1957 may refer to the newly established Ministry for Nuclear Affairs in 1956. Throughout the 1960's, information measures seem not to have been very important as most of the growth rates are negative. Since the SPD take-over of government in 1969, however, the costs of spreading information rose considerably in the election years of 1972, 1976, and 1980. An interpretation of this relationship between information costs and election years suggests an increased importance of technological issues, not only in the area of nuclear energy, but also concerning the initial consequences of rationalization due to the development of new technologies. A heightened public awareness of 'Technologiefolgeprobleme', i.e. the consequences of new technologies for everyday life, and public protest may have forced the SPD governments to defend their technology policy particularly in election years in order not to lose too many votes - especially the votes of young people - to alternative parties like the Greens.

After having presented the empirical results of this study, the focus of the concluding chapter can only be a brief summary and evaluation of our central hypotheses and findings regarding budgetary politics, elections and electoral politics as determinants of policy outputs in West Germany.

## Notes Chapter VI

- <sup>1</sup> See for example Musgrave 1969; Peacock and Wiseman 1961.
- <sup>2</sup> Maass, 1973:13.
- <sup>3</sup> See Strasser 1971.
- <sup>4</sup> The EC payments are reported in the annual German financial reports (Finanzberichte).
- <sup>5</sup> This approach to measuring flexibility was suggested by Maass, 1973:55.
- <sup>6</sup> The highest and second highest positive increments in deflated growth rates of the total budget are 11.5% in 1975 and 9.6% in 1967; the negative flexibility only amounts to -3.6% in 1969 and -2.0% in 1971. See also Table 8.2.2 and 8.3 in the appendix.
- <sup>7</sup> See Hirsch-Weber, 1967:102.
- <sup>8</sup> Hansmeyer 1963; Kaiser 1956.
- <sup>9</sup> Hirsch-Weber, 1967:102.
- <sup>10</sup> EG Magazin, September 1984:6.
- <sup>11</sup> See Maass 1973.
- <sup>12</sup> The term 'industrial subsidy' (Gewerbliche Wirtschaft) is taken from the Governmental Financial and Subsidy Reports and includes subsidies for energy, water, cultivation; mining, building trade, manufacturing industry; and regional promotion measures.
- <sup>13</sup> See Table 8.2.2 in the appendix.

- 14 See Table 8.2.2 in the appendix.
- 15 Source: Finanzbericht, 1982:160/61.
- 16 See Maass, 1973:122.
- 17 Bank, 1970:103.
- 18 See Bank, 1968: appendix.
- 19 Schmidtchen, 1973:70.
- 20 All data are taken from Deutscher Bundestag, Bundesrat (eds.), 1977, 1981 and 1984. The individual laws are listed under point 8.4 in the appendix.
- 21 The reason why these figures slightly exceed the number of 40 laws is due to the fact that several laws become effective gradually and not in a particular year. Source: Deutscher Bundestag, Bundesrat (eds.) op. cit.
- 22 Besides classic regression analysis, time series analysis has become more and more fashionable in econometric studies. Time series analysis is mostly employed to estimate the effects of macro-economic conditions on presidential popularity. This technique is not so much interested in theory but primarily in fitting a model to the data and forecasting future events. Within the time series domain, the search for better accounting of economic effects has turned to distributed lag models. The lag estimates differ substantially from one another, as a whole variety of different lag structures is considered. Norpoth (1984) claims that what is needed at this stage of research is some way of empirically determining a lag structure before the parameters of that structure are actually estimated. But the use of theory severely limits the number of alternative model specifications which seek to characterize the process whereby the data were generated. Time series analysis is often regarded as measurement without theory as it employs statistical-theory-based models and not economic-theory-based models. For our own study we preferred a variant of classic regression analysis as we are interested in testing specific hypotheses and time intervals in the influence of elections on public expenditures and not in detecting the

underlying process which might generate the whole series over time. Moreover, our time series are much too short to produce reliable results when employing this technique.

23 Table 4: Subsidies from 1962 to 1982 and regression analysis

Variable		b	B	R <sup>2</sup>
agriculture (national)	T1	12.3	0.3	(0.13)
	T2	- 3.8	-0.0	
	T3	- 1.6	-0.0	
	C	- 8.8		
agriculture (national+EC)	T1	5.2	0.1	(0.12)
	T2	- 8.9	-0.2	
	T3	- 1.8	-0.0	
	C	3.7		
improvement of agrarian structures	T1	- 4.9	-0.2	(0.17)
	T2	- 8.6	-0.3	
	T3	-11.0	-0.4	
	C	- 0.9		
income stabilizing measures	T1	24.3	0.3	(0.16)
	T2	- 5.6	-0.0	
	T3	1.6	0.0	
	C	-10.6		
industry	T1	1.3	0.0	(0.05)
	T2	- 3.2	-0.0	
	T3	- 9.0	-0.2	
	C	7.7		
energy, water cultivation	T1	7.3	0.1	(0.09)
	T2	6.8	0.1	
	T3	-10.2	-0.2	
	C	0.9		
mining, building manufacturing	T1	- 4.8	-0.0	(0.11)
	T2	-35.7	-0.2	
	T3	-39.0	-0.3	
	C	38.0		
regional promotion	T1	- 4.9	-0.1	(0.11)
	T2	-15.8	-0.3	
	T3	- 2.5	-0.0	
	C	6.1		

social transfers	T1	5.5	0.3	(0.17)
	T2	- 2.6	-0.1	
	T3	- 2.8	-0.1	
	C	2.5		

with: T1 - pre-election year  
T2 - post-election year  
T3 - election year  
C - constant, b,B - regression weights,  
R<sup>2</sup> - percentage of explained variance  
( ) - not significant on 5% level of significance

24 Table 5: Pre-election/post-election year contrast for subsidies from 1962 to 1982

	Value	S.Error	T	Df.	T.Prob
income stabilization	30.3	17.4	1.7	15	0.10
regional promotion	10.4	11.5	0.9	15	0.37
social transfers	7.6	5.2	1.4	15	0.16

25 Important aids in judging the importance of a discriminant function are the Eigenvalues and their associated canonical correlations. The canonical correlations squared can be interpreted as the proportion of variance in the discriminant function explained by the groups. To test for the statistical significance of the discriminant function, Wilk's lambda is computed. Lambda is an inverse measure of the discriminating power, i.e. the larger lambda is, the less discriminating power is present. Lambda is then transformed into a chi-square statistic for a test of statistical significance. In this case, lambda was 0.02. This corresponds to a chi-square of 19.3 with the probability level of 0.00. This means that a lambda of this magnitude has a 0.00 probability of occurring due to chance. The canonical correlation of 0.989 is just another measure of the function's ability to discriminate among the groups.

26 See Hilton, 1975:167; Urban, 1982:187; Kmenta, 1971:390; Kelejian/Oates, 1981:198.

27 Table 6: Standardized canonical discriminant function coefficients

improvement of agrarian structures	3.4
income stabilizing measures	-10.9
energy, water, cultivation	-5.3
mining, building trade, manufacturing industry	1.8
regional promotion	18.5
social transfers	10.6

28 Wildenmann, 1987:104.

29 Standfest, 1979:10ff.

30 See Kleinherz and Lampert, 1977:146; for a general discussion see Baker/Dalton/Hildebrandt 1981; Hartwich 1976; Alber 1980,1982; Standfest 1979.

31 The annual deflated growth rates for payments for compensation of hardships within the framework of company old age pension schemes, for example, are incremental only in six out of thirty cases, i.e. only 20% of the change in resource allocation is accounted for by the incrementalist margin of +/- 10%.

32 Table 9: Social and Research and Technology expenditures and the statistical analysis from 1953 to 1984.

<u>Analysis of Variance</u>	F	Contrast	Df.	T Prob.
pre-/post-election year				
social budget	3.14	3.00	24.0	0.00
chapter 01	3.06	-2.21	24.0	0.03
chapter 10	4.23	2.71	24.0	0.01
chapter 13	1.57	1.93	13.7	0.07
(post-/2.post)		-2.03	11.9	0.06
research budget	0.43	0.62	8.2	0.55
<u>Discriminant Analysis</u>	F	Sig	Correct Classification	N
pre-/post-election year				
social budget	6.08	0.02	69%	16
chapter 01	5.87	0.02	75%	16
chapter 10	5.90	0.02	69%	16
chapter 13	3.72	0.07	63%	16
research budget	0.38	0.54	50%	15
<u>Regression Analysis</u>	B	R <sup>2</sup>	F	Sig
social budget	T1 0.38	0.28	3.58	0.02
	T2-0.26			
	T3-0.10			
chapter 01	T1 0.04	0.22	2.67	0.06
	T2 0.46			
	T3-0.05			
chapter 10	T1 0.56	0.35	5.06	0.00
	T2 0.00			
	T3-0.13			
chapter 13	T1-0.06	0.11	1.27	0.30
	T2-0.35			
	T3 0.02			
research budget	T1-0.28	0.13	1.51	0.23
	T2-0.30			
	T3-0.27			

with: T1 - pre-election, T2 - post-election, T3 - election year

- 33 See Hansmeyer 1957; Maass 1973.
- 34 The only exception is the Federal Institute for Labour Protection and Accident Research in Dortmund where the costs on the personnel level are only predetermined by 25%.
- 35 It should perhaps be noted that - although using the same data - our results do not coincide with Treiber's findings concerning the relationship between election years and public expenditures: 'Wie erwartet finden wir bei dem Wachstum der Ausgaben positive und negative Wahlzyklen. Einen positiven Wahlzyklus, d.h. relativ hohe Zuwachsraten in Wahljahren durchlaufen die Ausgaben für Arbeit und Soziales insgesamt...', Treiber, 1984:183.
- 36 Treiber, 1984:153; see Der Bundesminister für Arbeit und Sozialordnung (ed.), Statistisches Taschenbuch 1981, Bonn 1981.
- 37 Table 10: Inflation (IR) and unemployment (UR) at (t) and (t-1) and social expenditures from 1953 to 1984.

