The Veto Player Approach in Macro-Comparative Politics: Concepts and Measurement[1]

Detlef Jahn, Baderstr. 6/7, 17489 Greifswald, University of Greifswald, djahn@uni-greifswald.de

Abstract

Over the last decade, analytical tools in modern macro-comparative analysis have become increasingly sophisticated. Yet our concern with problems of causal inferences has to a large extent overshadowed the equally important matters of conceptualization and measurement. Both the operationalization of highly elaborated analytical concepts and the empirical data employed are oftentimes crude and not suitable for elaborated analysis. Furthermore, macro-comparative analysis has been criticized with regard to conceptual issues. It is claimed that highly-aggregated data analysis lacks a micro-foundation and thus renders causal assumptions from structural data doubtful. This article focuses on veto player theory which currently attracts extensive attention in political science research and might be viable in order to mitigate the above mentioned analytical weaknesses. The paper distinguishes between a veto point analysis which has most analytical problems mentioned above, from veto player analysis. The latter has a micro-foundation rooted in rational choice theory. As veto player analysis is still flawed with regard to accounting for actors' preferences and institutional settings, this article introduces a novel veto player index that is time-variant for both aspects and thus achieves a fundamental improvement in veto player analysis. Although I do not overcome all analytical problems here, the new index is certainly a fundamental improvement for the veto player analysis.

The veto player approach is one of the most prominent analytical concepts in current comparative politics research. It has been applied in both qualitative and quantitative comparative analysis as well as in formal modeling of decision-making processes. The focus of this paper is on the veto player approach in macro-quantitative research designs. Macro-quantitative analysis requires a relatively large number of observations in order to allow for comparison by statistical analysis. In recent years, highly sophisticated statistical methods of causal inference have been developed for macro-comparative analysis. This is a welcome development as statistical analysis becomes increasingly important in political science research. This is particularly true for the so-called Time-Series – Cross-Sectional Analysis (TSCS) which is the state-of-the art method of the discipline and considers variables which are potentially variant between countries and over time. Both the comparison of a large number of countries over ample periods of time as well as the modelling of sophisticated causality makes high demands on the variables used. While variables have to be sufficiently abstract in order to travel across cases (Sartori 1984), the downside of abstractness is that it renders the specification of causal relationships difficult. For this reason some scholars are highly suspicious of macro-quantitative comparative analysis (Kittel 2006). In order to overcome this problem macro-quantitative analysis needs a theoretical micro-foundation as well as variables that are sensitive to variation between countries and time.

In this paper I review the existing literature with regard to how these requirements have been dealt with. On the one hand I focus on the conceptualization of the veto player approach while the examination of the concept's measurement and aggregation is my second point of interest. As more and more indices are on offer and are oftentimes used without further reflection, this analysis is of increasing importance. It is necessary to assess empirical indices in view of their conceptual and empirical benefits in order to provide guidelines for their use in analytical models. This doesn't only concern the handling of the veto player approach but also the use of other indices. For instance, democracy indices have recently been reviewed by Munck and Verkuilen (2002) from the same perspective. In their assessment they have differentiated between concerns of

conceptualization, measurement and aggregation. I follow their line of argument by considering a variety of veto player indices in this way.

The paper is structured as follows: first, I outline the essential aspects of assessing the conceptualization of the veto player approach. In the second part I summarize its core analytical foundation which results in the differentiation between veto point and veto player analysis. After reviewing major indices of veto point and veto player analysis in the third and fourth part I elaborate on some empirical requirements an enhanced veto player index would have to meet in the fifth section. These improvements make the veto player analysis sensitive for changes in both, institutional settings and preferences of veto player. In addition the approach enables us to analyze multi-dimensional preferences and shorter time units. The article concludes by discussing the enhanced veto player index's contributions to current political science scholarship and embedding the results into the nascent debate on the development of more powerful analytical and empirical tools for veto player analysis.

1 Conceptualizing and Measuring Veto Players in Macro-Comparative Analysis

Our concern with developing highly complex causal theories and revealing causal inferences between variables by technically highly sophisticated data analysis overshadows the equally important problem of conceptualization and measurement. This is even true for a parsimonious theory such as the veto player approach. Applying elaborated concepts always involves a trade-off between analytical clarity and parsimony on the one hand and a concept's validity in its empirical context on the other. Sartori (1984) forcefully argues that concepts must be able to travel while also making sense for individual cases without becoming idiographic. Some might, metaphorically spoken, throw out the baby with the bath water when suggesting case-specific improvements to veto player analysis (Ganghof 2003 discusses this point). However, oversimplistic operationalizations run the risk of undermining an analysis' validity.

In this paper I follow the lead of other scholars and evaluate various veto player approaches with regard to their conceptualization, measurement and aggregation (Smelser 1976; Adcock and Collier 2001; Munk and Verkuilen 2002). Conceptualization translates the theoretical concept into the empirical world. Theoretical concepts are supposed to be clear and should generate explicit hypotheses that reflect a concept's effects in empirical terms. We have to be clear about causal mechanisms which yield certain effects (Hedström and Swedberg 1998). For instance, causal mechanisms can be established by substantiating analytical concepts with a micro-foundation.

Conceptualization also implies the identification of a concept's relevant empirical attributes. One is best advised to opt for a parsimonious approach that neither includes too many (maximalistic) nor too few (minimalistic) specifications. In the field of veto player analysis this mainly concerns the identification of veto players as well as their preferences. Hypothetically, many stakeholders can act as veto players in certain policy fields. For macro-comparative analysis however, we need to focus on the most relevant ones in order to obtain general conclusions. In this respect one important aspect is the problem of redundancy. Some empirical concepts measure the same analytical aspect by means of various empirical indicators which entails an implicit overestimation of some of the concept's elements. Political actors' preferences are the driving force of veto player analysis and must be clearly specified in order to provide a basis for causal hypotheses.

Measurement links the conceptual attributes to observations. As mentioned above, the most important conceptual attributes of veto player analysis are the number of veto players and their respective preferences. How are data collected for these attributes? A technical issue in this context is the level of measurement. Although this seems to be rather trivial, it is not. Highly sophisticated empirical analysis such as TSCS analysis presupposes a certain level of measurement. Regression analysis normally calls for metric variables. Ordinal or count variables are unsuitable to regression analysis as they yield biased coefficients. In turn, downgrading ordinal variables to dummy variables –which are suitable for regression analysis – leads to a substantial information loss.

Modern data analysis also needs variation over time meaning that if a concept such as the function of veto players were to be time-variant, it would have to be taken into account. This aspect actually refers to both attributes of the veto player approach: the number of veto players as well as their preferences. As both may vary over time, empirical concepts have to account for this aspect.

Once a concept's measurement is completed with the assignment of scores to each of the relevant attributes, the next step is to aggregate the concept's disaggregated scores. This step has to do with the conceptualization of the theoretical concept. How does causal inference work in theoretical terms? In veto player analysis, some scholars focus on the number of (potential) veto players. When advancing this view one has to determine whether (potential) veto players have the same effect and must thus be counted equally. Other veto player approaches assume a different theoretical assumption. Tsebelis contends that the number of veto players is second-rank as opposed to their respective ideological distances. In order to grasp this aspect empirically, we need to measure the ideological range of the veto players that are spaced farthest from one another. In this case we do not have the problem of having to weigh various veto players differently.

In the following three parts of the paper I pick up the three aspects of conceptualization, measurement and aggregation by referring to four commonly used veto player indices. Since there are two rather distinguished approaches which differ in their focus I begin by pointing out the differences. The following two parts then focus on veto point and veto player analysis. While the first part is mainly of an analytical nature, the two subsequent ones also present empirical data applied in various approaches.

