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On Some Problems to Apply the Economic Model of Behaviour in Political Science

Abstract: After a short description of the economic model of behaviour it is shown that there are two reasons why problems arise if this model is applied to political processes and decisions. First, such decisions are often 'low cost', i.e. 'wrong' decisions have hardly any impact on the decision maker. Second, the behaviour of single individuals or small groups of individuals is to be explained. The common root of this problem is the difficulty to predict behaviour which is mainly preference governed and not guided by (changing) restrictions. Nevertheless, this should not lead to abolish the economic model because (i) it can be usefully applied also in this area and (ii) a better alternative is hardly available.

0. Introduction

[1] Starting with the seminal contribution of Downs (1957), we have seen a great deal of success in the application of the rational choice approach to the area of politics over the last fifty years. One of the main aims of this scientific research programme which is mostly called 'Public Choice', but sometimes also 'Economic Theory of Politics', 'New Political Economy', or, more recently, just 'Political Economy' is to develop positive theories of political processes, like theories of voting behaviour, of government behaviour, of bureaucratic behaviour, and of interest group behaviour, just to mention the most important theory sets in this area.² The methodological core of this programme consists of the economic model of behaviour, the 'homo oeconomicus',³ or 'rational evaluating maximising man' (REMM).⁴ It is assumed that individuals (subjectively) evaluate different action possibilities according to the perceived costs and benefits, and that they choose the action which promises the highest expected net benefit. During recent decades this standard methodological approach in economics has—in a kind

 $^{^{1}}$ For an introduction in and an overview of Public Choice see Mueller 2003, for more recent developments Besley 2007.

² Surveys for these areas are given in Mueller 1997.

 $^{^3}$ A general introduction into the concept of the economic model of behaviour and an overview of its application in economics and other social sciences is given in Kirchgässner 2008

⁴ See, for example, Meckling 1976 or Brunner 1987. See also the 'resourceful, restricted, expecting, evaluating, maximising man' (RREEMM) in Lindenberg 1985.

of 'imperialism'—also been applied to questions largely outside the realm of traditional economics.⁵ Thus, new sub-disciplines have emerged like, for example, 'the Economic Analysis of Law', 'the Economics of the Family', or 'the Economics of the Arts', to name just a few. Public choice, the application of this approach to political (public sector) decisions, was the first of these new sub-disciplines, and became a successful competitor to traditional political science which assumes that political decision makers do not follow their own personal interests but have incentives strong enough to pursue the interests of society or at least of the social group to which they belong. Thus, traditional political science follows more or less a 'public interest' approach.

[2] However, more recently, the homo oeconomicus model came under attack, not only with respect to its application in Political Science, but also in traditional Economics. It has been demonstrated, mainly using laboratory experiments, that two assumptions usually employed in economic analyses do not generally hold (or even do generally not hold): First, people are not fully rational, usually, they are at best boundedly rational. Thus, the von Neumann–Morgenstern axioms of rational behaviour do hardly shape everyday life. Second, people are not as self–interested as economic analyses usually suppose; they are not always behaving as free riders, they sometimes even make voluntary contributions to public goods. These two assumptions are often seen as constituent parts of the economic model. Thus, some economists already declare the 'death' of homo oeconomicus. However, as will be argued below, these assumptions are not constituent parts of the basic model but (only) some assumptions typically applied by economists when analysing economic processes. Thus, these critiques do not reject the basic model of homo oeconomicus.

[3] Nevertheless, despite the undoubted success of the rational choice research programme, it has long been realised that it is difficult to explain very basic political decisions such as to vote or not to vote with this approach. It is possible to explain variations in the turnout rate, but taking the economic approach seriously, one is trapped into the 'paradox of not-voting': rational voters should not vote. Although far less known, it has also been recognised that this approach cannot explain why people (should) vote for their preferred party. Moreover, it is difficult to explain government (or central bank) behaviour. An indication of this weakness is that despite many theoretical models and numerous empirical attempts the evidence for political business cycles is—to state it politely—rather weak. Starting with the seminal paper of Nordhaus (1975) it has been shown that governments have an incentive to deliberately produce such cycles in order to improve their re–election prospects, but whether such cycles are actually crea-

 $^{^5}$ For discussions of the economic imperialism see, for example, Stigler 1984; Lazear 2000; or Kirchgässner 2008, 135ff..

 $^{^6}$ See for example, Ken Binmore on the back cover of Bowles 2004. (http://www.amazon.com/Microeconomics-Institutions-Evolution-Roundtable-Behavioral/dp/product-description/0691126380 (03/09/08))

⁷ A survey of the literature is given by Feddersen 2004. For a more recent contribution to this debate see, for example, Kirchgässner/Schulz 2005, for a critique of the 'economic' attempts to solve this paradox Green/Shapiro 1994, 47ff..

ted still remains an open (empirical) question. This holds even for more recent attempts like, for example, the 'rational partisan theory' by Alesina/Rosenthal (1995).