	R <sup>2</sup>							
	IR(t)	A	IR(t-1)	A	UR(t)	A	UR(t-1)	A
total budget	0	-	0	+	3	+	0	-
social budget	0	+	2	+	2	+	0	+
chapter 01	0	+	0	+	2	-	2	-
chapter 02	25*	-	19*	-	8	+	17	+
chapter 03	2	-	0	-	0	+	2	+
chapter 04	0	+	0	-	7	-	6	-
chapter 05	2	-	12	+	9	+	9	+
chapter 06	2	-	2	+	8	+	1	-
chapter 07	2	-	0	+	8	+	0	-
chapter 09	48*	-	43*	-	6	-	2	-
chapter 10	0	-	0	-	0	-	0	+
chapter 11	56*	-	2	-	14*	-	2	-
chapter 12	8	+	13*	+	0	+	0	-
chapter 13	8	-	0	+	7	+	4	+

with: R<sup>2</sup> - percent of explained variance, \* - significant at 5% level, A - direction of association

- 38 Source: Bundeshaushaltsplan 1982.

39 With reference to the statistical results see Table 9, note 32. Treiber, on the other hand, states a negative electoral cycle for research and technology expenditures: 'Daß die Arbeits- und Sozialausgaben zu Wahlzeitpunkten hohe Zuwachsraten verzeichnen und die Forschungs- und Technologieausgaben besonders niedrige, entspricht der Logik wahlzyklischer Ausgabengestaltung', Treiber, 1984:195.

40 Table 13: Inflation (IR) and unemployment (UR) at (t) and (t-1) and research and technology expenditures from 1957 to 1984.

	R <sup>2</sup>							
	IR(t)	A	IR(t-1)	A	UR(t)	A	UR(t-1)	A
budget item	7	-	10	-	4	+	8	+
chapter 01	14*	-	15*	-	15*	+	22*	+
chapter 02	36*	-	36*	-	0	+	0	+
chapter 03	48*	-	43*	-	6	-	2	-
chapter 04	39*	-	35*	-	4	-	1	-
chapter 05	16*	-	17*	-	14*	+	21*	+
chapter 06	33*	-	35*	-	0	+	4	+

with: R<sup>2</sup> - percent of explained variance

A - direction of association

\* - significant at the 5% level

## VII. Summary of results and concluding remarks

Shortly before the summer break in 1986 the government passed the 1987 draft budget. The social budget is rated at 59.5 billion DM and will increase by 1.8% in comparison with 1986. Press reactions mainly concentrated on an inadequate increase in subsidies and on social transfers, i.e. the additional payment to the so-called 'rubble women' born before 1921. The insecurity regarding the future financing of the existing pension scheme has certainly not been reduced with this policy which has been pursued with an eye towards re-election.

The Minister of Social Affairs, Norbert Blüm, emphasized that the 1986 increase in pensions was the largest increase in eight years. A further increase of 3% for 1987 was decided upon and made public at the end of November.

Is it pure chance that such policy measures sometimes coincide with the timing of elections, or is it a systematic phenomenon, the product of the routine rhythms of marketing politics and of governments facing upcoming elections? The central concern of this study has been an attempt to answer this question. As a theoretical background the rational choice approach was taken. This approach to policy-making, and in particular, the vote-maximizing hypothesis, made it possible to formulate and test specific hypotheses regarding the relationship between budgetary politics and elections in West Germany.

As presented in chapter II, these hypotheses were backed up by the perceptions of the West German positional elites with respect to the directing impact of general elections and the necessity to pursue electoral politics in order to get (re-)elected. Elections as a control-mechanism and directing instrument - mediated through both interest groups and the public - seemed to have an important position in the politicians' perception. In chapter III and IV we discussed the existing studies and concepts which try to identify the determining factors of policy outputs or public expenditure developments. The measurement of policy output on too high a level of aggregation was perceived as one of the main drawbacks of these models. Furthermore they do not concentrate on cyclical aspects as the notion of a 'political business cycle' would suggest. It could be demonstrated that

the econometric studies employing this extreme notion of economic policy-making do not succeed in providing a consolidated corroboration of politico-economic 'cycles'. At least in the German context, there is no evidence for such 'machievellian' government behaviour, consciously and deliberately initiating economic instabilities in the form of political business cycles.

In chapter V we presented weaker but far more realistic hypotheses concerning governmental re-election efforts. We assumed that the electorally salient characteristics of economic benefits are their timing and recipient groups and that fluctuations in spending partly arise due to re-election constraints of governments seeking to enhance electoral support. This implies, however, that the result of electoral politics in the long run need not be different from the policies anyway intended. This means that the long-term consequences of election 'sweeteners' might be relatively low, but seem to inevitably occur due to the nature of the democratic process. A priori these suggestions are by no means comparable with the state's 'macro-bribery' as suggested by the 'political business cycle' studies.

We argued that the budget is a useful tool for governments aiming at re-election and that tactical considerations and limited resources speak in favour of systematic fluctuations in the allocation of resources in electorally appealing areas. A high directing capacity of general elections was assumed in the area of subsidies and social policy-making, whereas such a relation was considered as unlikely to occur in the research and technology budget. The analysis of electoral politics was combined with both an investigation of incremental change in West German budgeting and the concept of limited flexibility of public expenditures. Both concepts were incorporated into the analysis so as to give a more comprehensive description and explanation of the development of public expenditure in these three policy areas. The results were presented in chapter VI. We have seen that incrementalism does not hold true to the extent suggested in the literature and that a certain flexibility, especially variations in positive increments, is always present. Moreover, incrementalism seems very much a function of the level of aggregation and becomes less on a lower level of aggregation and with regard to programme costs. For instance the annual pattern of change in social

expenditures in the administrative sector is clearly in accordance with incrementalist theory, whereas the change in programme costs is not. The preconditions for regular fluctuations in allocations and the ability of governments to actively shape policy commitments according to their interests were thus given.

The various statistical analyses did not reveal a synchronization of expenditures and elections for all those areas where a directing impact of elections was assumed. In the case of subsidies our conclusion was that there are no regular increases shortly before elections or corresponding cuts after the elections have taken place. The only notable results concern the particular importance of pre-election years for the explanation of expenditure patterns of certain subsidies. These were national agricultural payments, particularly those related to income stabilization and social transfer payments. Regional promotion measures, on the other hand, were mainly characterized by cuts in first post-election years. It should again be emphasized that all results can only describe trends and are not suited for making any inferences or predictions about future developments. However, there was no convincing corroboration of the presumed relationship and therefore the overall result for this area is a negative one.

Given the particular importance of pre-election years - meaning high positive increases - for social transfers in general, a more detailed analysis of budgeted social expenditures seemed promising with respect to our research question. Surprisingly - as still on a high level of aggregation - we have seen that the budget item follows this two-year pattern with high positive growth rates in pre-election and smaller or negative ones in post-election years. As the factors mostly responsible for these overall variations, we identified war victim benefits and federal social insurance contributions. As the effects of both programmes are immediately visible and accountable, this seems to indicate that governments prefer increases in transfers not only because they improve voters' economic well-being at the right time - compared to fiscal or monetary policies with uncertain time-lags - but also because many types of transfers go to important interest groups in Germany, like the veterans and the retired.

These results become less evident as soon as the 1980's are incorporated in the analysis. Regarding war victim benefits,

however, one has to take into consideration that the number of beneficiaries decreased from 2.4 million in 1974 to 1.8 million in 1983, and consequently the electoral importance of this group also decreased. The number of pensioners, on the other hand, increases steadily over time and amounts to 13.6 million in 1983. Thus it is not surprising that old age pensions have always been of central interest for governments. As the 'social contract among generations', i.e. the retired share in the growth in income received by the employed, becomes more and more of a debit to the active labour force, present and future government activities in this area become all the more important. Short-term planning and electorally appealing policy measures could easily end in financial disaster.

We have seen that demographic and economic factors do not substantively contribute to an explanation of social expenditures. Neither of the two macro-economic indicators yields spectacular results. Organizational factors seem to influence resource allocation to administrative units, while political factors apparently explain some programme outlays with reasonable accuracy. Concerning research and technology expenditures, organizational factors seem to provide for a good explanation of resource allocation for the last twelve years. Political factors - here defined as (re-)election efforts - and economic factors on the other hand, could not yield notable results.