2 Competing Concepts of Veto Player and Veto Point Analysis

The basic premise of the veto player approach is simple. Governments as agenda setters[2] strive for implementing their favored policies. In case of government's inactivity the policies remain unchanged. If governments were free and willing to act without obstruction, they would move the status quo to satisfy their preferences. Granted that there are other actors with divergent preferences which have decision-making power (veto players) the result would be a compromise between the government's preferences on the one hand and the veto player's preferences on the other. Formally, government's activity can be measured by comparing the policy or policy outcome at time point t_1 with the policy or policy outcome at t_2. The policy or policy outcome at t_1 is called *status quo*. If the status quo is 30 (e.g. 30 percent of the GDP is invested in social expenditure) and the preference of the government is 35 (for instance it wants to improve unemployment benefits) the policy shift from t_1 to t_2 would change from 30 to 35. This would be true under *ceteris paribus* conditions if there were no veto players. Veto players alter the outcome since veto players are "… actors whose agreement is required for a change of the status quo." (Tsebelis 2002: 17) Referring to the example this means that if a veto player prefers 32, a compromise between 35 and 32 has to be reached and the government's target of 35 is unattainable. If a veto player were to prefer 25, making a compromise could even mean the continuance of the status quo. Since agenda setters control the agenda they do not have to make compromises which are further away from their ideal points than the status quo. If they risk reaching a result beyond the status quo they simply do not put the issue on the agenda and make do with the status quo.

---

[2] In modern democracies there could also be agenda setters other than governments. However, I neglect this aspect since in parliamentary democracies governments are the agenda setter most of the time (Döring 1995; Bräuninger and Debus 2009). In the political system of the United States the Congress acts as an agenda setter and here above all the majority party (Krehbiel 1998; Cameron 2000; Cox and McCubbins 2005). Another exception is the European Union's increased status as agenda setter. This aspect is not accounted for as it would complicate veto player illustration and its inclusion would not change the basic idea of the paper.

There are basically two notions of veto players and their operationalization in macro-comparative politics. One strand counts the number of veto players. As this perspective does not take preferences and veto player interaction into account, I assign these approaches to the veto *points* category. The veto function is measured by the number of veto points. Scholars in this research tradition contend that the status quo is more likely to change in political systems with no or few veto points than in political systems with many veto points.

The analysis of veto points does not incorporate actors' preferences: neither the ones of the agenda setter (e.g. governments) nor the ones of veto points. In fact this presupposition makes speculating on the range of potential compromise impossible. This is different in approaches under the label of veto *player* analysis. Veto player analysis considers the preferences of veto players. The veto function is the ideological range between the preferences of veto players. The closer the preferences of potential veto players, the easier it is to change the status quo. The relevant ideological range for analysis is the distance between the two veto players with the greatest differences. For instance, if there were five veto players with social expenditure preferences of 31, 32, 33, 34, and 35 percent of GDP, the relevant range would be 4 (from 31 to 35), meaning that three veto players in between 31 and 35 would be absorbed. Veto player analysis builds on rational choice theory and is theoretically complex (Tsebelis 2002). The empirical measure of the ideological range of the two opposite veto players is merely an empirical proxy for the win set, the area within which a compromise between veto players is possible.[3]

Veto point and veto player analysis focus on different empirical aspects. Veto point analysis intends to count all *potential* veto points. A basic problem of this analytical concept is that it cannot capture when a potential veto point actually exercises its veto power. This is easier in veto player

---

[3] The analytical tools for identifying the win set of collective actors are (a) preferences, (b) status quo, and (c) the cohesion of individual veto players in a particular issue area. I do not consider the complex interaction of variables in this paper and focus instead on established operationalizations of the veto player approach in macro-comparative analysis. However, I will get back to these aspects in the conclusion of this paper.

analysis. If veto players have identical preferences, their veto function is zero; if the preferences differ by five points on an ideological scale, the veto function is five and so on.

The theoretical underpinning of both approaches is substantially different. While the analysis of veto points aims at identifying the number of veto points which perform institutional constraints on the maneuverability of central governments, veto player analysis starts out from political actors' and institutions' models of interaction which are based on rational choice theory. Therefore causal mechanisms in veto point analysis are much more difficult to trace than in veto player analysis which has a micro-foundation.

To be sure, veto player theory - both the notions of veto points and veto players - cannot make assumptions about the direction of policy change. For instance, with regard to the positive or negative effects of veto players on economic growth George Tsebelis explicitly states: "It is not clear whether many veto players will lead to higher or lower growth, because they will "lock" a country to whatever policies they inherited, and it depends whether such policies induce or inhibit growth." (Tsebelis 2002: 204) Veto player analysis is also flawed in case the status quo shifts which is common in political reality (e.g. changes in the economic situation, unemployment rates, trade, demographic factors, etc.). Even though this aspect is crucial for veto player analysis, I won't focus on this conceptual aspect and limit the paper to a discussion of the established indices of veto point/player analysis. This is a necessary first step in order to enhance and thus improve veto player analysis with further specifications. I first discuss certain concepts and their operationalization in the tradition of veto point analysis and turn to veto player analysis in macro-comparative politics in the next section.

3 Measurement and Aggregation of Veto Points in Macro-Comparative Analysis

Indices about institutional constraints on central governments have for the first time been introduced in the early 1990s (Huber et al. 1993; Colomer 1996; Schmidt 1996, Kaiser 1997). These indices refer to the theoretical

work of semi-sovereign states (Katzenstein 1987) and try to specify the "degree of semi-sovereignty" (Schmidt 1996: 171) or the "patterns of institutional pluralism" (Colomer 1996). The analysis of institutional constraints on the scope of central governments' maneuverability concentrates on potential veto points which may obstruct decision-making. These approaches can be divided into two categories: for once, simple indices which count a country's number of veto points and second, veto point analyses which aim at identifying the general goal of veto points. The latter approach distinguishes between veto points which either obstruct or support governments. Yet, only obstructive veto points can strictly speaking be regarded as veto points. Supportive veto points – which are a contradiction in terms – may have substantially different functions than vetoing governments' policies. Since the distinction between obstructive and supportive veto points is not clear, collective or consensus veto point analysis - as the latter is sometimes labeled - might measure something else than veto points.

The empirical analysis of these indices is based on the number of veto points in a respective political system. All veto points count the same and are designed to be stable over time. I illustrate this by presenting Manfred G. Schmidt's (1996) indicator.[4] The index of institutional constraints on central governments ranges from 0 to 6. High values indicate powerful constraints on central governments while low values point to ample maneuvering room. The additive index is composed of 6 dummy-variables ('1' = constraints, '0'= else) (1) EU membership = 1, (2) degree of centralization of state structures (federalism = 1), (3) difficulty of amending constitutions (very difficult = 1) (4) strong bicameralism = 1, (5) central bank autonomy = 1, and finally (6) frequent referenda = 1 (Schmidt 1996: 172).

---

[4] The indices of Colomer and Huber et al. are rather similar in empirical terms to Schmidt's index although they analytically stress slightly different aspects. Schmidt's index correlates with .79 with Colomer's and Huber et al.'s indices for the 23 OECD countries considered in this paper. The latter two correlate with .87. We included the 23 OECD countries because we could obtain data for only these countries concerning the preferences over time, i.e. available party manifesto data (see below).

The conceptual logic seems to be clear. Institutional veto points limit governments' action space. However, there are at least three conceptual problems: First, it is not at all clear if the index includes all potential veto points. Constitutional courts, presidents, or strong interest groups and even mass media could be additional veto points. Second, not all potential veto points are veto points in all policy areas and in different policy areas there might be additional ones. For instance, central banks are no veto points in the field of environmental or social policy. Instead, environmental NGOs or influential enterprises might be potential veto points in the area of environmental policy while employer associations and trade unions might be additional veto points in labor or social policy. Third, potential veto points may not use their veto power in certain policy fields or situations. They could even support the government policy. For instance, the EU and central banks might support a government which aims at privatizing sectors but at the same time might obstruct government initiatives in other policy areas. These policy-related factors make it difficult to identify the key veto points.

The aggregation of veto point analysis doesn't follow specific theoretical guidelines. All veto points are assigned equal weight even though it is plausible that some veto points have a stronger veto power than others. For instance Schmidt counts "strong" bicameralism but he doesn't provide criteria for when bicameralism is strong enough to be counted as a veto point. This is also a problem of double counting. Federalism and bicameralism may for example measure the same thing (dispersion of power to sub-regional units). Including both aspects into an index gives double weight to sub-national power dispersion. Another problem of Schmidt's index is that it is constructed for cross-sectional analysis (valid for the mid-1990s) so that it does not consider changes in the number of veto points over time.