- [4] Thus, while some authors consider public choice to be a huge success and even propose to extend its application to Political Science,⁸ it also has been attacked by several authors because of weak empirical evidence. Quiggin (1987), for example, stated that available empirical evidence often runs counter to public choice theory. According to his opinion, the reason for this is the 'egoistic rationality' assumption. In their reply, Brennan/Pincus (1987) point to the distinction between rationality and egoism. They accepted that egoism plays a minor role in political as compared to economic markets which might lead to systematically different behaviour. However, they emphasise that using the rationality assumption even without the additional assumption of self–interest would allow at least some of the public choice orthodoxy to survive any attack on the egoism assumption.
- [5] Green/Shapiro (1994) launch a broader and sharper attack against the application of the rational choice approach in political science. Using examples like voter turnout and legislative behaviour they show that the empirical evidence for the rational choice approach is in many cases rather weak. They trace this back to methodological pathologies like post hoc theory development and the use of selective (favourable) evidence. However, these pathologies do not always arise when rational choice theories are tested, nor are they specific for this approach, but they can also be found when other theories are empirically tested.
- [6] A thorough inspection of empirical public choice gives a somewhat more differentiated picture. It is, for example, difficult to explain the level of voter turnout, but not necessarily *changes* in voter turnout. The behaviour of 'staying voters' is difficult to explain, but the behaviour of floating voters may be better predicted using the 'economic' rather than the traditional sociological approach. To take another example: interest groups provide a wide variety of selective incentives to raise membership fees to be able to produce the public good, as is predicted by the theory of interest groups by Olson (1965). Nevertheless, there is also some evidence that citizens, in supporting interest groups, make voluntary contributions to public goods.
- [7] And why should the same citizens act fundamentally different in political compared with economic markets? Why should they, for example, be altruistic in politics but be self—interested in the economy? It seems to make more sense to start with Adam Smith (1759) that individuals have both, self—interest and altruism (empathy) as motivations, and which of the two is more strongly reflected in their behaviour depends on the specific circumstances. Thus, the same basic model of behaviour should be applied to the analysis of political as well as economic processes, but should be able to explain different behaviour.

⁸ See, e.g., Riker 1990; Kavka 1991; or Dowding 2006.

- [8] One basic difference between many political and most economic decision situations is to what extent wrong decisions matter for the individual decision maker: costs of wrong (personal) decisions are rather low in many political contexts, especially for voters, but high in most economic contexts, especially for investors, and often also for consumers. Thus, if the economic model of behaviour is to be applied to situations when political decisions have to be taken, a theory of low cost—decisions has to be developed.
- [9] A second basic difference is that empirical economics is usually dealing with aggregate behaviour, while political analysis is often concerned with the decision of single individuals (or very small groups). This holds especially if government behaviour is to be analysed. While it is true that the rational choice approach is based on methodological individualism and, therefore, takes the behaviour of a single individual as a starting point, this does not necessarily imply that it is also successful in the explanation of the behaviour of single individuals.

[10] In the following, it is shown that these two basic differences account for at least some of the difficulties which arise when the rational choice approach is applied to the area of political processes and decisions. Before starting with this discussion, we first give a short description of the economic model of behaviour (Section 1). Then we discuss the theoretical problems which arise with respect to low cost situations (Section 2), before we turn to the aggregation problem (Section 3). In Section 4 we discuss the common root of both problems: the difficulties to say something concrete about the preferences of individuals.

1. The Economic Model of Behaviour

[11] As is well known, in the economic model of behaviour, the individual's decision situation is described essentially by two elements: by preferences and restrictions. Both elements are strictly distinguished. In a given situation the restrictions limit the individual's leeway of action; within this leeway there are various available alternatives of acting from which the individual can choose. According to his preferences, the individual assesses—given his limited knowledge—the various alternatives at his disposal, and finally chooses that alternative(s) which come(s) closest to his preferences or which promise(s) to bring about the maximum net benefit.⁹ Thus, in this model human behaviour is interpreted as a rational choice from available alternatives by the individual or—to speak in the language of economics—as 'utility maximisation under constraints' with limited information.¹⁰

⁹ J. Rawls who calls this concept "the standard one familiar in social theory" remarks that "in the usual way, a rational person is thought to have a coherent set of preferences between the options open to him. He ranks this options according to how well they further his purposes; he follows the plan which will satisfy more of his desires rather than less, and which has the greater chance of being successfully executed." (1971, 143)

¹⁰ As the individuals' behaviour is oriented at the (potential) consequences of the various

[12] Two issues are important for considering an individual's decision within the framework of the economic model of behaviour: the independence of the decision and the rationality of the decision. Independence of a decision means that an individual acts according to his/her own preferences (and not according to the preferences of others). Of course he can take into account the interests of others in his preferences; in the extreme case he can be envious or malevolent, but also altruistic and benevolent. As a rule, however, in economic analyses 'the axiom of self-interest' is presupposed: The individual acts exclusively according to his own interests. Thus envy, malevolence, altruism and benevolence are excluded. Of course, the individual knows that he does not live alone, but only within a society. Corresponding 'social orientations', e.g., the desire to live in a democratic society, are part of his preferences. The interests of other individuals are taken into account, however, only insofar as they influence the individual's range of action. In his *Theory of Justice* J. Rawls calls such a behaviour "mutually disinterested rationality" (1971, 144).