The accusation frequently made in connection with pensions in the Federal Republic is that they are used as an election gift on a massive scale, and electoral tactics take precedence over an overall welfare strategy for the improvement of the quality of life in old age. This spending behaviour led to a financial crisis at the beginning of the 1970's. Facing the 1987 January election, government strategies do not seem to have changed. That particularly women are going to benefit from these latest increases might be explained by the simple fact that the Christian Democrats are well aware that they stand to lose one of their traditional groups of supporters. Sex alone is no longer such a good discriminator for electoral behaviour as it was in the past. While women traditionally voted rather for the conservative parties, at present there is no difference on that issue.

There is no doubt that social policy measures are utilized to a considerable extent to provide legitimacy for the governing

party. Even if the notion of 'social policy as a policy of election gifts' is rather exaggerated as it assumes a monocausal relationship, there is evidence for a synchronization of policy measures with the electoral calendar. Our results emphasize the special importance of pre-election years in the budgeting process. This emphasis was explained by the short time period between the enforcement of budgets in election years and the election dates themselves. The characteristic features as encountered in our expenditure series, however, consist of high increments in pre-election years and correspondingly lower or negative ones in post-election years. In the case of old age pensions, high increases in second post-election years are also in evidence. This points to the fact that election promises given in the 1970's have actually been implemented.

This implies that the rational choice approach and the maximization hypothesis proved to be a useful tool in order to explain some short-term developments of public expenditure in electorally important areas of policy-making. Budgetary politics and re-election efforts seem to combine in emphasizing the importance, visibility and accountability of social transfers.

Following a normative line of argumentation, this result should be perceived as a negative by-product of the democratic process, in the sense that it contradicts our ideal notions of representation and pragmatic policy-making. But the consequences of the government's desire to get re-elected do not necessarily have a negative impact on society. This is only the case if things get 'out of hand' in the sense that warning signals - for instance in old age pensions - cannot stop the 'march of folly' out of electoral tactics. In general, the existence of (re-)election efforts and constraints points to the steering capacity of general elections, i.e. that politicians obviously feel obliged to pursue electoral politics, but also to the importance of public participation in this four-year rhythm.

But it is exactly this discontinuity which has recently provoked a general questioning of the old structures of representation in Germany. A heightened public awareness of policy problems and decisions confronting the present and future generations has led to more participatory and direct democratic claims. As pointed out above, however, the empirical legitimacy still appears to be mostly unchallenged. In

representative democracy as it stands, the discontinuity of public participation certainly intensifies re-election efforts of incumbent governments. The costs for society may be substantial. But again, we do not find any evidence for this stop-and-go economy as maintained by the New Political Economy studies. There is, however, a certain synchronization between social transfer policies and the electoral calendar. Such policies are characterized by an immediate and highly visible benefit for particular groups and merely hidden or deferred costs for the population at large. Long-range planning in social policy has been neglected in favour of a quick crisis management and short-term electoral advantages. The results and prospects for this policy area are thus not very encouraging: myopic policies for voters presumed to be myopic.

## VIII. Appendix

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#### 8.1 List of variables used in the analysis

##### 8.1.1 Variable list : Subsidies

V1 : Agricultural subsidies - national payments

V2 : Agricultural subsidies - national + EEC payments

- V3 : Improvement of agrarian structures
- V4 : Income stabilizing measures
- V5 : Industry
- V6 : Energy, water, cultivation
- V7 : Mining, building trade, manufacturing industry
- V8 : Regional promotion measures
- V9 : Social transfers

Source: Finanzbericht 1982, Bonn 1981.

#### 8.1.2 Variable list : Total and Labour and Social Order Budget

- V1 : Total volumes of budget including extraordinary budget and supplementary budget. The values of extraordinary and supplementary budgets are added to the respective volumes. The values are given in units of 1000 DM. The budget year 1960 is generally referred to as a rump financial year for stock. It runs from 1.4.1960 to 31.12.1960, since during this year the financial year was adjusted to the calendar year. The budget reform took place from 1968 to 1969. The 1969 budget is the first to be drawn up according to the new system.
- V2 : Total volumes for budget item 11 - labour and social order
- V3 : Ministry expenditures
- V4 : General appropriations
- V5 : Federal Enforcement Agencies for Accident Insurance in Wilhelmshafen
- V6 : Federal Institute for Labour Protection and Accident Research in Dortmund

- V7 : Federal Labour Court in Kassel
- V8 : Federal Insurance Office in Berlin
- V9 : Federal Social Court in Kassel
- V10 : Federal Office for Civil Service in Cologne; since 1982 this heading has been estimated under budget item 15 - Federal Ministry Youth, Family and Health
- V11 : Integration of foreign labour
- V12 : War victim pensions and similar benefits
- V13 : War victim welfare and fare allowances
- V14 : Benefits under the promotion of employment law and similar services, unemployment benefit
- V15 : Social insurance

Source: Annual German budget plans (Bundeshaushaltspläne), official classification.

#### 8.1.3 Programme costs for social security and job and job conditions

- V16 : Payments to private persons for social security - Pensionable emoluments and benefit payments to the disabled, widows and widowers, orphans and parents, welfare benefits to wives, children and parents of prisoners. Payments and loans within the framework of war victim relief on the basis of the Federal Pensions Law, the Assistance to Prisoners Law, the Soldiers Pensions Law, the law governing compensation for victims of violence and the law governing subsistence allowances to dependents of prisoners of war.
- V17 : Payments to companies for social security - Payments for compensation of hardships within the framework of company old age pension schemes.

- V18 : Payments to institutions with public responsibilities for social security - Central services and measures for war victim welfare, transport of the disabled, and integration of severely disabled persons, occupational rehabilitation and improvement of social integration of the disabled (since 1961), social policy measures for older persons (from 1968 to 1969). Equipment services for physical exercises for war-wounded, research concerning the severely war-wounded, and treatment in related equipment.
- V19 : Payments to public law institutions for social security - Payments to sickness insurance institutions for the costs of statistics relating to types of illness and causes of death.
- V20 : Payments to self-governing organizations of accident insurance institutions.
- V21 : Treatment of illness, and cures at spas in own establishments.
- V22 : Reimbursements of fare money losses resulting from the transport of severely disabled persons without charge over short distances.
- V23 : Subsidies to social insurance institutions.
- V24 : Travelling costs on the basis of co-ordination activities related to foreign employees. Payments to social security organizations and associations - subsidies for care services to leading organizations for free welfare services and to German trade unions. Public costs for jobs and conditions - co-ordination and special measures for foreign employees. Payments to regions and districts for economic development and infrastructure - promotion of housing construction for foreign employees.
- V25 : Payments to private law institutions for social security - Treatment of illness, cures at spas at establishments outside the pension schemes, payments to Valbella/Davos sanitorium.
- V26 : Payments to associations and organizations for social security - Association for social progress, social court association and other associations and organizations having to do with social matters.

- V27 : Payments to regions and local authorities for social insurance - Exchange of experiences between doctors, officials and employees of pension institutions of the different regions. Expenditures under the Hospital Financing Law (since 1977).
- V28 : Reimbursement of regional subsidies for contributions to annuity insurance of disabled persons working in factories.
- V29 : Payments to international organizations for social security - Contributions to the Federal administration for social security of captains of Rhine vessels.
- V30 : Public costs for social security - Treatment of illness, payments in kind, pension payments on the basis of international and supranational agreements.
- V31 : Measures for the promotion of employment of mentally or physically handicapped persons.
- V32 : Payments to other countries on the basis of social security agreements.
- V33 : Payments to private persons for jobs and conditions - Promotion of employment in Berlin, assistance to employees in the hard coal and/or mining industry, and in the iron and steel industries (from 1973), individual promotion of occupational training for the wage earning middle classes (1962 - 66).
- V34 : Unemployment benefit.
- V35 : Expenditures for job creation measures for those on unemployment benefits.
- V36 : Institutional promotion of occupational training of the wage earning middle classes; only 1970: promotion of occupational training services in frontier zone with East Germany. Promotion of application of results of research in practice within the sphere of 'synchronization of life'.
- V37 : Subsidy to Federal Institute for Labour (1975 and 76), payments of administrative costs to BFA for carrying out the unemployment benefits (until 1969).

V38 : Payments to the German Association for Noise Reduction, the German Standards Commission, the Labour Court Association, the Association for Labour Safety, the European Tariff Archive Commission for Noise Reduction.

V39 : International Labour Organization, Geneva.

V40 : Expenditures on preparation of information, including publications, and information reports in daily newspapers.

V41 : Expenditures on children's allowances; under budget item 11 between 1955 and 1965, then under budget item 15 02.

V42 : Wage and other payments to those providing civil service; this category falls under budget item 15 from 1982.

Source: Annual German budget plans 1952 - 1984. The individual categories were set up on the basis of individual titles.

#### 8.1.4 Variable list : Research and Technology Budget

V43 : Volumes for survey of budget item for research and technology. Data cover the period from 1956 to 1982. In 1956 the Federal Ministry for Nuclear Affairs (budget item EP 31) was set up. This was followed in 1962 by the Federal Ministry for Scientific Research (EP 31), which was converted in 1970 for the Federal Ministry for Education and Science (EP 31). Since 1973 there has existed the Federal Ministry for Research and Technology (EP 30). To maintain consistency within the categories, the headings were arranged according to the 1976 system.

V44 : Expenditures of Ministry for Research and Technology.

V45 : General research promotion.

V46 : Natural sciences technical research and development.

V47 : Data processing, information engineering, documentation.

V48 : Energy research and technology.

V49 : Aerospace research, transport systems.