The latest above mentioned downside can easily be remedied by recoding the index for empirical analysis in order to make it time-variant. I have accounted for the abolishment of the Danish and Swedish second chambers (in 1953 and 1970) and marked the respective years of EU-membership. I also factored in that the Bank of England became independent in 1998 and that some countries had to abide by European

Central Bank rules due to joining the EURO-Zone. Figure 1 gives an overview over the number of veto points in 23 OECD countries from 1950 to 2005. I did not include Greece, Portugal and Spain during periods of dictatorship.

Figure 1 here

Schmidt's index is relatively stable over time. Switzerland, the USA, and Germany have the most institutional constraints. In contrast New Zealand has no institutional constraints. The number of institutional constraints mainly increases because of EU-membership and joining the EURO-Zone (Central European Bank). Denmark and Sweden lost one institutional constraint when they abolished the second chamber but gained one due to joining the EU. The United Kingdom's institutional constraints are EU-membership (1973) and the independent Bank of England (1998).

Since the late 1990s, a more differentiated approach for veto point analysis has been published. Birchfield and Crepaz (1998; see also Crepaz and Moser 2004) as well as Wagschal (2005) distinguish between consensual and competitive veto points. While consensual veto points support rather than obstruct central governments' policies and therefore are no real veto points, competitive veto points result in the blocking of central government's policy reform attempts.

In Crepaz' view, collective veto points – which is his term for supportive veto points - are a measure of institutional diffusion that necessitates the sharing of political power in a collective fashion. It is a composite indicator that consists of three elements: (a) the proportionality of the electoral system, (b) the effective number of legislative parties, and (c) the degree of corporatism. Competitive veto points encompass federalism and bicameralism. Crepaz operationalized collective and competitive veto players by using Lijphart's (1999) measure for two distinct patterns of democracy.[5] Hence Lijphart's executives-parties dimension corresponds to collective veto points while the federal-unitary dimension matches the

---

[5] Based on Crepaz' publications, it appears as if he has significantly altered Lijphart's indices. In fact however, he has adopted Lijphart's measures one-to-one. I thank Markus Crepaz for sending me his data set.

competitive dimension. According to the conceptual logic of Crepaz' index, consensus democracies have more collective veto points that support government policy. However, the causal links are not always clear. Why, for instance, should a proportional election system promote government policy?

Although Crepaz uses two time periods (Lijphart's data from 1945-1996 for the period from 1960-1970 and the data from1971-1996 for the period from 1971-1996) his measure of veto points is not really time-variant. Following Crepaz' coding, I have used his index with a breakpoint in 1971 and respectively extended the data to 1950 and 2005. I have also included the collective veto player index because this indicator is identical with Lijphart's major dimension of consensus democracy. Consequently collective veto points are an indicator for a different logic of politics: the consensual policy style. Crepaz, or Lijphart for that matter, has aggregated veto points by way of factor analysis, meaning that the factor scores weigh the empirical strength of individual veto points. The inductive weighting of veto points might be more appropriate than simply adding them up like Schmidt did. Figure 2 and 3 show the score for collective and competitive veto points.

Figure 2 and 3 here

Since Crepaz' veto point indices are based on Lijphart's highly aggregated concepts, it is difficult to deduce the major elements and causal mechanisms which may have an impact on policies and policy outcomes. A more transparent and elaborated index of veto points which also distinguishes between consensual and competitive veto points has been compiled by Uwe Wagschal (2005). Wagschal contends that coalition governments and constitutional courts are consensual veto players which don't have the same policy obstructing functions as competitive veto points. In his view, competitive veto points are (a) strong federalism, (b) EU-membership, (c) direct democracy, (d) strong bicameralism, (e) strong presidents, (f) proportional representative election systems, and (g) independent central banks. The variables have a dichotomous coding and are added up. Direct democracy, constitutional courts, and presidentialism have a .5 coding.

As with Schmidt's and Crepaz' indices, it is not always easy to see the causal mechanisms which result from Wagschal's veto point index. Coalition parties might not be an obstructive veto point, yet claiming that they support government policy more strongly than single party governments is a daring assumption. The same is true for constitutional courts. Both analytically and empirically the claim that political systems with constitutional courts call for more government support than political systems without constitutional courts is not sustainable. The same is true for "strong" federalism and bicameralism (cf. comments on Schmidt's index). With regard to the veto function of proportional election systems, Crepaz and Wagschal arrive at opposite conclusions. While Crepaz considers proportional elections systems to be consensual, Wagschal rates them as competitive.

Considering aggregation, Wagschal weights some indicators less than others. It isn't always plausible why a .5 weight is appropriate and why all "strong" presidents have the same weight. The President of the United States could for instance be stronger than the President of Finland.

Analogical to Schmidt's index I have also updated Wagschal's index and made it time-variant. In addition to the changes made in Schmidt's index, I have included an additional veto point for New Zealand due to the change from a majoritarian to a proportional electoral system in 1996.

Figure 4 here

Apart from conceptual and theoretical problems, veto point indices further face substantial technical problems. The analysis of veto points has the shortcoming that all variables are count variables. The use of count variables as independent variables is difficult in regression analysis, in particular given the ambiguity about whether all veto points exercise the same constraints on policy. Wagschal seems to pay attention to this aspect because he attributes only half of the impact to some veto points. However, this measurement seems to be very arbitrary. Another detriment of veto point analysis is that it seems to count some veto functions twice. This is particularly obvious with regard to federalism and bicameralism. Countries with strong bicameralism are often organized federally with the second chamber representing the interests of the sub-national units.

Furthermore, most veto point analyses are to a large extent time-invariant which means that they often bring about effects that are difficult to distinguish from country effects in TSCS analysis. This is especially problematic when applying fixed effects in statistical analysis. This aspect is particularly relevant for Crepaz' indices which don't really change over time. Although his data aggregation is more appropriate than Schmidt's and Wagschal's, his concepts show severe theoretical problems. It is not at all clear whether to interpret Crepaz' veto point indices in light of veto player theory or of consensus democracy. After all, Crepaz' veto point indicators are identical with Lijphart's indicators for consensus democracy. This confusion makes causal inferences extremely difficult.

As mentioned above, the analysis of veto points is substantially different from the analysis of veto players. While veto points are structural characteristics of political systems which change only infrequently, veto player analysis combines structural characteristics with the strategic behavior of political actors within institutional settings. Consequently veto player analysis is more ambitious as it doesn't only call for information about the institutional setting but also about the preferences of political actors. As both institutional settings and actor's preferences can change over time, empirical analysis is highly demanding. In the following I focus on two veto player approaches. Witold Henisz' (2000; 2002) analysis of political constraints of policy change and George Tsebelis' (2002) analysis of veto players.

4 Measurement and Aggregation of Veto Players in Macro-Comparative Analysis

Witold Henisz (2000; 2002) introduces two measures of political constraints. He identifies the number of independent branches of government with veto power over policy change in various countries on a yearly basis from 1800 to 2004. The preferences of each of these branches and the *status quo* policy are assumed to be independent and identical and are drawn from a uniform, one-dimensional policy space. Thus Henisz works with assumed rather than empirical preferences. This assumption allows for the derivation of a quantitative measure of institutional hazards

using a simple spatial model of political interaction. This initial measure is then modified to take the extent of alignments across the branches of government into account by using data on the composition of parties in veto player branches. Such an alignment increases the feasibility of policy change. The measure is further modified to capture the extent of preference heterogeneity within each veto player branch which increases (decreases) decision costs of overturning policy for aligned (opposed) executive branches. The main result of the calculations is that (1) each additional veto point (a branch of government that is both constitutionally effective and controlled by a party different from other branches) provides a positive but diminishing effect on the total level of constraints on policy change and (2) homogeneity (heterogeneity) of party preferences within an opposition (aligned) branch of government is positively correlated with constraints on policy change. Henisz supplies two measures: The first measure includes three independent branches of government (executive, lower house and upper house) (polcon3) while the second contains five independent branches of government (additionally sub-federal units and the judiciary) (polcon5).