[13] The second point is the rationality of the decision. In this context rationality does not mean that the individual chooses the optimal way of acting at every moment, that he goes through the world like a walking computer which always calculates the best of all available alternatives in a flash. This distorted picture of 'homo oeconomicus' which up to now is still found in many (text)books of microeconomics and which has rightly been criticised again and again, is not in line with the modern interpretations of the economic model of behaviour. ¹¹ In this model, rationality only means that the individual is principally in a position to assess and evaluate his range of action and then to act accordingly. It has to be taken into account, however, that the individual must make his decision without being fully informed and that the search for additional information is costly. Also, he often has to decide under time pressure. The individual will accept costs for additional information if he realises a relevant change in his action leeway and he, therefore, must assess and evaluate his alternatives once again. A rational individual reacts to such a change 'systematically', i.e. neither by chance nor randomly, nor in a purely traditional way in that he strictly sticks to given rules independent of the concrete situation. 12 Therefore, his behaviour can systematically be influenced by providing incentives, which in most cases result from changes of the individual's action leeway (his restrictions). As a consequence, it is possible to predict behavioural changes as a reaction to changes of the leeway of actions.

[14] Generally, possible actions that are open to an individual involve other individuals. A contract, for example, can only be achieved if—in a given situation—both (all) partners agree. Rational individuals will only agree if they expect a personal net-benefit, which means that—given the respective preferences—the expected benefit of the service to be performed by the contracting partner has to

possible actions, one also speaks of a 'consequentialist' approach in this context. See for this, for example, Sen 1977.

¹¹ For criticism of this concept of rationality see already Arrow 1986.

¹² For a more detailed discussion of this weak rationality assumption see Kirchgässner 2004.

exceed the expected costs, which must be borne for the own service. But this is exactly the situation of (productive) exchange, and such exchange does not just take place in the economic and legal areas, but everywhere, also in politics. ¹³ Therefore, social interactions can almost always be interpreted as exchange, and this is largely the case if the economic model of behaviour is applied.

[15] The restrictions to which the individual agents are submitted can in many cases be identified easily. In the simplest case of consumer choice in the private household, these are the income of the household as well as the given prices of the various goods. However, it is rather difficult to discover individuals' preferences. Apart from inquiries, with all their methodological difficulties, they can usually only be recovered indirectly: the knowledge of the individuals' behaviour and of their restrictions allows the researcher to draw conclusions about their preference orderings. Furthermore, preferences are, as a rule, more stable than restrictions; preferences change more slowly than restrictions. Therefore, economic theory assumes preferences to be stable 14 and explains changes in the behaviour of human beings nearly exclusively by changes in the restrictions. If restrictions change, certain alternatives of acting become relatively more advantageous, others relatively less advantageous, and the individuals increasingly choose those alternatives which have become more attractive. ¹⁵ As these preferences are supposed to be relatively stable, the question is, however, only rarely asked where these preferences come from, how they are formed and how they are (or can be) influenced.

[16] This also means that with the help of the economic model of behaviour primarily changes in the behaviour of individuals or differences between individuals can be explained, but hardly ever levels of activities. For example, given a specific situation it can be explained how the consumption of petrol will change after a rise in its price. The quantity of the consumption, however, cannot be explained, except if a comparison with other countries and different conditions is made. Thus, economics might be seen as a science which deals with changes of social conditions: human behaviour may be influenced if the conditions under which people act, in our terminology the restrictions, are changed.

2. Voting Behaviour and Low-Cost Situations

[17] Whenever this model is applied in economic theorising, one of the basic implicit assumptions is that decisions matter: A wrong decision has a negative impact (a loss of potential utility gain) on the decision maker. This assumption is non-controversial for nearly all 'economic decisions', be it production or consumption decisions. Investors (firms, or to be more precise, owners of firms) are

¹³ The same applies to co-operations between partners which are usually based on (explicit or implicit) contracts; in this sense they can be interpreted as exchanges as well.

¹⁴ Sometimes, they are even assumed to be identical across individuals. See, for example, the famous contribution of Becker/Stigler 1977.