V50 : German Historical Institute Rome.

V51 : German Historical Institute Paris.

V52 : Art History Institute Florence.

V53 : Biological Institute Helgoland.

Source: Annual German budget plans (Bundeshaushaltspläne),  
official classification.

8.1.5 Programme costs for economic development and infrastructure,  
and energy, resources, and environment.

V54 : Payments to companies for economic development and infrastructure - Promotion of contract research medium - and small - sized companies. Promotion of German risk financing institution. Promotion of the use of electronic data processing in business. Operating costs of space test laboratory set up by Federal Government in 'Industrieanlagenbetriebsgesellschaft'.

V55 : Payments to private law institutions for economic development and infrastructure - Heinrich-Hertz-Institute Berlin. Association of Mathematics and Data Processing Bonn. German Society for Air and Space Travel Cologne. German Research and Test Institute for Air and Space Travel Cologne.

V56 : Payments to associations and organizations - diverse. Payments to international organizations. European Organization for Astronomic Research in the southern hemisphere Hamburg. European space organization Paris. International Institute for Management in Engineering, Milan. International Institute for Applied Systems Analysis, Vienna.

V57 : Public costs for economic development and infrastructure -

Promotion of bilateral and inner-German co-operation in scientific research and development of technology. Promotion of research and development for industrial innovation (production, manufacturing and process engineering, physical and chemical technology. Scientific co-operation with foreign research institutes. Research and development into information engineering, electronics and data processing. Promotion of space research and engineering, communication satellites, transport and traffic, space research and technology.

V58 : Sundry expenditures for energy, resources, environment - Training of engineers and technicians in the field of nuclear energy. Reduction of financial operating risk of demonstration power stations. Fundamental research into nuclear physics in scientific organizations and institutes. Institute for Marine Research, Kiel. Setting up of teams in higher schools.

V59 : Payments to private law institutions for energy, resources, environment - Kiepenheuer Institute for Solar Physics, Freiburg. Association for Radiation and Environmental Research, Munich. German electronsynchrotron Foundation, Hamburg; Association for heavy ion research, Darmstadt; Hahn-Meitner Institute for Nuclear Research, Berlin; Max von Laue-Paul Langevin Institute, Grenoble; Society for Nuclear Research, Karlsruhe; Nuclear Research Plant, Juelich; Max Planck Institute for Plasma Physics, Garching; Society for the use of Nuclear Energy in Shipbuilding and Shipping, Geesthacht. Institute for Marine Research, Bremerhaven; Alfred-Wegener Institute for Polar Research (only 1980).

V60 : Contains several small categories of expenditures for energy, resources, environment - Sundry associations. European Conference for Molecular Biology, Heidelberg. European Organization for Nuclear Research; International Atomic Energy Organization, Vienna; Reimbursement of expenditures incurred by reasons in implementing the atom law.

V61 : Public costs for energy, resources, environment - International programme for the utilization of fuel cycling. Co-operation with foreign research institutes, environmental protection processes and environmental planning, marine research and sea water desalination. Promotion of non-nuclear energy research, reactor

safety and general safety engineering, reactor development, uranium supply, fuel cycling, recovery, waste treatment and waste elimination in nuclear engineering.

V62 : Nuclear physics research.

V63 : Expenditures on preparation of information; see V40.

Source: Annual German budget plans 1956 to 1984. The categories were again set up on the basis of individual titles.

V64 : Deflation Index, i.e. the index of Government Consumption;  
Source : Jahresgutachten des Sachverständigenrates zur wirtschaftlichen Entwicklung, different years.

8.2 Tables of deflated expenditures and growth rates of subsidies from 1962 to 1982.

8.2.1 Subsidies: deflated expenditure series from 1962 to 1982 in Mill. DM.

Year	V1	V2	V3	V4	V5	V6	V7	V8	V9
1962	7304	7304	3474	3522	2085	1143	246	429	44831
1963	7248	7248	3464	3592	2327	1085	521	426	43876
1964	7396	7396	3785	3322	3193	1071	1463	359	47675
1965	7603	7603	4071	3280	3084	868	1590	321	51465
1966	6556	6556	3275	3053	2786	850	1297	299	51188
1967	7456	7456	3575	3667	3368	905	1855	320	52444
1968	10401	10401	3181	7023	3569	994	1610	461	54639
1969	10457	10457	2989	7323	3084	743	1077	553	52133
1970	10759	10759	2801	7831	3229	1196	882	622	51575
1971	5428	12947	2450	2862	3123	1297	776	638	50817
1972	4416	11128	1643	2617	3689	1062	968	743	50571
1973	3541	9448	1697	1737	4651	1043	1400	610	47981
1974	2408	7305	1451	830	4110	1236	1482	786	49959
1975	2336	7016	1416	817	3929	1713	1222	593	67262
1976	1918	6981	1151	657	3148	1241	951	555	66915
1977	1838	8376	1162	568	3599	1449	985	502	67332
1978	1912	9973	1132	662	5009	1401	2076	555	69946
1979	1908	9612	1105	654	4876	1227	2196	578	69431
1980	1783	8989	938	685	5542	1410	2467	539	70593
1981	1275	7158	690	449	4827	918	2465	394	74646
1982	1271	6563	639	500	4413	798	1964	315	74148

Source: The nominal data were taken from the Financial Report and deflated with the index of Government Consumption (1976=100).

8.2.2 Subsidies : deflated growth rates from 1963 to 1982

Year	V1	V2	V3	V4	V5	V6	V7	V8	V9
1963	-0.7	-0.7	-0.3	2.0	11.6	-5.1	111.8	-0.7	-2.1
1964	2.0	2.0	9.3	-7.5	37.2	-1.3	180.8	-15.7	8.7
1965	2.8	2.8	7.6	-1.3	-3.4	-19.0	8.7	-10.6	7.9
1966	-13.8	-13.8	-19.6	-6.9	-9.7	-2.1	-18.4	-6.9	-0.5
1967	13.7	13.7	9.2	20.1	20.9	6.5	43.0	7.0	2.5
1968	39.5	39.5	-11.0	91.5	6.0	9.8	-13.2	44.1	4.2
1969	0.5	0.5	-6.0	4.3	-13.6	-25.3	-33.1	20.0	-4.6
1970	2.9	2.9	-6.3	6.9	4.7	61.0	-18.1	12.5	-1.1
1971	-49.5	20.3	-12.5	-63.5	-3.3	8.4	-12.0	2.6	-1.5
1972	-18.6	18.1	-32.9	-8.6	18.1	18.1	24.7	16.5	-0.5
1973	-19.8	-15.0	3.3	-33.6	26.0	-1.8	44.6	-17.9	-5.1
1974	-32.0	-22.7	-14.5	-52.2	-11.6	18.5	5.9	28.9	4.1
1975	-3.0	4.0	-2.4	-1.6	-4.4	38.6	-17.5	-24.6	34.6
1976	-17.9	-0.5	-18.7	-19.6	-19.9	-27.6	-22.2	-6.4	-0.5
1977	-4.1	20.0	1.0	-13.5	14.3	16.8	3.6	-9.5	0.6
1978	4.0	19.0	-2.6	16.5	39.2	-3.3	110.8	10.6	3.9
1979	-0.2	-3.6	-2.4	-1.2	-2.8	-12.4	5.8	4.1	-0.7
1980	-6.6	-6.5	-15.1	4.7	13.9	14.9	12.3	-6.7	1.7
1981	-28.5	-20.4	-26.4	-34.5	-13.0	-34.9	-0.1	-26.9	5.7
1982	-0.3	-8.3	-7.4	11.3	-8.6	-13.0	-20.3	-20.0	-0.6

Source: own calculations

8.3 Deflated total volumes of budget from 1952 to 1984 in units of 1000 DM; deflated growth rates of total budget volumes from 1953 to 1984; deflation index.

Year	Deflated expenditures	Deflated growth rates	Deflation index
1952	54062400	----	43.2
1953	64916736	20.1	42.9
1954	63342128	-2.4	42.9
1955	68294112	7.8	44.8
1956	73584112	7.8	47.6
1957	74047040	0.6	50.5
1958	72111216	-2.6	53.7
1959	72343440	0.3	55.0
1960	71565840	-1.1	58.6
1961	77410368	8.2	62.2
1962	82160528	6.1	65.0
1963	83765840	2.0	68.4
1964	85234304	1.8	70.8
1965	84476736	-0.9	75.7
1966	87237504	3.3	80.1
1967	95688240	9.6	82.0
1968	94778800	-0.9	85.1
1969	91388160	-3.6	91.2
1970	90945761	-0.5	100.0
1971	89096640	-2.0	112.4
1972	90966608	2.1	119.8
1973	91503936	0.6	131.4
1974	93036624	1.7	146.6
1975	103698784	11.5	155.7
1976	101829024	-1.8	161.1
1977	101484384	-0.3	168.8
1978	108263696	6.7	174.3
1979	109295392	1.0	186.0
1980	108323200	-0.9	198.0
1981	110759500	2.2	208.7
1982	114169370	3.0	215.8
1983	114107710	0.0	221.9
1984	113428760	-0.6	226.7