As Henisz points out his approach has some weaknesses. One is that actors' preferences are estimated. The range between the independent branches of government is deduced from a simple spatial model which is applied to all states. George Tsebelis (2002: 204/5) argues that Henisz' approach of political constraints approximates veto player theory but that its operationalization features important deviations which consequently make it impossible to predict a high correlation between the two indices. Furthermore, Tsebelis criticizes Henisz' approach with regard to the fact that the judiciary doesn't always have veto power and that federalism has been counted twice because it is included in both the concepts of federalism and bicameralism. In addition, legislative constraint is captured by taking into account all parties that are represented in parliament. At least in parliamentary systems the government has control over the legislative game and therefore the opposition parties impose no constraints on legislation.

Figures 5 and 6 show the variation of political constraints over the last decades. Figure 5 uses data for three (polcon3) while figure 6 uses data for

16

five independent branches of government (polcon5). While the former index is available for the period from 1950-2004 (for some countries there are often even longer time series) the latter index is only available for the time from 1960-2004.

Figure 5 and 6 here

The inclusion of sub-federal units and the judiciary increases the level of political constraint (mean for polcon3 = .44; for polcon5 = .75) and the variance between countries but it equalizes the political constraints within countries which may cause problems when using fixed effects in regression models.[6] The aggregation rules of Henisz' indices follow the veto player approach and use the ideological range between the two most opposite veto players. Thus Henisz' indices are metric and suitable for modern regression analysis. With regard to preferences, Henisz is restricted to an estimated one-dimensional analysis. It remains unclear though what this dimension intends to represent.

The analysis of veto player function in macro-comparative studies is exclusively based on George Tsebelis' (2002) theoretical elaborations. Therefore we should pay close attention to the operationalization of his concept for macro-comparative analysis. He points out that the veto player function can be calculated by means of (a) the number of veto players, (b) their maximum ideological distance, and (c) the coherence of individual veto players. In his macro-comparative studies, Tsebelis (2002: chapter 7 and 8; Tsebelis and Chang 2004) uses the ideological distances of the two most opposite veto players, as derived from expert judgments, as a proxy. First I have used George Tsebelis' data and have updated the data set until 2005 with data from Benoit and Laver (2006).[7]

Figure 7 here

Tsebelis' operationalization of veto players is transparent and consistent with his theory (Tsebelis 2002). However, even here shortcomings can be

---

[6] The average index of variance (standard deviation/mean) within a the 21 OECD countries is for polcon3 = .211 and for polcon5 = .084.

[7] The data is available on George Tsebelis' webpage: http://sitemaker.umich.edu/tsebelis/veto_players_data; April 2009.

identified. The most important flaw is that party positions and institutional settings are considered to be invariant over time. Party positions are derived from average counts of expert judgments assembled over a time span of several decades. Furthermore, it is not clear why Tsebelis does not include the USA and Greece in his analysis. As data on party preferences in Switzerland were lacking in the Laver/Hunt expert judgment data set (Tsebelis 2002: 170; for the original data set see Laver and Hunt 1992), Swiss party preferences were replaced with data from Finland. Tsebelis' approach has exclusively been applied to the Right/Left dimension and no serious attempts have been made to transfer it to other dimensions.[8]

To sum up at this point it becomes obvious from table 1 that the approaches have some common and some special features in terms of conceptualization, measurement and aggregation.

Here Table 1

In terms of conceptualization one should strive for a balance between maximalistic and minimalistic definitions (Munk and Verkuilen 2002: 9). In this respect veto point analysis and polcon5 are rather maximalistic which contains the risk of redundancy. Polcon3 and Tsebelis' approach is minimalistic. With regard to the conceptualization of preferences, Tsebelis is the only one to use an empirical measure. Henisz' two indices use a hypothetical measure which is problematic. Veto point indices ignore preferences in extenso and and per se attribute opposition preferences to all veto points outside of government. The greatest advantage of veto player over veto point approaches is their theoretical micro-foundation which allows for the formulation of hypotheses about causal mechanisms. This has been done in book length by Tsebelis (2002).

The measurements for veto points/players have been obtained by different means. Schmidt's and Wagschal's indices count the number of veto points

---

[8] Tsebelis (2002: Chapter 8; together with Chang 2004) uses a two-dimensional model. However, these data are not open to the public and the two dimensions chosen (three left/right indices from expert judgments on the one hand and a "pro-friendly relationship to the USSR versus anti" from Laver and Hunt's expert judgments on the other) may not be independent and analytically distinct. All indicators measure various aspects of the Left/Right dimension.

while Crepaz uses factor analysis for the identification of differences in political systems. After having identified relevant veto players, Henisz and Tsebelis use their respective preferences as measurement for the estimation of veto player effects.

The measurement of veto points/players also influences the aggregation of the veto function into an overall index. Both Schmidt and Wagschal obtain aggregation by summing up individual veto players. While Wagschal uses weighting procedures, Schmidt doesn't. However, strictly speaking, count variables are not suitable for regression analysis (King 1986: 666). Crepaz uses the factor scores for further analysis. Although the factor analysis includes some ordinal variables the factor scores are interval data. However, the biggest drawback of Crepaz' index is that it is time in-variant. All veto player approaches use the ideological range of the two most opposite veto players. This aggregation measure has an interval scaling and is therefore suitable for regression analysis.

The bottom line of my stocktaking is that veto player analysis is superior to veto point analysis. This is true with regard to all three categories: conceptualization, measurement, and aggregation. When comparing the two veto player approaches, the lack of empirical data for veto player preferences stands out as a major weakness in Henisz' realization. Yet his inclusion of more countries and years presents a substantial advantage over Tsebelis' practice. It is particularly disappointing that Tsebelis does not include Greece and the USA. Above all the omission of the USA makes it difficult to use Tsebelis' approach for studies of highly industrialized countries. An additional drawback of Tsebelis' approach is that empirical preferences of veto players are time-invariant. Finally, another weakness of both veto player analyses is that they concentrate on a one-dimensional ideological space only. This is often not suitable for all empirical analysis. Therefore I would like to elaborate on Tsebelis' veto player index by using time-variant preferences and by including Greece and the USA as well as changes in institutional settings.

5 Towards a More Refined Veto Player Analysis

In this section I offer two new veto player indices. In a first step, I up-date and complement Tsebelis veto player index by using time-variant veto player preferences. In a next step, I elaborate the concept by considering in addition changes in the institutional settings. I include also additional second chambers and presidents since they may exercise an "anticipated veto."

In order to up-date and complement Tsebelis' veto player index**,** I modify Tsebelis' veto player index by using time-variant veto player preferences. Furthermore I include Greece and the United States in the analysis. I also replace the Finnish data which was used for Switzerland with data on Swiss parties. Greece was easy to add to the sample of countries since data are available and it remains a puzzle why it was not included in Tsebelis' analyses. There might be substantial objections with regard to the inclusion of the United States since the programmatic standpoints of American parties are difficult to determine. However, there is a substantial amount of literature which claims that parties in the US are well-structured and have a systematic impact on the political process as well as policies (Cox and McCubbins 2005; Theriault 2008). I used the largest ideological range between the President, the Senate, and the House.[9]

In order to obtain a time-variant index of party preferences I used data from the Comparative Manifestos Project (CMP) (Budge et al. 2001; Klingemann et al. 2006). In order to determine the range of veto players from party manifesto data I attributed the estimated party position to each party in government. As party manifesto data are only available for election times, data for the remaining years were imputed. In this analysis I used a Left/Right index which has been deduced from political theory and deviates from the inductive measures offered by the Party Manifesto Group (RILE) (Jahn 2010a). The advantage of this measure for preferences is that it allows for using the same method for other ideological dimensions as well. So far it is possible to use data for the familiar

---

[9] I did however not consider the two supermajority rules characteristic of the United States' political system, the filibuster in the Senate and the President's veto which both may have expanded the United States' range.

Left/Right dimension and for other ideological dimensions such as the environmental Green/Growth dimension (Jahn 2010b).[10]

My veto player index is both sensitive to changes in governments and the majority of second chambers. The second chambers are included in the analysis with their median position.[11] In case the median was situated outside the coalition parties' ideological range, the range was respectively extended. The same has been done for the President of Portugal who is the only president that was included in Tsebelis' analysis. The development of the veto player function with time-variant party positions in 23 OECD countries is shown in figure 8.