¹⁵ In other words there is a (partial) substitution of less attractive alternatives by those which have now become relatively more attractive.

mainly interested in profits, they evaluate possible investment projects according to their expected payoff, and finally choose the project which seems to be the most profitable one. ¹⁶ A wrong decision implies a—sometimes significant—financial loss. If the conditions, for example, interest rates, change, the expectations about the profitability of the investment projects will change and, thus, the behaviour of the investor may change as well. Private households compare prices and qualities of different goods and acquire the bundle of goods with the 'best' price—quality—combination. Wrong decisions as, for example, the purchase of a good with a quality much lower than expected, cause a decline of wealth.

[18] In these and many other economic examples, it is important to realise that individuals cannot only (at least approximately) evaluate benefits and costs of different possible decisions, but that they are also personally affected by the outcome of their decisions. This provides an incentive to make 'right' decisions. Of course, 'wrong' decisions are not precluded, but as long as individuals are able to learn, the process will lead towards 'better' decisions.

[19] Once this standard economic model of behaviour is applied to other areas, the assumption that the individual is personally affected by his decision becomes controversial. In these areas there are many situations where the decision has nearly no impact on the decision maker. In the political and judicial sphere, we observe—beside others—the following two types of 'low cost decisions': ¹⁷

- (i) The decision of the single individual is irrelevant for the individual him—herself and for all other individuals, but the collective decision is relevant for all individuals. This holds, for example, for the electoral participation and the electoral decision (Low-Cost Decision Type I).
- (ii) The decision of the single individual is irrelevant for the individual him—/herself, but is highly relevant for some other individual (or for a group of other individuals). This holds, for example, for judicial decisions (Low—Cost Decision Type II).

[20] A standard and well-discussed example for the first type of low cost decisions is the decision to participate in elections or referenda. Even more striking, but hardly discussed, is the voting decision itself. There may be social approval or pressure which forces people to participate, but as long as voting is secret, there exist—apart from possible but unobservable psychic costs—no such incentives with respect to the decision between different candidates or parties. If there are more than just a few voters, the probability of a single vote to be decisive is negligible. Thus, whichever party or candidate a voter is going to give his/her

¹⁶ Even if firms do not behave exactly as described by economic theory, this theory has proved to have sufficient explanatory and predictive power to be used for analysing firm behaviour 'as if' they behaved in this manner. See for this point the classical paper of Friedman 1953.

¹⁷ See for this in more detail Kirchgässner 1992.—Low cost situations have until now only rarely been discussed in the (economic) literature and, if at all, mostly with respect to voting decisions. See Buchanan 1954; Harsanyi 1969; Tullock 1971; Brennan/Buchanan 1984; Brennan/Lomasky 1984; 1985, and especially 1993; Kliemt 1986; Kirchgässner/Pommerehne 1993; Brennan/Hamlin 2000 as well as Kirchgässner 2008, 139ff.; 2008a.

support, the decision does not influence the result of the election at all. The decision takes place—as Kliemt (1986) states—behind "a veil of insignificance". Therefore, from this point of view there is no reason to vote for the party or candidate whose expected policy comes closest to the individual's personal interest, but, of course, there is also no reason to vote against them.

[21] Whether something is decided outside or behind the 'veil of insignificance' is independent of the question whether it is decided on the constitutional level or during the current political process. ¹⁸ Voters' decisions may relate to the election of a candidate as well as to the referendum about a constitutional rule: in both cases they are in a low cost situation. Most high cost decisions are in the current political process. But there can be high cost situations at the constitutional level as well. This holds at least as long as actual constitutional decisions are considered. Only if we restrict the range of constitutional decisions to those which are actually made behind a 'veil of ignorance' and only if we assume—in addition—that the number of decision makers is large, then such decisions are always low cost. However, neither of these conditions is a necessary element of the concept of constitutional choice.

[22] Brennan/Lomasky (1985; 1993) argue that moral rules can play an important role in situations behind the 'veil of insignificance': when people vote they are more other-regarding and less self-interested than in the market place. This becomes evident when we switch our attention from voting decisions to referenda. If the moral rule requires redistribution of income, (some) people will vote for redistributional measures even though the imposition of such a policy is against their (narrow) material self-interest. The knowledge that the own decision does not matter at all, makes it easy to follow an acknowledged moral rule. On the other hand, if a redistributional measure is rejected by the majority, hardly anyone of those who voted for it feels obliged to follow this norm privately and to voluntarily transfer the same amount of money to the poor. To state it the other way round: there is no total crowding out of private charity by public redistribution.¹⁹

[23] This result calls the assumption of self-interest into question. But what can self-interest mean whenever the individual's decision does not matter for the decision-maker himself? In such a situation other motivations will play a crucial role. Following Adam Smith in stating that individuals have both, self-interest and empathy as motivations, we have to ask under which conditions their behaviour will (mainly) be guided by self-interest and under which conditions by empathy. In the usual economic high cost situation empathy is very costly and sometimes even dangerous: an entrepreneur who pays higher (than

¹⁸ The distinction between the two levels, the constitutional one and the one of the current political process, is fundamental not only for the *Theory of Justice* of Rawls 1971 but also for Constitutional Economics. See, for example, Buchanan 1987.