8.3.1 Deflated expenditure series of the labour and social order budget in units of 1000 DM from 1952 to 1984.

Year	V2	V3	V4	V5	V6	V7
1952	14230812	19302.3		1172.0	00704.9	
1953	14505593	18382.5		1200.5	00676.7	2136.1
1954	15816118	21373.4		1931.0	00784.6	1902.8
1955	15825918	21613.8		1884.8	00752.5	1992.6
1956	17501760	21174.8		1979.4	00732.6	2135.3
1957	17744816	23587.3		2834.5	00929.7	2356.6
1958	16438318	25039.8		2879.5	00800.0	2431.3
1959	16263168	21448.2	020491.6	2959.6	00792.2	2586.0
1960	18181360	19232.8	023384.8	2777.8	00724.1	2436.5
1961	18222816	18952.4	031016.1	2711.3	00692.8	2595.0
1962	17308608	20082.3	040474.4	3056.3	00768.5	2713.1
1963	16810384	18788.0	048435.8	2980.8	00790.4	2587.7
1964	19470576	19929.8	064613.8	3268.5	00761.6	2629.8
1965	20854352	18747.4	077792.2	3207.9	00723.6	2484.9
1966	17086560	22673.4	087040.6	3436.0	00929.5	2717.1
1967	17749424	23862.4	031137.2	3632.7	01365.0	2830.2
1968	19594320	24786.6	035496.0	3944.3	01647.0	2608.2
1969	18510832	24232.5	041865.7	3311.0	01752.3	2477.6
1970	18767056	26274.2	073875.5	3092.9	05836.8	2551.9
1971	17529920	30652.8	098769.5	2977.7	07911.7	2455.3
1972	18032336	31124.7	061399.6	3200.2	05582.1	2794.1
1973	17195328	32459.3	073325.4	3274.4	10569.3	2781.9
1974	18607360	32682.5	084843.7	3008.6	07188.6	2529.8
1975	23656672	34061.0	077774.4	3423.2	07211.3	2730.9
1976	23790144	32294.8	071549.9	3345.7	08742.4	2983.9
1977	22765488	31851.9	604955.4	3559.8	09428.3	3103.7
1978	24688096	34742.4	564255.0	3660.9	09818.1	3515.2
1979	24076304	34830.1	542858.1	3344.1	12537.6	3729.0
1980	24282175	32603.5	515495.4	6040.4	19231.3	3938.9
1981	26067408	33658.8	454483.4	4150.4	18927.6	4102.5
1982	24952289	33469.4	483769.2	4160.7	24386.4	4806.3
1983	26537988	32621.9	500407.8	3785.5	17311.8	5694.3
1984	26226018	31045.9	509147.7	3666.1	14188.3	5962.5

(Table 8.3.1 - cont'd)

Year	V8	V9	V10	V11	V12
1952					7700393.0
1953	3569.5	3660.4			7751243.0
1954	2207.5	4706.5			7440318.0
1955	2077.0	4703.5			7477087.0
1956	1958.6	4186.8			8696443.0
1957	3629.5	4966.3			7197825.0
1958	3548.8	5011.2			6656737.0
1959	3626.7	4948.2			6066087.0
1960	3387.4	46561			7118987.0
1961	3669.5	4841.5	004075.6		6844181.0
1962	3753.8	5122.3	006138.9		6218996.0
1963	3496.8	4882.9	009330.1		5709632.0
1964	3976.1	5015.3	013988.4		6940550.0
1965	3729.9	4772.8	014620.9		6852931.0
1966	4143.6	5529.6	014098.6		6407945.0
1967	4264.5	5364.6	013839.8		7118531.0
1968	3975.4	5031.1	013494.7	09253.8	6935550.0
1969	4077.4	5029.6	028570.9	08684.2	6538175.0
1970	4214.1	5039.2	068862.6	09690.0	6724225.0
1971	4176.2	4923.4	063199.7	14484.0	6285481.0
1972	4593.6	5508.9	079024.8	13284.6	6367592.0
1973	4762.3	5623.1	094616.9	16617.2	6246038.0
1974	4684.0	5472.7	112303.1	17257.8	6252881.0
1975	5499.0	6391.8	113129.6	19332.0	6350738.0
1976	5356.3	6533.8	158605.1	18135.3	6354355.0
1977	5364.3	6332.3	179984.0	18181.3	6444990.0
1978	5253.0	6925.4	235524.3	21336.8	6510257.0
1979	5611.3	6967.2	228583.3	25086.0	6224028.0
1980	5509.1	6779.8	217965.6	28023.2	5852111.1
1981	5518.9	6780.0	227306.1	33521.8	5633632.0
1982	5588.0	6680.7	241714.0	36974.0	5511017.1
1983	7424.5	5562.9	999999.9	53317.3	5298265.0
1984	6412.9	5374.9	999999.9	121923.7	5150105.4

(Table 8.3.1 - cont'd)

Year	V13	V14	V15			
1952		2488425.0	04297914.0			
1953		2554312.0	05860371.0			
1954		2011025.0	06613912.0			
1955		1845636.0	06396582.0			
1956		1264695.0	07451206.0			
1957		0810851.1	09653706.0			
1958		0711266.0	09009862.0			
1959		0616160.9	09454787.0			
1960		0435464.0	10556818.0			
1961		0244774.8	10447681.0			
1962		0119111.5	10073850.0			
1963		0079653.9	10307806.0			
1964		0067941.1	10986562.0			
1965		0061785.3	11151018.0			
1966		0053070.5	11421300.0			
1967		0019840.6	12293050.0			
1968		0061107.5	12497418.0			
1969		0057595.9	11795068.0			
1970	463800.0	0035242.0	11344362.0			
1971	400711.6	0032776.7	10581418.0			
1972	450041.3	0029786.7	11003512.0			
1973	549961.6	0032246.6	10123037.0			
1974	544422.6	0042149.4	11497906.0			
1975	583461.6	5485577.0	10967343.0			
1976	536685.1	3111682.0	13479881.0			
1977	518927.6	0861551.9	14077256.0			
1978	515576.5	1128624.0	15751862.0			
1979	457446.0	0897127.3	15634150.0			
1980	457525.0	1521096.0	15615856.0			
1981	509487.3	5307288.9	13828550.0			
1982	563716.4	6115492.1	14893926.0			
1983	624087.4	5293384.4	14696125.0			
1984	539986.8	4885572.1	14952631.0			

8.3.2 Deflated growth rates of social expenditures from 1953 to 1984

Year	V2	V3	V4	V5	V6	V7	V8
1953	1.9	-4.8		2.4	-4.0		
1954	9.0	16.3		60.9	16.0	-10.9	-38.2
1955	0.1	1.1		-2.4	-4.1	4.7	-5.9
1956	10.6	-2.0		5.0	-2.6	7.2	-5.7
1957	1.4	11.4		43.2	26.9	10.7	85.3
1958	-7.4	6.2		1.6	-14.0	3.2	-2.2
1959	-1.1	-14.3		2.8	-1.0	6.4	2.2
1960	11.8	-10.3	14.1	-6.2	-8.6	-5.8	-6.6
1961	0.2	-1.5	32.6	-2.4	-4.3	6.5	8.3
1962	-5.0	6.0	30.5	12.7	10.9	4.6	2.3
1963	-2.9	-6.4	19.7	-2.5	2.9	-4.6	-6.9
1964	15.8	6.1	33.4	9.7	-3.6	1.6	13.7
1965	7.1	-5.9	20.4	-1.9	-5.0	-5.5	-6.2
1966	-18.1	20.9	11.9	7.1	28.5	9.4	11.1
1967	3.9	5.3	-64.2	5.7	46.9	4.2	2.9
1968	10.4	3.9	14.0	8.6	20.7	-7.8	-6.8
1969	-5.5	-2.2	17.9	-16.1	6.4	-5.1	2.6
1970	1.4	8.4	76.5	-6.6	233.1	3.0	3.4
1971	-6.6	16.7	33.7	-3.7	35.6	-3.8	-0.9
1972	2.9	1.5	-37.8	7.5	-29.4	13.8	10.0
1973	-4.6	4.3	19.4	2.3	89.3	-0.4	3.7
1974	8.2	0.7	15.7	-8.1	-32.0	-9.1	-1.7
1975	27.1	4.2	-8.3	13.8	0.3	8.0	17.4
1976	0.6	-5.2	-0.8	-2.3	21.2	9.3	-2.6
1977	-4.3	-1.4	745.5	6.4	7.8	4.0	0.2
1978	8.4	9.1	-6.7	2.8	4.1	13.3	-2.1
1979	-2.5	0.3	-3.8	-8.7	27.7	6.1	6.8
1980	0.8	-6.4	-5.0	80.6	53.4	5.6	-1.8
1981	7.3	3.2	-11.8	-31.3	-1.6	4.1	0.2
1982	-4.3	-0.5	6.4	2.5	28.8	17.1	1.2
1983	6.3	-2.5	3.4	-9.0	-29.0	18.5	32.9
1984	-1.2	-4.8	1.7	-3.1	-18.0	4.7	-13.6

(Table 8.3.2 - cont'd)