Figure 8 here

While this index (Jahn1) is conceptually similar to Tsebelis' index, the major difference is the replacement of time-invariant preferences from expert judgments with time-variant preferences deduced from party manifesto data. In the next step, I consider changes of institutional settings in various countries and relax the criteria for including second chambers as veto players. According to Tsebelis' analysis the data in figure 8 only includes second chambers in Australia, Canada, Germany, and Switzerland. In addition, I have included the United States Senate. In spite of second chambers being crucial institutions in veto player analysis, their analytical status and operationalization remain inconsistent. In this respect it has been stated „… that second chambers always exercise an influence

---

[10] This method of identifying party preferences has further advantages. First, it is possible to obtain a measure for the saliency of respective issue dimensions. Thereby one can construct indifference curves which are essential to veto player theory (Jahn 2010a). Second, this measure of preferences also allows for measuring the coherence of individual parties over time. This is also pivotal for veto player analysis since actors' coherence is another important feature of veto player theory (Jahn and Oberst 2009). As the inclusion of these factors would increase the complexity of this paper, I leave the elaboration of these concepts to later publications.

[11] Tsebelis seems to use the second chamber party which is ideologically furthest away from the most radical party in government. However, this is not really appropriate because the second chambers are collective actors and their position vis-à-vis government is the absolute majority of the members if the upper houses which is the median position.

on final outcomes of legislation. This is a trivial point when upper chambers can veto legislation, as in the United States, Switzerland, and Germany. However, it is our contention that all second chambers exercise influence even if they are considered weak or insignificant." (Tsebelis and Money 1997: 211) Yet, when it comes to empirical analysis, Tsebelis (2002: chapter 7 and 8; Tsebelis and Chang 2004) only includes the German *Bundesrat* and the Australian, Canadian and Swiss second chambers. However, it remains unclear why the Belgian, Japanese, Italian, Dutch, Danish, Swedish, French and Spanish second chambers which are perceived as strong or medium-strong (Lijphart 1999: 211-213) are not included in the analysis. This might be true with regard to formal decision-making structures. Yet, informal anticipatory effects call for the inclusion of other second chambers as well. Although the German second chamber is perceived as strong in the literature, it has been demonstrated that the formal intervention competences of the *Bundesrat* are rather modest and that many decisions are influenced by a so-called „veto-anticipation" (Burkhart and Manow 2006).[12] The same could also be true for the other second chambers mentioned above . Almost all second chambers can delay the political process. If governments want to produce political results in a timely fashion they are dependent on the cooperation of second chambers. In order to get along governments have to be prepared to compromise on policy goals. In this way second chambers can consequently influence policies.

Another aspect which I will consider in this index (Jahn2) is the change of second chambers over time. It is clear that Sweden's and Denmark's second chambers will not be considered after their abolishment. Another aspect is the status change of the Belgian Senate. After the constitutional reform in 1993 the Belgian Senate lost power and I therefore only consider it as a veto player until 1993.

Presidents are institutional veto players along the lines of second chambers. In theory all presidents have an influence on the political process but in reality presidential power is very diverse. Tsebelis only

---

[12] The same logic of anticipated impact has been analyzed in terms of "the politics of negative power" for the President of the United States (Cameron 2000).

includes the President of Portugal as a veto player. He excludes the French President from his analysis and does not even consider the presidents of Austria, Finland, Ireland, and Iceland to be veto players. I agree that the presidents in Austria, Ireland, and Iceland only have very limited power. However, the Finnish President had an important veto player function before the constitutional reform in 2000 (Nousiainen 2001). Therefore I have included the Finnish President as a veto player before the change in the constitution came into effect. In contrast, the French President is difficult to model as the role of the French President changes in accordance with parliamentary majorities: "The President of the Republic is the supreme authority as long as he has a majority in the National Assembly; but he must abandon the reality of power to the prime minister if ever a party other than his own has a majority in the Assembly." (Aron 1982: 8)

The veto player function has been operationalized on the basis of the number of veto players and their ideological distances measured on the Left/Right dimension. Veto players are (a) coalition governments, (b) second chambers, and (c) presidents. I have always included the widest ideological range. Given that a veto player was situated within this range it was absorbed (absorption rule; Tsebelis 2002: 26-30). I accounted for second chambers and presidents granted that they have an impact on the political process (Tsebelis and Money 1997; Lijphart 1999). For Austria, Greece, Ireland, New Zealand, Norway, Iceland, and the United Kingdom I used coalitions' ideological ranges (if existent). This entails that I disregarded second chambers in Austria, Ireland and the United Kingdom.[13] Countries with strong (symmetrical) second chambers are Australia, Germany, USA, Italy, Japan, the Netherlands, Sweden (until 1970), Denmark (until 1953), Belgium (until 1993) and Switzerland. Although Canada, France, and Spain have moderate bicameralism (Lijphart 1999: 212) I included them in the group of countries with second chambers which exert influence on the policy process. Portugal and Finland (until 2000) are countries with strong presidents. For the USA I

---

[13] I also don't consider the Norwegian "Second Chamber" (*lagting*) as it is part of the parliament (*storting*). The same applies to the Icelandic second chamber (*Nethri Deild*) which was abolished in 1991 (Eythorsson and Jahn 2009: 197).

used the range between Senate, House and President as described above. For Belgium I included the second chamber until 1993. After the reform I only analyzed the coalition range. In France the situation is more complicated. In periods without *cohabitation* I treated the French system as presidential. Although the French president doesn't have many formal powers (Huber 1996: 24-30) he has informal power positions in its own (governmental) party during periods of united government. Thus I have used the range between the coalition, the Senate and the President as the veto player range. However, since the position of the President is identical with the President's party position in our analysis,[14] the President's position is situated within the range of the coalition and is therefore absorbed. In times of *cohabitation* I have ignored the position of the President: "Cohabitation demonstrates that in the absence of a coherent majority in support of the president, the president is relatively powerless in influencing even the direction of political change." (Huber 1996: 29) Therefore I have used the range between the coalition parties and the second chamber in case of *cohabitation*. The French Senate is normally considered to be a medium strong second chamber (Lijphart 1999). However, it has been demonstrated that the French Senate has a profound impact on the legislative process (Tsebelis and Money 1997: Chapter 7). In particular in periods of non-cohabitation with the Left in power the Senate was often able to influence policy.

The index also includes a factor which is often neglected in macro-comparative research. Normally, data for variables are collected on an annual basis. However, most legislative processes proceed faster. Analyzing 17 Western European parliaments, Becker and Saalfeld (2004) arrive at the conclusion that the legislative process on average takes around four to five months. Yet it is also common that bills are negotiated for two or even three years. Consequently, most legislative procedures fall in between a time lag of 0 and 1 year. Therefore it is urgently needed to construct data files which have time units that are shorter than one year. The data set presented for the revised veto player index is based on

---

[14] Since I have no data for the preferences of the presidents over time, I use the party preferences of the president's party from Party Manifesto Data.

quarterly changes in institutional settings.[15] This enables more refined lag-structures for empirical analysis. The result of this operationalization is displayed in figure 9.

Figure 9 here

The correlation matrix shows that the various indices correlate quite differently with each other and thus measure different things. There is a clear divide between veto point and veto player indices which do not correlate. However, veto point indices (Schmidt; Wagschal; Crepaz 2) are closely connected. Tsebelis' index is quite isolated and correlates highly with Lijphart's executives-parties dimension (!) (Crepaz1) meaning that the index potentially measures something other than veto player impact. We find the same high correlation between Crepaz' collective veto points (which is Lijphart's consensus democracy index) and polcon3. The correlation also explicitly confirms that Tsebelis' index is very different from Henisz' polcon indices, above all polcon5. Thus one should abstain from applying Henisz' indices when referring to Tsebelis' veto player theory as Henisz simply measures something other than veto player effects. Finally, the correlation matrix demonstrates that time-variant policy positions of veto players (Jahn1) considerably differ from time-invariant measures (Tsebelis).