¹⁹ According to Abrams/Schmitz 1978; 1984, in the United States this kind of crowding out is below 30 percent, i.e., an additional dollar of redistribution by the fisc reduces private charitable contributions by less than 30 cents. See for this also Ferris/West 2003 as well as Garret/Rhine 2006.

market) wages out of moral considerations may be driven out of the market by his competitors: nice guys lose. Therefore, in many or even most economic situations we will hardly ever see altruistic behaviour. On the other side, if altruistic behaviour is rather cheap we can assume that some or perhaps even many individuals will follow moral rules and—perhaps—behave altruistically. This holds for electoral participation, but also for many other situations where we observe (small) private contributions to a public good.²⁰ Thus, it is not the different basic motivation but the different restrictions which cause individuals to behave differently in political compared to economic markets.

[24] There is also another point which has to be taken into account. In high cost situations changes of (binding) restrictions will affect the behaviour of individuals. This makes their behaviour predictable and, therefore, enables (economic) policy makers to influence their behaviour. In low cost situations there are, however, no such restrictions available. Thus, the behaviour of individuals is mainly guided by their preferences. Because preferences are much more difficult to observe than restrictions and much more difficult to influence in a certain direction, in such situations it is much harder to influence and predict the behaviour of individuals (or even its changes). This causes problems for economic policy, but also for economics as a science of human behaviour. On the other hand if preferences are—as usually assumed—relatively stable and if one can draw conclusions on the preferences of individuals from their past behaviour, it is possible to make predictions about their future behaviour, especially in situations when they are more or less free to follow these preferences. Correspondingly, those who are affected by decisions which are low cost to the decision makers have a strong interest that people with similar preferences to their own take such decisions. This holds the more the larger the leeway of these decision makers is. Thus, while the economic model has difficulties to explain how people decide in low cost situations, it is quite apt to show why those who have (political) influence try to bring others with similar preferences into such positions. This is rather obvious if we consider, for example, the nomination procedures for judges of supreme courts.²¹

3. Government Behaviour and the Aggregation Problem

[25] Taking all this into account it is easy to see why the explanation of voter behaviour causes difficulties for the economic model of behaviour, but it should not be difficult to explain government behaviour. Governmental decisions might be compared with risky investment decisions: a government which takes 'wrong' actions (according to the opinion of the voters) might not be re–elected. This usually causes a large utility loss for those driven out of office (and a large gain

²⁰ That individuals voluntarily make private contributions to the provision of a public good has also been shown in experiments. For a survey of the results see Ledyard 1995.

²¹ On the process for electing federal judges in the United States see, for example, Stratmann/Garner 2004; Goff 2006; Solumn 2005 as well as some other papers in issue 2 of Cardozo Law Review 25 (2005).

for those coming into office). Nevertheless, as numerous empirical studies about the political business cycle show, it is also rather difficult to explain government behaviour.

[26] Here, a second problem arises: the aggregation problem. There are, however, two aggregation problems in economics. They are related but have to be distinguished. The first one is rather often, the second rarely, discussed. Both can be illustrated using the law of demand.

[27] The first aggregation problem is inherent in the question whether the aggregate demand function has a negative slope. The negative slope of the demand function is the assumption economists nearly always use when explaining economic phenomena: rising (relative) prices lead to a reduction in demand. But can we start from very general (rationality) assumptions about the behaviour of the economic agents and derive such a demand function? Sonnenschein (1972; 1973) has shown that this does not hold generally: the aggregate demand function for a certain good may locally have any slope in an exchange economy.²² To exclude this possibility, rather restrictive assumptions about the individual preference functions are necessary. This holds as well when restrictions about possible distributions of the individual preferences (and the initial distribution of resources) are employed.²³

[28] A second facet of the same problem has been discussed in econometrics. Starting with Theil (1954) it has been asked whether it is possible do derive linear macro-relations from linear micro-relations. Again, it has been shown that only rather restrictive assumptions like identical corresponding micro-parameters or proportionality of the exogenous micro variables are sufficient to ensure consistent aggregation.²⁴

[29] In both cases, the conditions derived are so strict that they usually will be violated. However, it should be kept in mind that these conditions are sufficient but not necessary ones: there are many other possibilities which allow (but not ensure) a negative slope of the demand function or consistent aggregation of micro-relations. Thus, it is finally an empirical question whether any demand function is negatively sloped or whether consistent linear aggregation is possible. At least with respect to the first question, there is in many cases abundant empirical evidence which is reliable enough to base political measures on it. For example, hardly anyone will really believe that a strong rise in Swiss petrol prices would lead to an increase of petrol demand in Switzerland, even if general equilibrium theory is not able to prove the contrary (under the usual rationality assumption of economic theory).

 $^{^{22}}$ See for this Fischer 1987 as well as Balasko 1988, 120ff..