Year	V9	V10	V11	V12	V13	V14	V15
1953				0.7		2.6	36.4
1954	28.6			-4.0		-21.3	12.9
1955	-0.1			0.5		-8.2	-3.3
1956	-11.0			16.3		-31.5	16.5
1957	18.6			-17.2		-35.9	29.6
1958	0.9			-7.5		-12.3	-6.7
1959	-1.3			-8.9		-13.4	4.9
1960	-5.9			17.4		-29.3	11.7
1961	4.0			-3.9		-43.8	-1.0
1962	5.8	50.6		-9.1		-51.3	-3.6
1963	-4.7	52.0		-8.2		-33.1	2.3
1964	2.7	49.9		21.6		-14.7	6.6
1965	-4.8	4.5		-1.3		-9.1	1.5
1966	15.9	-3.6		-6.9		-14.1	2.4
1967	-3.0	-1.8		-11.1		-62.6	7.6
1968	-6.2	-2.5		-2.6		208.0	1.7
1969	0.0	111.7	-6.2	-5.7		-5.8	-5.6
1970	0.2	141.0	11.6	2.9		-38.8	-3.8
1971	-2.3	-8.2	49.5	-6.5	-13.6	-7.0	-6.7
1972	11.9	25.0	-8.3	1.3	12.3	-9.1	4.0
1973	2.1	19.7	25.1	-1.9	22.2	8.3	-8.0
1974	-2.7	18.7	3.9	0.1	-1.0	30.7	13.6
1975	16.8	0.7	12.0	1.6	7.2	12914.6	-4.6
1976	2.2	40.2	-6.2	0.1	-8.0	-43.3	22.9
1977	-3.1	13.5	0.3	1.4	-3.3	-72.3	4.4
1978	9.4	30.9	17.4	1.0	-0.7	31.0	11.9
1979	0.6	-2.9	17.6	-4.4	-11.3	-20.5	-0.7
1980	-2.7	-4.6	3.7	-6.0	0.0	69.5	0.1
1981	0.0	4.3	19.6	-3.7	11.3	248.9	-11.4
1982	-1.5	6.3	10.3	-2.2	10.6	-36.2	7.7
1983	-16.7	9.9	44.2	-3.9	10.7	-13.4	-1.3
1984	-3.4	9.9	128.7	-2.8	-13.5	-7.7	1.7

8.3.3 Deflated expenditure series of the research and technology budget in units of 1000 DM from 1956 to 1984.

Year	V43	V44	V45	V46
1956	0093232.3	04605.0		
1957	0165428.6	06062.4		
1958	0263522.3	07542.8		
1959	0247314.8	08101.3		
1960	0312761.5	08468.4		
1961	0305905.4	08087.5		
1962	0470980.4	10356.8		
1963	0639388.2	12645.3		
1964	0769176.1	14445.6	071802.1	
1965	0834589.8	13150.9	108529.9	
1966	1017947.2	14685.8	119794.0	
1967	1285201.0	17169.6	140236.3	
1968	1365757.0	17424.0	144502.5	006110.5
1969	1464293.0	18420.9	172105.3	009141.3
1970	1616593.0	12959.5	213701.1	013475.5
1971	2191319.0	13914.4	268951.1	027818.5
1972	2359931.0	18940.9	279731.4	237503.8
1973	2387409.0	23444.4	248022.8	313601.0
1974	2511720.0	54413.6	251560.5	465868.3
1975	2617934.0	22902.7	247766.8	315719.9
1976	2459551.0	21864.1	228069.3	339659.1
1977	2493846.0	20707.3	232338.2	320043.8
1978	2819373.0	23392.4	245589.1	397291.4
1979	3029729.0	23079.6	258705.3	459428.1
1980	3008580.8	22904.5	263282.8	501930.0
1981	2911123.6	23054.1	259705.8	490641.0
1982	3280126.5	23178.0	258592.7	719107.0
1983	3117995.5	22960.7	270751.2	684701.7
1984	3109316.3	22745.0	357378.9	667823.6

(Table 8.3.3 cont'd)

Year	V47	V48	V49	V50	V51	V52	V53
1956		0088625.6					
1957		0159366.3					
1958		0255979.5					
1959		0239213.5					
1960		0304293.0					
1961		0297817.8					
1962		0406746.5	053876.9				
1963		0482380.8	144361.4				
1964		0470851.5	211621.0		0455		
1965		0514960.5	197420.0		0528		
1966		0598051.5	284739.0		0675		
1967	030487.8	0740469.5	354601.1	1465	0772		
1968	039970.6	0774651.9	380866.3	1510	0722		
1969	099414.1	0777963.2	384880.7	1584	0783		
1970	118621.1	0913943.3	332431.4	9212	1272	0905	
1971	276682.3	1144263.0	450606.6	2383	0928	0890	04881
1972	242208.8	1057003.0	513260.5	2800	1063	0976	06444
1973	321630.5	1012972.2	458439.0	2331	0854	1012	05674
1974	320587.3	1002880.4	406903.1	1685	0849	1364	06166
1975	376697.4	1175852.0	473809.7	1800	0896	1484	07940
1976	331682.1	1101263.0	484021.0	1696	0999	1248	07910
1977	301302.6	1141366.0	467769.5	1626	1030	1195	06478
1978	317339.0	1336073.0	508482.8	1724	1061	1446	07094
1979	314911.2	1376182.0	593213.2	1599	1022	1006	08110
1980	276923.1	1384230.8	610825.3	1501	1003	1644	09799
1981	205575.9	1356702.4	559050.3	1540	1141	2603	11133
1982	278263.7	1448380.4	646840.6	1564	1213	2777	07015
1983	283423.2	1278105.0	622238.9	1531	1115	1203	06469
1984	296916.2	1223454.0	616554.0	1511	1096	1437	06261

8.3.4 Deflated growth rates of research and technology expenditures from 1957 to 1984.

Year	V43	V44	V45	V46	V47	V48
1957	77.4	31.6				79.8
1958	59.3	24.4				60.6
1959	-6.2	7.4				-6.6
1960	26.5	4.5				27.2
1961	-2.2	-4.5				-2.1
1962	54.0	28.1				36.6
1963	35.8	22.1				18.6
1964	20.3	14.2				-2.4
1965	8.5	-9.0	51.1			9.4
1966	22.0	11.7	10.4			16.1
1967	26.3	16.9	17.1			23.8
1968	6.3	1.5	3.0		31.1	4.6
1969	7.2	5.7	19.1	49.6	148.7	0.4
1970	10.4	-29.7	24.2	47.4	19.3	17.5
1971	35.6	7.4	25.9	106.4	133.3	25.2
1972	7.7	36.1	4.0	753.8	-12.5	-7.6
1973	1.2	23.8	-11.3	32.1	32.8	-4.2
1974	5.2	132.1	1.4	48.6	-0.3	-1.0
1975	4.2	-57.9	-1.5	-32.2	17.5	17.3
1976	-6.1	4.5	-8.0	7.6	-12.0	-6.4
1977	1.4	5.3	1.9	-5.8	-9.2	3.7
1978	13.1	13.0	5.7	24.1	5.3	17.1
1979	7.5	-1.3	5.3	15.6	-0.8	3.0
1980	2.1	-0.8	1.8	9.3	-12.1	1.9
1981	-3.2	0.6	-1.3	-2.2	-25.7	-2.0
1982	12.7	.5	-0.4	46.5	35.3	6.7
1983	-4.9	-0.9	4.7	-4.8	1.8	-11.7
1984	-0.2	-0.9	32.0	-2.5	4.8	-4.3

(Table 8.3.4 cont'd)

Year	V49	V50	V51	V52	V53
1957					
1958					
1959					
1960					
1961					
1962					
1963	168.0				
1964	46.6				
1965	-6.7		16.2		
1966	44.2		27.8		
1967	24.5		14.3		
1968	7.4	3.1	-6.5		
1969	1.1	4.9	8.5		
1970	-13.6	481.4	62.5		
1971	35.6	-74.1	-27.1	-1.7	
1972	13.9	17.5	14.5	9.7	32.0
1973	-10.7	-16.7	-19.6	3.7	-12.0
1974	-11.2	-27.7	-0.6	34.7	8.7
1975	16.4	6.8	5.5	8.8	28.8
1976	2.2	-5.8	11.5	-15.9	-0.4
1977	-3.4	-4.1	3.1	-4.2	-18.1
1978	8.7	6.1	3.0	20.9	9.5
1979	16.7	-7.2	-3.8	-30.4	14.3
1980	3.0	-6.2	-1.9	63.5	20.8
1981	-8.5	2.6	13.8	58.3	13.6
1982	15.7	1.5	6.3	6.6	-36.9
1983	-3.8	-2.1	-8.0	-56.7	-7.8
1984	-0.9	-1.3	-1.7	19.4	-3.2

8.4 Social policy laws and their timing from 1972 to 1983

Laws	Passed	In effect
1972 - 1976		
- 4. Rentenversicherungs- Änderungsgesetz	31.3.73	1.1.73
- Arbeitsaufsicht Landwirtschaft / Übereinkommen;	28.7.73	29.7.73
- Arbeitnehmerschutzgesetz	28.7.73	29.7.73
- Arbeitnehmerunterkünftegesetz	28.7.73	1.10.73
- 8. Gesetz zur Änderung des Selbstverwaltungsgesetzes;	11.8.73	12.8.73 1.1.75
- Betriebsärztegesetz	15.12.73	16.12.73 1.12.74
- 16. Rentenanpassungsgesetz	9.6.73	10.6.73 1.1.74
- Strafrechtsreform - Ergänzungsgesetz;	30.8.75	1.12.75
- Zivildienstgesetz/3.Änd.	26.6.73	1.7.73 1.10.73
- Leistungsverbesserungsgesetz	21.12.73	1.1.74
- Schwerbeschädigtengesetz/Änd.	27.4.74	28.4.74 1.5.74
- Sozialgesetzbuch/Allg. Teil	13.12.75	1.9.75 1.1.78
- Sozialgerichtsgesetz/Änd. Verfahrensbeschleunigung;	3.8.74	1.1.75