Table 2 here

My own indices correlate highly. Although the latter index (Jahn 2) is theoretically and empirically more elaborated than the time-variant and complemented improved Tsebelis index (Jahn 1) the distinctly high correlation seems to indicate that the analytical gains do not fully translate into empirical ones. However, it is obvious that my indices have the highest degree of correlation with Tsebelis' index. Further they are considerably set apart from the veto point and polcon indices. We can therefore unerringly assert that the new indices measure the veto player concept more accurately than the hitherto existing.

---

[15] Since it is difficult to include all government changes, I have decided for units of analysis on a quarterly basis for each country from 1950 to 2005.

Conclusion

The paper demonstrated that veto player analysis is distinct from veto point analysis and that the former is superior to the latter with regard to conceptualization, measurement and aggregation. Theoretically, veto player analysis has a micro-foundation which allows for compiling hypotheses about causal mechanisms to be tested in macro-comparative analysis. However, the paper also clarified that similar analytical concepts are measured in very different ways. This has severe consequences for causal analysis and interpretation. If we test our theoretical concepts with alternative empirical indicators our results are bound to be highly ambiguous and disputable. Similar analytical concepts have to be operationalized with indicators that produce similar results. This concern is particularly relevant when operationalizing Tsebelis' veto player approach with the indicator developed by Henizs. Empirically, Tsebelis' and Henisz' indicators have very little in common. Analyses in which Henisz' indicator is applied and in which results are interpreted according to Tsebelis' theory are invalid.

The paper also showed ways to overcome some empirical weaknesses of established veto player indices. Building on the theoretical foundation of George Tsebelis' veto player approach I have developed a new index that includes changes in preferences and institutional settings. Furthermore, this index is available for different ideological dimensions (so far the Left/Right and Green/Growth dimensions) in annual as well as quarterly units. In particular the latter aspect makes more sophisticated legislative studies possible.

However, the elaborations of this paper only constitute the first step on the way to improving veto player analysis. In particular, two aspects deserve detailed examination in the years to come: First, the cohesion of political actors and secondly, the inclusion of the European Union as veto player (O'Reilly 2005; Jones and Lee 2008). The former aspect is mainly an empirical question since coherence plays an important analytical role in veto player theory. However, there are so far only very few reliable indicators for party or government coherence which cover a substantive number of countries (for a review of literature for his own index see

Powell 2000: 58-67; also see Depauw and Martin 2009). Furthermore these measures are time-invariant.[16] Up to now only few approaches have attempted to draw inferences about time-variant government parties' coherence (Jahn and Oberst 2009).

The second challenge concerns the inclusion of international veto players. It is controversially discussed which veto players should be included in the analysis. The spectrum includes minimalistic (Tsebelis and Chang 2004: 460/1) as well as maximalistic approaches (Wagschal 2005). Parsimonious approaches are favored as they have a sharper analytical focus than maximalistic ones which oftentimes run the risk of measuring something else and thus make tracing causal mechanisms difficult. The research on the impact of international factors on domestic policies has gained momentum in recent years (Jahn 2006). In future research especially the European Union has to be taken into account since it increasingly shapes its member states' domestic policies. In this context it doesn't suffice to model the EU as a dummy variable assuming the same effect for all countries. Instead a measure which grasps the EU's position and relates the results back to individual countries is required. In turn this means that the EU's positions need to be identified. In consequence, further research is required to refine macro-comparative analysis of veto players.

Moreover we need a more sophisticated index of second chamber strength. It is inadequate to either include only the most relevant or all relevant second chambers. Lijphart's ordinal scale is a good start (see also Tsebelis and Money 1997; Bergman et al. 2003: 117-120). Yet what we need is an interval-scaled index of second chamber strength.

---

[16] Jones and Lee (2008) draw conclusions about party coherence in party systems from the respective incentives of personal vote (the stronger the element of personal votes the more incoherent the parties in the party system). However, this indicator is also time-invariant and treats all parties within a party system similarly. Both assumptions are not realistic. The same applies to Depauw and Martin's (2009) index which is based on roll-call analysis. The only systematic comparative study, even though still time-invariant, which uses parties as a unit of analysis has recently been presented by Paul Warwick (2006) in the context of his analysis of policy horizons. However, his study includes only those West-European parties in countries with a tradition of coalition governments.

Turning away from veto player analysis' dichotomy of policy stability versus change presents an even bigger challenge. It would be a major improvement if we were able to say more about the direction of change. This could be achieved by combining veto player with agenda setting analysis. However, this research is still in the fledgling stages and presupposes a basic theoretical elaboration of both the veto player and agenda setting approaches.

To sum up, much remains to be done in veto player analysis. Yet the veto player approach has the potential to combine sophisticated empirical analysis with solid social theory and may thus promote a new phase of theoretically informed empirical analysis in macro-comparative research. I hope that the here developed veto player indices are helpful to conduct more refined empirical analysis in this spirit.

Literature:

Adcock, R. & Collier, D. 2001. Measurement Validity: A Shared Standard for Qualitative and Quantitative Research. *American Political Science Review* 95(3), 529-546.

Aron, R. 1982. Alternation in Government in the Industrialized Countries. *Government and Opposition* 17(1), 3-21.

Benoit, K. & Laver, M. 2006. *Party Policy in Modern Democracies.* London: Routledge.

Becker, R. & Saalfeld, T. 2004. The Life and Times of Bills. In H. Döring & M. Hallerberg (Eds.), *Patterns of Parliamentary Behavior. Passages of Legislation Across Western Europe* (pp. 57-90). Aldershot: Ashgate.

Bergman, T. & Müller, W.C. & Strøm, K. & Blomgren, M. 2003. Democratic Delegation and Accountability: Cross-national Patterns. In K. Strøm & W.C. Müller & T. Bergman (Eds.) *Delegation and Accountability in Parliamentary Democracies*. Oxford: Oxford University Press.

Birchfield, V. L. & Crepaz, M.M. 1998. The impact of constitutional structures and collective and competitive veto points on income inequality in industrialized democracies. *European Journal of Political Research*, *34*, 175-200.

Bräuninger, T. & Debus, M. 2009. Legislative Agenda-Setting in Parliametary Democracies. *European Journal of Political Research* 48(6), 804-839.

Budge, I. & Klingemann, H.-D. & Volkens, A. & Bara, J. & Tannenbaum, E. 2001. *Mapping Policy Preferences: Estimates for Parties, Electors, and Governments, 1945 – 1998.* Oxford: University Press.

Burkhardt, S. & Manow, P. 2006. Veto-Antizipation. Gesetzgebung im deutschen Bikameralismus. *MPIfG Discussion Paper 06/3.*

Cameron, C. 2000. *Veto Bargaining: Presidents and the Politics of Negative Power.* Cambridge: Cambridge University Press.

Colomer, J. M.1996. Introduction. In Josep M. Colomer (Ed.) *Political Institutions in Europe* (pp. 1-17). London: Routledge.

Cox, G. W. & McCubbins, M. D. 2005. *Setting the Agenda: Responsible Party Government in the US House of Representatives.* Cambridge: Cambridge University Press.

Crepaz, M. M.L. & Moser, A. 2004. The Impact of Collective and Competitive Veto Points on Public Expenditures in the Global Age. *Comparative Political Studies* 37(3), 259-285.

Depauw, S. & Martin, S. 2009. Legislative Party Discipline and Cohesion in Comparative Perspective. In D. Giannetti and K. Benoit (Eds.), *Intra-Party Politics and Coelition Governments* (pp. 103- 120). London: Routledge.

Döring, H. (Ed.). 1995. *Parlaments and Majority Rule in Western Europe.* Frankfurt/New York: Campus/St. Martin's Press.

Eythorsson, G. & Jahn, D. 2009. Das politische System Islands. In W. Ismayr (Ed.), *Die politischen Systeme Westeuropas* (pp. 195-218). Wiesbaden: VS Verlag.

Ganghof, S. 2003. Promises and Pitfalls of Veto Player Analysis. *Swiss Political Science Review* 9(2), 1-25.

Hedström, P. & Swedberg, R. (Eds.). 1998. *Social Mechanisms: An Analytical Approach in Social Theory.* Cambridge: Cambridge University Press.