²³ See Hildenbrand 1983.—This holds, however, only locally. Due to the budget constraint, an increase in relative prices which is large enough will always lead to a reduction in demand. This is the content of the first fundamental law of demand as proposed by Alchian Allen: "Any person's consumption rate for any good will be increased (decreased) if the price is lowered (increased) sufficiently." (1964, 68)—See for this also Becker 1962.

²⁴ For a discussion of this problem see Stocker 2008.

[30] The second and for our discussion much more relevant aggregation problem is quite a different one. Despite the fact that economic theory is based on a model of individual behaviour, economics is hardly interested in the behaviour of single individuals but in the behaviour of so-called 'aggregates' such as, for example, consumers, entrepreneurs, or voters. It is not the behaviour of a certain single individual which is interesting, but the 'typical' behaviour is considered: regularities in the behaviour of all or at least the majority of the individuals in the respective group.²⁵ Here the micro-theory offers (only) the basis in order to be able to explain macro-phenomena.²⁶ This is not a contradiction, as it might seem at first glance. If, via the change of a certain macro-variable, the conditions for the actions of all individuals of a certain group are influenced in a similar way, it is to be expected that their reaction will, not in every single case but on average, show the regularity which can be explained by the individual decision calculus. A rise in petrol prices will, for example, not induce every car-driver to save petrol. For economic reasoning, however, it is only relevant that all consumers together react with less consumption so that the price-rise leads to a reduction of the total quantity demanded. This behaviour, which actually could be observed after the sharp increases of petrol prices in 1973/74 and 1979/80 and again today, can—by using some additional 'weak' assumptions—be derived for the 'typical' or 'representative' consumer from the individual optimality calculus of the theory of consumer behaviour.²⁷

[31] Without disposing of quite a lot of information about the individual preferences it is, however, hardly possible to explain *individual* behaviour. When applying the economic model the basic hope is that when looking at aggregates individual factors cancel each other out. Individuals preferences might be distributed randomly which can lead to a wide variety of individual behaviour, but by taking averages we can take advantage of the law of large numbers and find the basic structure which lies behind these actions. If the economist's model incorporates this basic structure, he will be able to explain aggregate, but not individual behaviour. Using the economic theory of voter behaviour, it can, for example, be explained (and empirically tested) that rising unemployment leads to a reduction of the government's support, but it is difficult to explain for which party a single (unemployed) voter will vote. It seems to be appropriate to resort to sociological or psychological approaches in order to explain the behaviour of individual (single) voters, whenever personal factors are crucially decisive. ²⁸

²⁵ Correspondingly, Hicks writes when dealing with the law of demand: "In all our discussions so far, we have been concerned with the behaviour of a single individual. But economics is not, in the end, much interested in the behaviour of single individuals. Its concern is with the behaviour of groups. A study of individual demand is only a means to the study of market demand." (1939, 34)—See for this also Hayek 1952, 48f., as well as Popper 1967, 142.

²⁶ See also Becker with respect to the application of the economic approach outside traditional economics: "While this approach to behavior builds on an expanded theory of individual choice, it is not mainly concerned with individuals. It uses theory at the micro level as a powerful tool to derive implications at the group or macro level." (1993, 385)

²⁷ For a critique of the assumption of the representative agent see, however, Kirman 1992.

²⁸ See for this Kirchgässner 1980.

[32] There are economists who even believe that the economic model of behaviour can contribute nothing at all to the explanation of individual behaviour but who, nevertheless, hold the view that this (individualistic) model can be used to explain developments in the economy. One of the representatives of this view, Alchian, writes about economic analysis: "To regard it as a theory of individual behavior is fatal." (1953, 601) The background of this assessment is the consideration that because of strong competition, (ex post) only that behaviour will survive in the economic process which bears the requirements of this process, independent of the single individuals' intentions or motivations.

[33] If this extreme view would hold, the economic model could only partially be applied to analyse political behaviour because Political Science, at least as long as it is concerned with government (or central bank) behaviour, often investigates the behaviour of single individuals or small groups of individuals. However, as Zintl (1989) has pointed out, the economic model can also be applied to explain or predict individual behaviour whenever an individual's alternatives are so severely reduced by the restrictions that individual factors (like personal preferences) only play a minor part.²⁹ Thus, e.g. within the framework of the economic theory of politics the behaviour of individual governments can be explained if their leeway is strongly limited by the re-election constraint. But if this restriction is not binding, it is hardly possible to explain their behaviour.

[34] This becomes obvious if we look at analyses of government behaviour within empirical public choice. In the first paper about the political business cycle, Nordhaus (1975) assumed that governments create such a cycle by following a vote-maximising-strategy, and he derived testable implications about the development of unemployment and inflation during this cycle. Despite some preliminary evidence which he presented in favour of such a cycle the bulk of empirical studies which were published since then did not support this view: the evidence is at best rather mixed.