- Heimarbeitsänderungsgesetz	31.10.74	1.11.74
- Altershilfe für Landwirte/7.Änd.	22.12.73	1.1.73 23.12.73 1.1.74
- 5. Anpassungsgesetz - KOV	19.12.73	1.1.72 1.1.73 1.10.74
- Rehabilitationsleistungsgesetz	15.8.74	1.10.74
- Betriebliche Altersversorgung	21.12.74	22.12.74 1.1.75
- Mitglieder von Betriebsver- fassungsgesetzen/Schutzgesetz;	22.1.74	23.1.74
- 17. Rentenanpassungsgesetz	4.4.74	1.1.74 5.4.74 1.1.75
- Konkursausfallgeldgesetz	19.7.74	20.7.74
- Sozialversicherungsgesetz für Behinderte;	13.5.75	1.7.72 1.7.75
- 6. Anpassungsgesetz - KOV	28.8.74	1.10.74
- Mitbestimmungsgesetz	8.5.76	1.7.76
- Jugendarbeitsschutzgesetz	15.4.76	1.5.76
- Sozialhilfedienstförderungsgesetz	31.12.74	1.1.75
- 18. Rentenanpassungsgesetz	3.5.75	1.1.75
- Arbeitsförderungsgesetz/Änd. Arbeitsvermittlung;	28.6.75	1.7.75

- Krankenversicherungs - Weiterent- wicklungsgesetz;	30.12.76	1.7.77
- Krankenversicherung der Studenten	28.6.75	29.6.75 1.9.75 1.10.75
- 7. Anpassungsgesetz - KOV	13.6.75	1.7.75
- Personalvertretung der Zivil- dienstleistenden;	16.8.75	17.8.75
- Sozialgesetzbuch/Sozialver- sicherungsvorschriften;	30.12.76	1.7.77
- 3. Bundessozialhilfegesetz/Änd., 5. Bundesversorgungsgesetz/Änd.;	16.12.75	1.4.75
- Kündigungsschutzgesetz/Änd §1	8.7.76	9.7.76
- Berufskrebschutzgesetz	19.5.76	20.5.76
- Renten- und Unfallsversicherungs- abkommen mit Polen;	16.3.76	17.3.76
- 8. Anpassungsgesetz - KOV	19.6.76	1.1.76 20.6.76 1.7.76
- 19. Rentenanpassungsgesetz	10.6.76	4.8.74 1.7.77
- Hilfswerk für behinderte Kinder/ Änderung	28.7.76	1.8.76
1976 - 1980		
- 9. Anpassungsgesetz - KOV	30.6.77	1.7.77 1.2.78
- 20. Rentenanpassungsgesetz	30.6.77	1.1.77 1.1.78

- Krankenversicherungs - Kostendämpfungsgesetz;	6.77	1.1.77 1.1.78
- Gerätesicherheitsgesetz	17.8.79	1.1.80
- Arbeitsrechliches EG- Anpassungsgesetz	20.8.80	21.8.80
- Arbeitsförderungsgesetz/4. Änd.	17.12.77	12.5.76 1.1.78
- 2. Kündigungsschutzgesetz/ Anpassung an EG-Recht;	29.4.78	30.4.78
- Arbeitsgerichtliches Verfahren/ Beschleunigung;	23.5.79	1.7.79
- Landesversicherungsanstalten in Niedersachsen/Zuständigkeitsänd.;	25.1.79	26.1.79
- 21. Rentenanpassungsgesetz	25.7.78	1.1.79
- 10. Anpassungsgesetz - KOV	11.8.78	1.1.79
- Sozialgesetzbuch/Verwaltungsverf	26.8.80	77-84
- Flexible Altersgrenze/ Schwerbehinderter;	9.11.78	1.1.79
- Schwerbehindertenfreifahrt/ Öffentlicher Personenverkehr;	17.7.79	1.10.79
- Arbeitsförderungsgesetz/5. Änd.	28.7.79	78,79,80
- Mutterschaftsurlaubsgesetz	30.6.79	1.7.79
- 2. Agrarsoziales Ergänzungsgesetz	16.7.80	77-81
- Gewerbeordnung/§139b	21.3.80	22.3.80

- Krankenversicherungsgesetz/ Verwaltung der Mittel.	22.12.79	1.1.80
1980 - 1983		
- Sozialgesetzbuch	9.11.82	1.1.82 1.1.83 1.7.83
- Künstlersozialversicherung	1.8.81	2.8.81 1.1.83
- Montanmitbestimmungs- sicherungsgesetz	27.5.81	1.7.81
- Wartezeitgesetz	13.8.81	14.8.81
- Rentenanpassungsgesetz 1982	4.12.81	1.1.78 1.1.83
- Krankenhaus-Kostendämpfungs- gesetz/Änd.	30.12.81	1.1.82 1.7.82
- Kostendämpfungsgesetz- Ergänzungsgesetz	30.12.81	1.1.82
- 11. Anpassungsgesetz - KOV	26.11.81	1.1.82
- Illegale Beschäftigung von Arbeitnehmern	19.12.81	1.1.82
- Arbeitsförderungs- Konsolidierungsgesetz	29.12.81	30.12.81 1.1.82
- Seemannsgesetz/3.Änd.	4.3.83	1.4.83

Source: Deutscher Bundestag, Bundesrat (eds.) 1977, 1981, 1984.

8.5 The budgetary process and election dates in Germany

Budget Year	Budget passed	Election dates	Time of Government formation
1952	25.6.52		
1953	24.7.53	6.9.53	9.10.53
1954	26.5.54		
1955	12.7.55		
1956	24.7.56		
1957	26.6.57	15.9.57	29.10.57
1958	24.7.58		
1959	6.7.59		
1960	2.6.60		
1961	10.4.61	17.9.61	17.11.61
1962	23.5.62		
1963	24.6.63		
1964	13.5.64		
1965	18.3.65	19.9.65	20.10.65
1966	22.6.66		
1967	4.7.67		
1968	3.5.68		
1969	18.4.69	28.9.69	21.10.69
1970	27.6.70		
1971	3.3.71		
1972	21.12.72	19.11.72	14.12.72
1973	6.7.73		
1974	31.5.74		
1975	16.4.75		
1976	8.6.76	3.10.76	15.12.76
1977	25.7.77		
1978	21.2.78		
1979	23.2.79		
1980	21.12.79	5.10.80	5.10.80
1981	13.7.81		
1982	17.2.82		
1983	22.12.82	6.3.83	30.3.83
1984	22.12.83		

Source: Register zu den Verhandlungen des Deutschen Bundestags,  
different years.