Henisz, W. J. 2000. The Institutional Environment for Economic Growth. *Economics and Politics* 12(1), 1-31.

Henisz, W. J. 2002. The Institutional Environment for Infrastructure Investment. *Industrial and Corporate Change* 11(2), 355-389.

Huber, E. & Ragin, C. C. & Stephens, J. D. 1993. Social Democracy, Christian Democracy, Constitutional Structure and the Welfare State. *American Journal of Sociology* 99(3), 711-749.

Huber, J. D. 1996. *Rationalizing Parliament: Legislative Institutions and Party Politics in France.* Cambridge: Cambridge University Press.

Jahn, D. 2006. Globalization as "Galton's Problem": The Missing Link in the Analysis of Diffusion Patterns in Welfare State Development. *International Organization* 60(2), pp. 401-431.

Jahn, D. 2010a. Left and Right in Comparative Politics: A Deductive Approach, unpublished manuscript, University of Greifswald.

Jahn, D. 2010b. Mapping Political Dimensions from Party Manifesto Data, unpublished manuscript, University of Greifswald.

Jahn, D. & Oberst, C. 2009. Cohesion of Nordic Parties in Comparative Perspective. Paper prepared for presentation at the 5th ECPR General Conference, Potsdam 10 - 12 September, 2009 in the panel on "Conflict and Cohesion in North European Political Parties" organized by Nicholas Aylott.

Jones, K. A. & Lee, H. 2008. Veto Players Revisited: Internal and External Influences on Policy Stability. Presented at the 2008 Annual Meeting of the Midwest Political Science Association, Chicago, IL.

Kaiser, A. 1997. Types of Democracy: From Classical to New Institutionalism. *Journal of Theoretical Politics* 9(4), 419-444.

Katzenstein, P.1987. Policy and Politics in West Germany: The Growth of a Semi-Sovereign State, Philadelphia: Temple Univ. Press.

King, G. 1986. How Not to Lie with Statistics: Avoiding Common Mistakes in Quantitative Political Science. *American Journal of Political Science* 30(3), 666-687.

Kittel, B. 2006. Crazy Methodology? On the Limits of Macroquantitative Social Science Research. *International Sociology* 21(5), 647-677.

Klingemann, H.-D. & Volkens, A. & Bara, J. L.& Budge, I. & McDonald, M.D. 2006. *Mapping Policy Preferences II: Estimates for Parties, Electors, and Governments, 1990-2003.* Oxford: Oxford University Press.

Krehbiel, K. 1998. *Pivotal Politics: A Theory of U.S. Lawmaking.* Chicago: University of Chicago Press.

Laver, M. & Hunt, W. B. 1992. Policy and Party Competition. New York, NY: Routledge.

Lijphart, A. 1999. *Patterns of Democracy. Government Forms and Performance in Thirty-Six Countries.* New Haven, CT: Yale University Press.

Munck, G. L. & Verkuilen, J. 2002. Conceptualizing and Measuring Democracy. Evaluating Alternative Indices. *Comparative Political Studies* 35(1), 5–34.

Nousiainen, J. 2001. From Semi-Presidentialism to Parliamentary Government: Political and Constitutional Developments in Finland. *Scandinavian Political Studies* 24, 95-109.

O'Reilly, R. F. 2005. Veto Points, Veto players, and International Trade Policy. *Comparative Political Studies* 38, 652-675.

Powell, G. B. 2000. *Elections as Instruments of Democracy: Majoritarian and Proportional Visions.* New Haven, CT: Yale University Press.

Sartori, G. 1984. Guidelines for Concept Analysis. In G. Sartori (Ed.), *Social Science Concepts: A Systematic Analysis* (pp. 15-85). Beverly Hills, CA: Sage.

Schmidt, M. G. 1996. When Parties Matter: A Review of the Possibilities and Limits of Partisan Influence on Public Policy. *European Journal of Political Research* 30,155-183.

Smelser, N. J. 1976. *Comparative Methods in the Social Sciences: Prentice-Hall Methods of Social Science Series.* Englewood Cliffs, NJ: Prentice-Hall.

Theriault, S. M. 2008. *Party Polarization in Congress*. Cambridge: Cambridge University Press.

Tsebelis, G. 2002. *Veto Players. How Political Institutions Work.* Princeton, NJ: Princeton University Press.

Tsebelis, G. & Chang, E. C. C. 2004. Veto Player and the Structure of Budgets in Advanced Industrialized Countries. *European Journal of Political Research* 43, 449-476.

Tsebelis, G. & Money, J. 1997. *Bicameralism.* Cambridge: Cambridge University Press.

Wagschal, U. 2005. *Steuerpolitik und Steuerreformen im internationalen Vergleich*. Münster: LIT Verlag.

Warwick, P. V. 2006. *Policy Horizon and Parliamentary Government*. New York, NY: Palgrave MacMillan.

Table 1: Conceptualization, Measurement and Aggregation of Veto Points/Player Analysis

	Schmidt	Crepaz	Wagschal	Henizs (polcon3)	Henizs (polcon5)	Tsebelis
Conceptualization						
• Number of Veto Points/Players	Maximum	Maximum	Maximum	Minimum	Maximum	Minimum
• Preferences	None	None	None	Hypothetical	Hypothetical	Empirical
• Micro-foundation	No	No	No	Yes	Yes	Yes
• Redundancy	Yes	Yes	Yes	No	Yes	No
Measurement						
• Veto Points/Veto Players	Counting	Factor Analysis	Counting	Preferences	Preferences	Preferences
• Level of Measurement	ordinal	metric	ordinal	metric	metric	metric
• Preferences	None	None	None	Hypothetical Preferences	Hypothetical Preferences	Empirical Preferences
• Time Variance						
- Preference of Actors	No	No	No	No	No	No
- Through Changing Majorities	No	Very little	No	Yes	Yes	Yes
- Institutional Setting	No	Very little	No	No	No	No
Aggregation	Unweighted Summing Up	Factor Scores	Weighted Summing Up	Ideological Range	Ideological Range	Ideological Range
Major Weakness	• No Preferences • Redundancy • time invariant • little over all Variance for TSCS-Analysis	• No Preferences • Redundancy • time invariant • little over all Variance for TSCS-Analysis	• No Preferences • Redundancy • time invariant • little over all Variance for TSCS-Analysis	• Hypothetical Preferences	• Hypothetical Preferences • Redundancy • little over all Variance for TSCS-Analysis	• time invariant preferences and institutional settings • Exclusion of USA and Greece

Table 2: Correlation Matrix of Various Veto Points and Veto Players Indices

	Schmidt	Crepaz1	Crepaz2	Wagschal	Polcon3	Polcon5	Tsebelis	Jahn1	Jahn2
Schmidt	1.0000 1210								
Crepaz1	0.1182 1210	1.0000 1227							
Crepaz2	**0.6845** **1210**	-0.0242 1227	1.0000 1227						
Wagschal	**0.8834** **1210**	0.2568 1210	**0.5461** **1210**	1.0000 1210					
Polcon3	0.2044 1187	**0.6366** **1203**	0.1158 1203	0.2517 1187	1.0000 1261				
Polcon5	0.4805 986	0.2502 993	0.3305 993	0.3232 986	**0.7013** **1015**	1.0000 1015			
Tsebelis	0.2026 1114	**0.5093** **1114**	0.0588 1114	0.3736 1114	0.3979 1093	0.1869 910	1.0000 1114		
Jahn1	0.1639 1199	0.4243 1199	0.1625 1199	0.3193 1199	0.2970 1176	0.2197 985	**0.5809** **1109**	1.0000 1200	
Jahn2	0.1464 1210	0.3936 1210	0.1567 1210	0.3111 1210	0.2599 1187	0.2041 986	**0.5733** **1114**	**0.9764** **1200**	1.0000 1211

Explanation: all correlations > .5 are bold. Upper line is Pearson's r; lower line is number of observations.