[35] An alternative approach is the 'partisan view' as developed by Hibbs (1977; 1994): it is generally assumed that compared with their right—wing (Republican) counterparts left—wing (Democratic) governments will give relatively more weight to unemployment than to inflation.³⁰ Correspondingly, the latter will favour more expansionary policies than right-wing governments. Dummy variables are employed to 'test' these assumptions. Though one can find some evidence from several countries for this proposition, especially for the Fifties to

²⁹ Another way to cope with this problem has been proposed by Heiner 1983; 1990. He states that the higher the uncertainty the more individuals will follow rules (of thumb) which can make their behaviour more predictable, while "optimizing with no uncertainty in choosing more preferred alternatives does not tend to produce systematic and stable regularity in behaviour. Rather, it tends to destroy such regularity as successively more information can be reliably interpreted in guiding more complex behavior." (1983, 572). This might hold if we only look at single individuals, but it does not exclude that by aggregation collective behaviour will show regularities even if optimisation takes place under full information. See for this also Kirchgässner 1993, 189ff..

³⁰ This conclusion has already earlier been drawn by Kirschen 1964, 227, when investigating the economic policy of American governments during the Fifties and Sixties.

the Seventies, there is, however, (at least until now) no possibility to derive these objectives from a theoretical model. Moreover, the empirical evidence is quite different if we consider more recent policy. Despite being Republicans, Presidents Ronald Reagan and George W. Bush followed rather expansionary fiscal policies, quite contrary to what had been believed to be typical for Republicans.³¹ Thus, estimates of ideologically oriented policies are more or less plausible statistical ex post-descriptions of what happened and can hardly be seen as tests of a theory. This also holds for the empirical estimates of the (rational) partisan theory as performed, for example, by Hibbs (1977; 1994) or by Alesina/Rosenthal (1995).

[36] The same holds with respect to central bank policy. The hypothesis most often tested is the conventional wisdom that central bankers appointed by left-wing (Democratic) governments are less eager to fight inflation than those appointed by right-wing (Republican) governments. Again, this hypothesis is not derived from a theoretical model but stated ad hoc, and the empirical results are rather mixed, too. This holds for the studies about the U.S. Fed as well as for the Deutsche Bundesbank.³²

[37] Thus, if—as in the Nordhaus case—a strong theory is developed to explain government behaviour with reference to the re-election constraint, it is rejected in most cases. If, however, preferences determine government (or central bank) behaviour, the theoretical approach is suspended in favour of a mixture of ad hoc-assumptions and an empirical (econometric) description. At least until now, public choice theory does not seem to be very successful in explaining government behaviour.

4. On Explaining Preference Guided Behaviour

[38] In both cases, with respect to voter as well as government behaviour, if we look at low cost situations or if the aggregation problem arises, the basic reason for the problems in applying the economic model is the same: the restrictions are at best rather weak and the behaviour is mainly influenced by individual preferences and much less (if at all) by restrictions. Thus, agents are at least partly intrinsically and not (purely) extrinsically motivated.³³ Because the economic model takes preferences as given and tries to explain changes in behaviour by changes in the restrictions, it is—at least at first glance—not applicable to situations where restrictions do not matter (or open at least a large leeway for intrinsically motivated actions). Thus, the lack of success comes as no surprise.

³¹ The same observation can be made with respect to public debt. While until the beginning of the eighties many believed that—ceteris paribus—its increase would be stronger under left-wing (Democratic) than right-wing (Republican) administrations, huge increases of US public debt occurred—despite all the rhetoric—under Ronald Reagan and George W. Bush, Republican presidents.

³² For the United States see, for example, Havrilevsky 1994. For Germany, Lohmann 1993 finds no partisan effects at all. $33 As for the role intrinsically motivated behaviour can play even in the traditional economic

sphere see Frey 1997.