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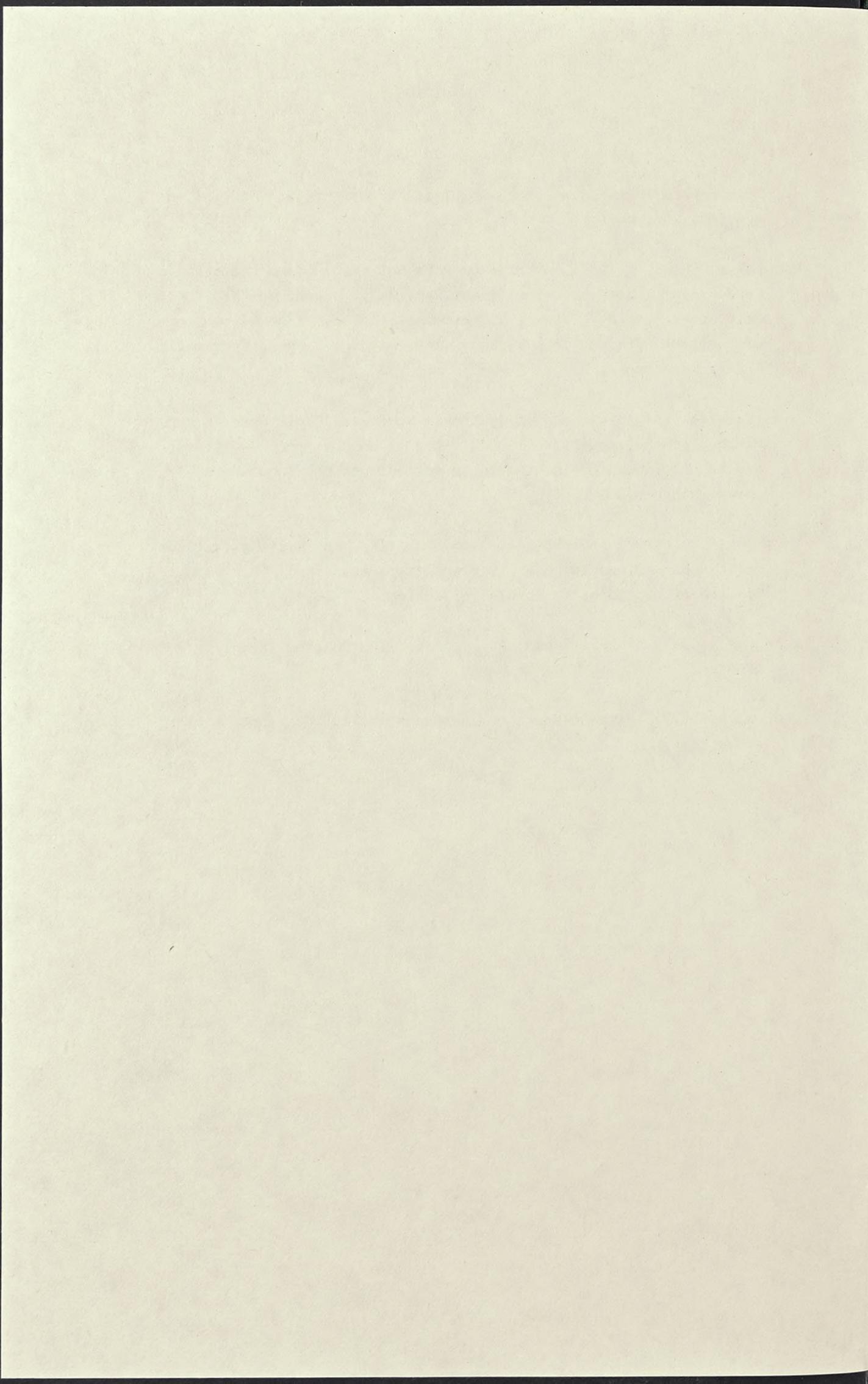
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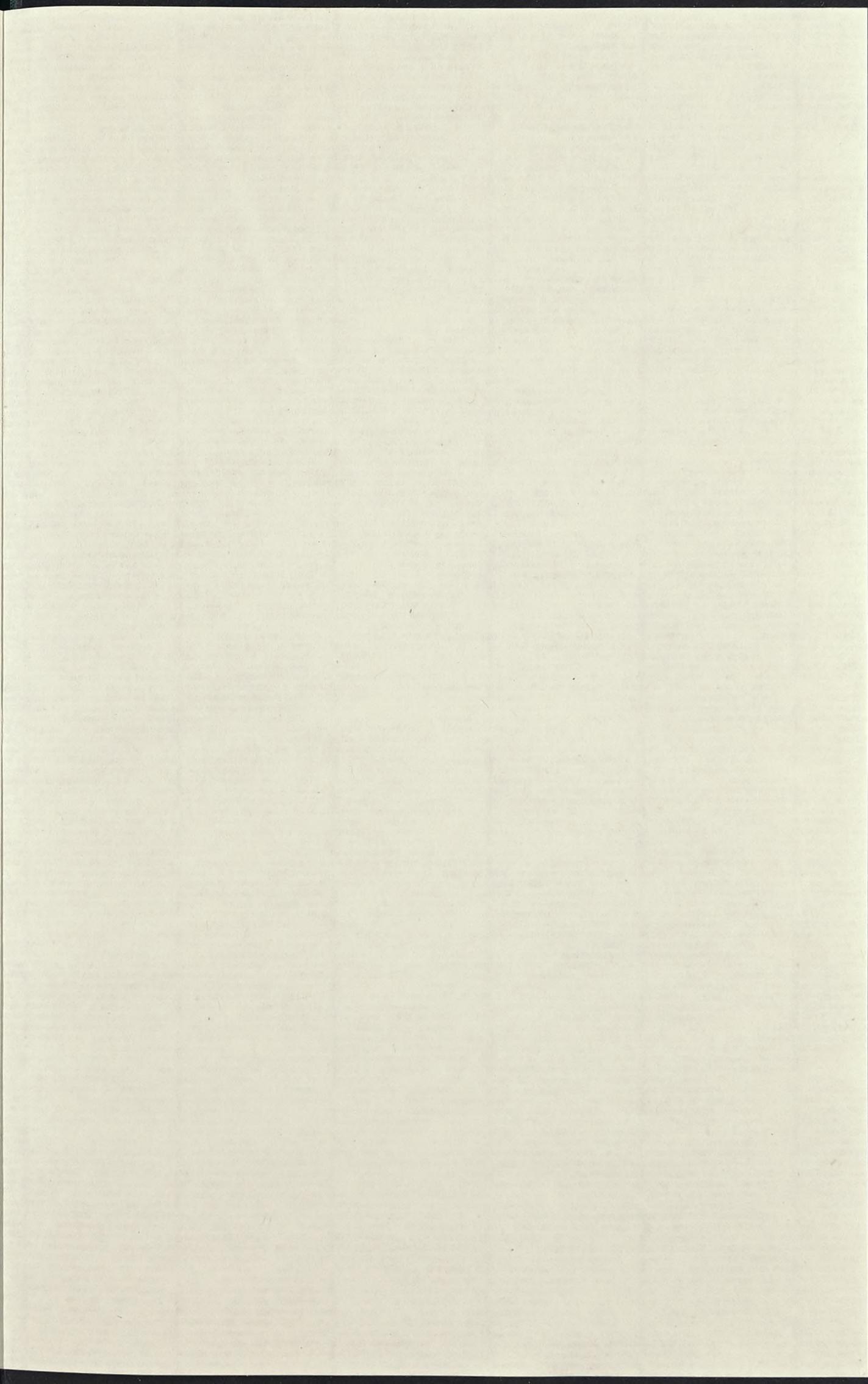
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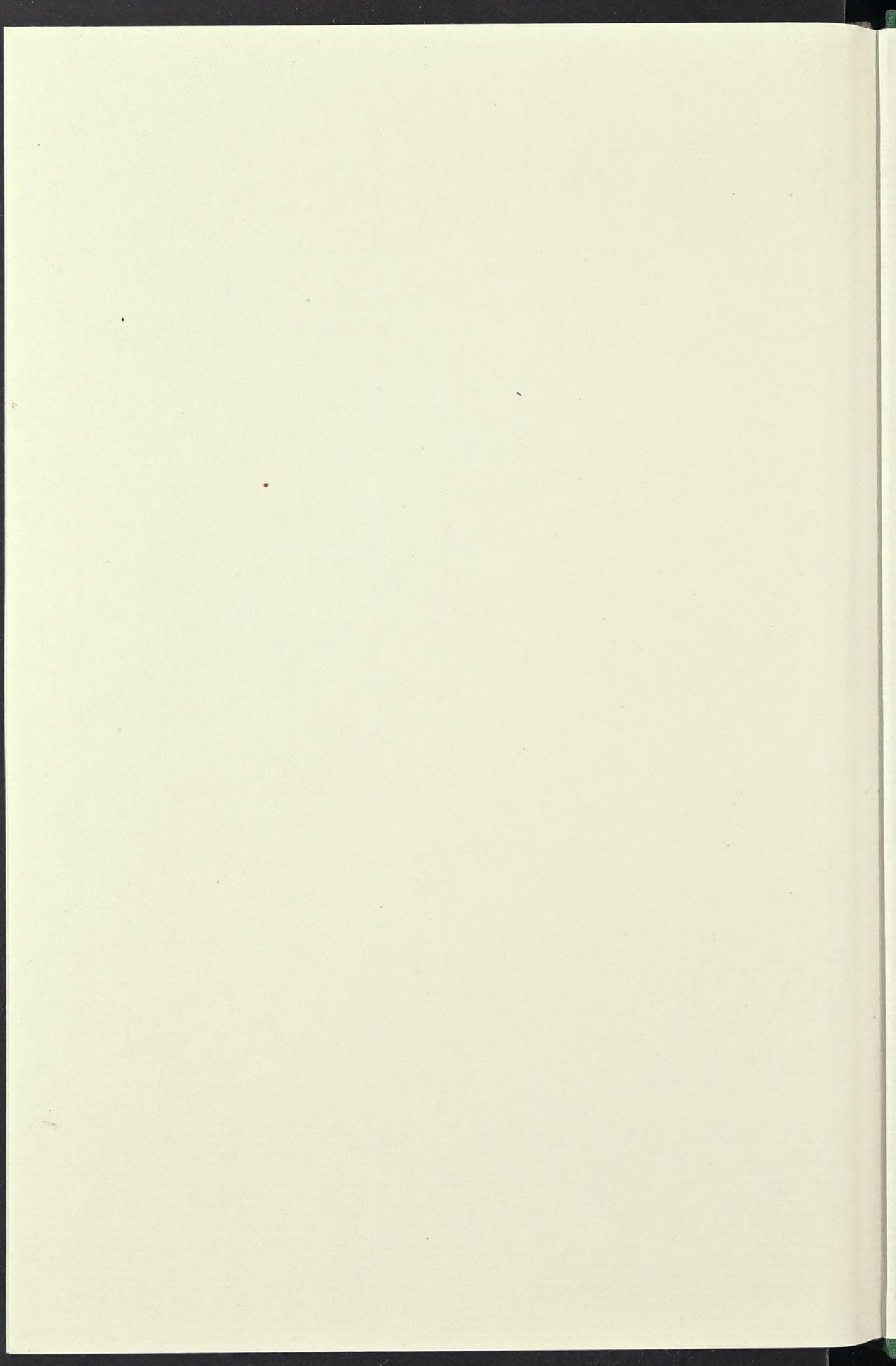
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