- [39] The problems are enforced if both conditions are fulfilled. We might explain the behaviour of a single individual if the restrictions are rather strict or of groups of individuals in low cost situations by referring to other motivations than self-interest. But without personal knowledge it is extremely difficult to predict the behaviour of a single individual in a low cost situation.
- [40] This might suggest the conclusion that the economic approach should be abandoned whenever problems in the political area are to be analysed. However, this suggestion could be wrong for several reasons. First, there are areas where the economic model can be applied with considerable success as, for example, Olson's (1965) theory of interest groups shows. Thus, it needs to be carefully asked where in Political Science the economic approach can be applied without (major) problems and where such difficulties arise. Second and more important: what are the alternatives? One should not forget that one of the reasons for the great success the rational choice approach has had in Political Science is that the existing alternatives are not very attractive, at least for a considerable share of political scientists.
- [41] Another conclusion is, however, that the assumption of self-interest as usually made in economic analyses has to be relaxed. If we assume that individuals are both, self-interested and altruistic, and if we can show that in certain situations the assumption of self-interest is not sufficient to derive behavioural conclusions, we have to rely more on assumptions of other (moral) motivations like empathy. This is especially relevant if we consider voluntary contributions to the provision of public goods. That a situation is low cost is presumably a necessary, but certainly not a sufficient condition for a large part of the population to behave morally. A second necessary condition is that the public good is provided even if a considerable share of the individuals makes no contribution. This holds, for example, for electoral participation: if the participation is seen as a voluntary contribution to the public good of 'functioning of the democracy'. Moreover, a third (and perhaps the most important) necessary condition is that such behaviour cannot (or at most to a rather small extent) be exploited. Finally, the individuals have to accept such moral demands as justified and being part of their civic duty. While it is difficult to empirically observe whether this last condition is given in a certain situation, the first three conditions can easily be observed. Thus, using the economic model we can at least predict whether moral or altruistic behaviour (of a large number of citizens) can occur.
- [42] The problem is, of course, that preferences as well as individual motivations can hardly be observed independently. This was, after all, the justification for those using the economic approach to regard preferences as being fixed and to rely on (changes of the) restrictions. On the other hand, if, as stated above, preferences are stable, it should be possible to derive information about these preferences from past behaviour and assume that the same preferences will also be valid in the future. From this perspective, to make assumptions about the ideological preferences of the different governments or administrations might be

ad hoc from a theoretical point of view, but it could nevertheless have a sound empirical basis.

[43] This strategy is the more promising the larger the groups are which have similar preferences. Then, it can also be asked which conditions favour the evolution of certain preferences. In such a framework, combined testable hypotheses can be derived: Given that certain conditions favour the development of certain preferences and given that such preferences guide the behaviour of the individuals in certain (low cost) situations, we can explain differences in the behaviour of individuals living under different conditions. This is possible, for example, in the analysis of voting behaviour. In doing so we are quite near to the traditional sociological theory of voting behaviour. But as long as we use a micro-model of individual behaviour to derive such macro-relations we still are using the economic approach. This indicates that the differences between the economic and the sociological (rule-theoretic) models of behaviour are not that large as it is often thought, at least as long as both refer to a micro basis.³⁴

5. Summary and Concluding Remarks

[44] The economic model is intended to be a behavioural model which can be applied to all human behaviour in whatever area human beings are acting. It is advertised in this way by its proponents, and is seen as an alternative to traditional approaches. During recent decades, it proved to be remarkably successful in 'new' areas, including those of traditional Political Science. Nevertheless, problems arise when it is applied there. Its empirical success is more modest than acknowledged by many of its proponents. Correspondingly, harsh criticisms have been brought forward by its opponents.

[45] There are two reasons why problems arise if this model is applied in the area of political processes and decisions. First, such decisions are often 'low cost', i.e. 'wrong' decisions have hardly any impact on the decision maker. Second, the behaviour of single individuals or small groups of individuals is to be explained. The common root is the difficulty to predict behaviour which is mainly preference guided and not guided by (changing) restrictions.

[46] The problem is, however, that hardly any attractive theoretical alternative to the economic model of behaviour is available. This was, of course, one of the preconditions for its success. Traditional, more sociologically oriented approaches were often more descriptive than theoretical, even if the predictive power of the empirical work based on these approaches was sometimes quite remarkable.

[47] When evaluating the usefulness of the application of the economic model in political science one should, however, distinguish between the (core) model itself and the additional assumptions which are usually employed when this model is applied to economic problems. Whenever it is the objective to 'understand'

 $^{^{34}}$ See for this also Kirchgässner 2008, 269ff..

and not only to describe the behaviour of individuals it is hardly possible to do so without the framework of the economic model. This holds in Political Science as well as in other social sciences, and whether or not the economic terminology is applied: whenever the behaviour (acting) of people is to be understood it is hardly possible to do so without reference to their intentions (preferences), their subjectively perceived leeway of actions (determined by the restrictions), and a presupposition of systematic behaviour (weak rationality). This also holds for many 'sociological' analyses which employ this model.³⁵

[48] However, this does not imply that the additional assumptions usually made in economic analyses also have to be used, especially the assumption of self-interest. It is a very powerful assumption if decisions are high cost, but it loses most of its power whenever decisions are low cost. But it is not easy to find a substitute. The assumption of 'moral behaviour' or of altruism can be useful in some contexts as with respect to electoral participation, but not in others like, for example, government behaviour. There are situations where it is sufficient to rely on the stability of preferences, but in many others information about the preferences of the acting individuals is necessary. Reliable information, however, is difficult to collect. Despite the general applicability of the economic model, this weakness is not easy to overcome. This might sound rather pessimistic, but as long as there is no better alternative available, it is at least a reasonable second best strategy to apply the economic model of behaviour also in other areas like politics.

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 $^{^{35}\,\}mathrm{For}$ the application of the economic model in sociology see, e.g., Coleman 1990; Barron/Hannan 1994; or Esser 1999/2000.

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