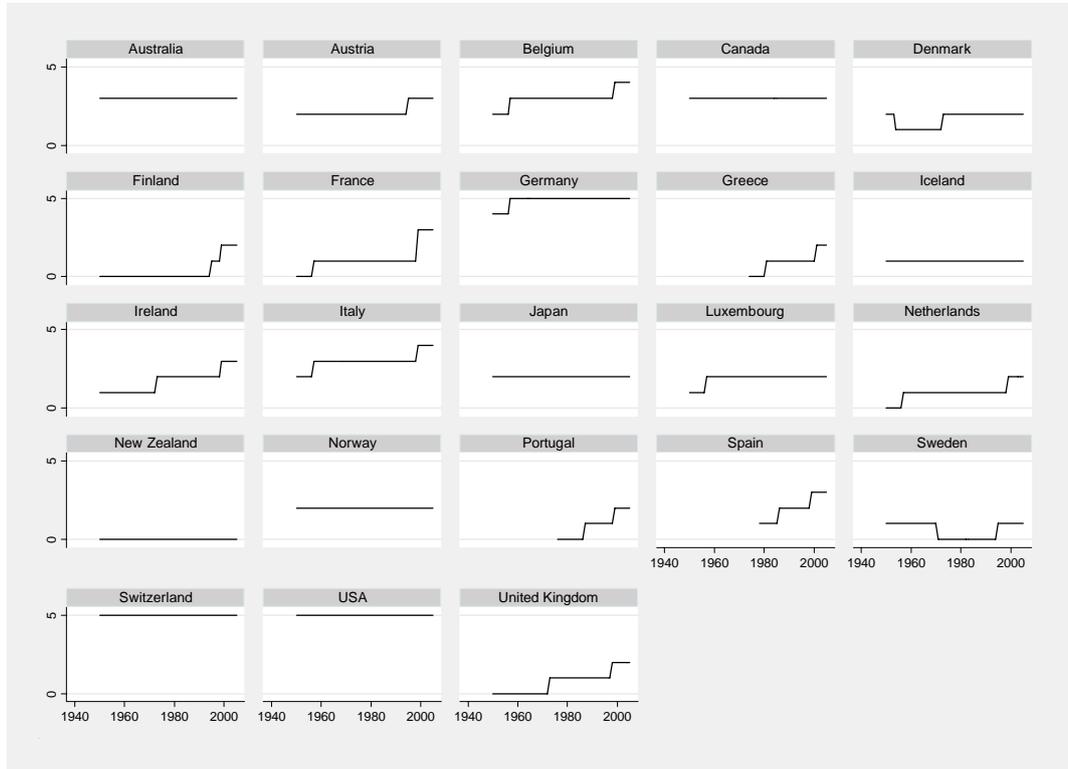Figure 1: Institutional Constraints on Central Governments (Schmidt)
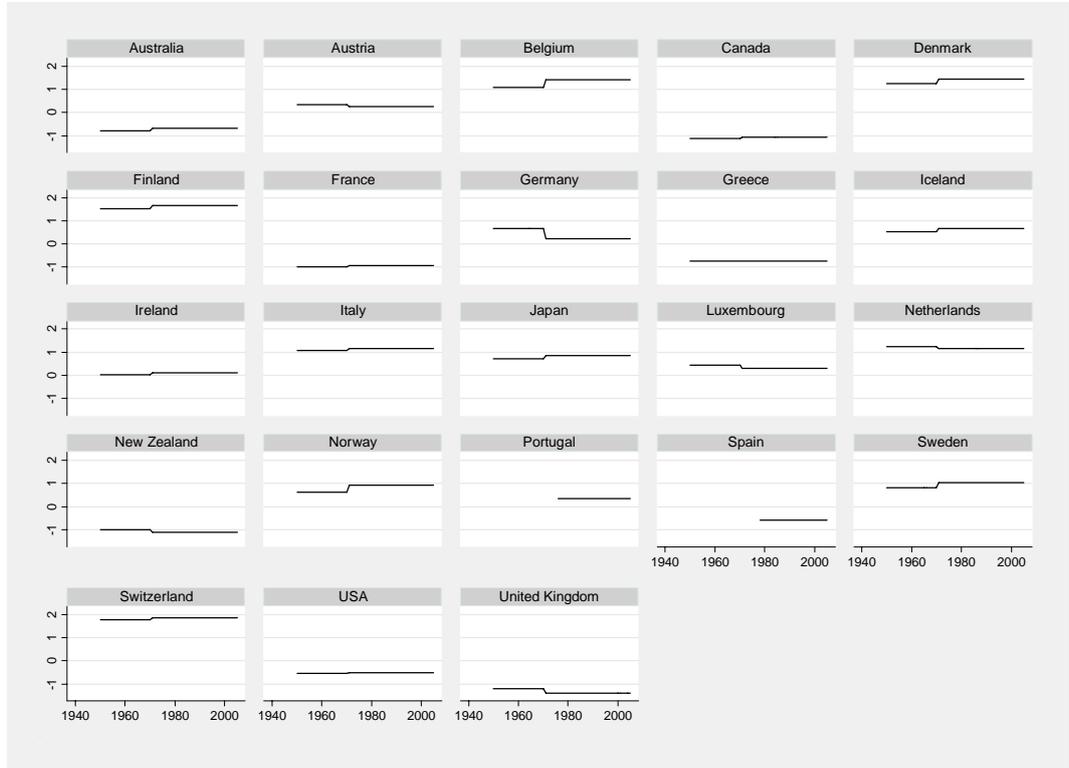
Figure 2: Collective Veto Points (Crepaz 1)

Figure 3: Competitive Veto Points (Crepaz 2)

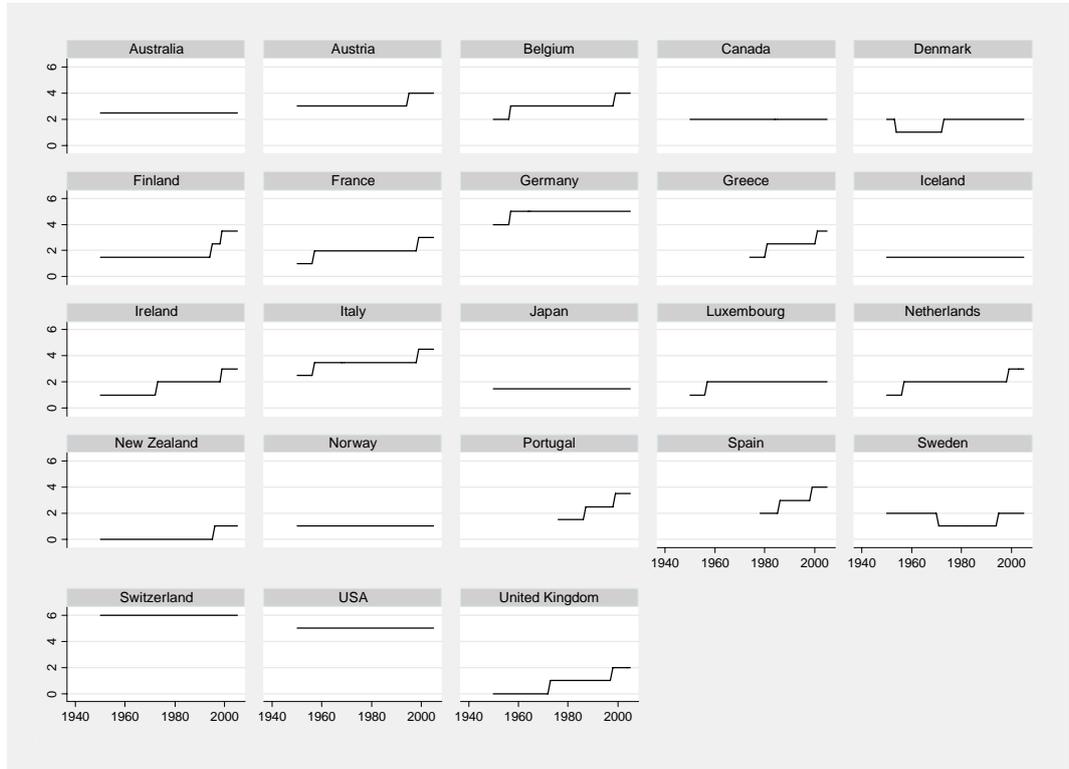Figure 4: Competitive Veto Points (Wagschal)

Figure 5: Political Constraints on Policy Change (polcon3)
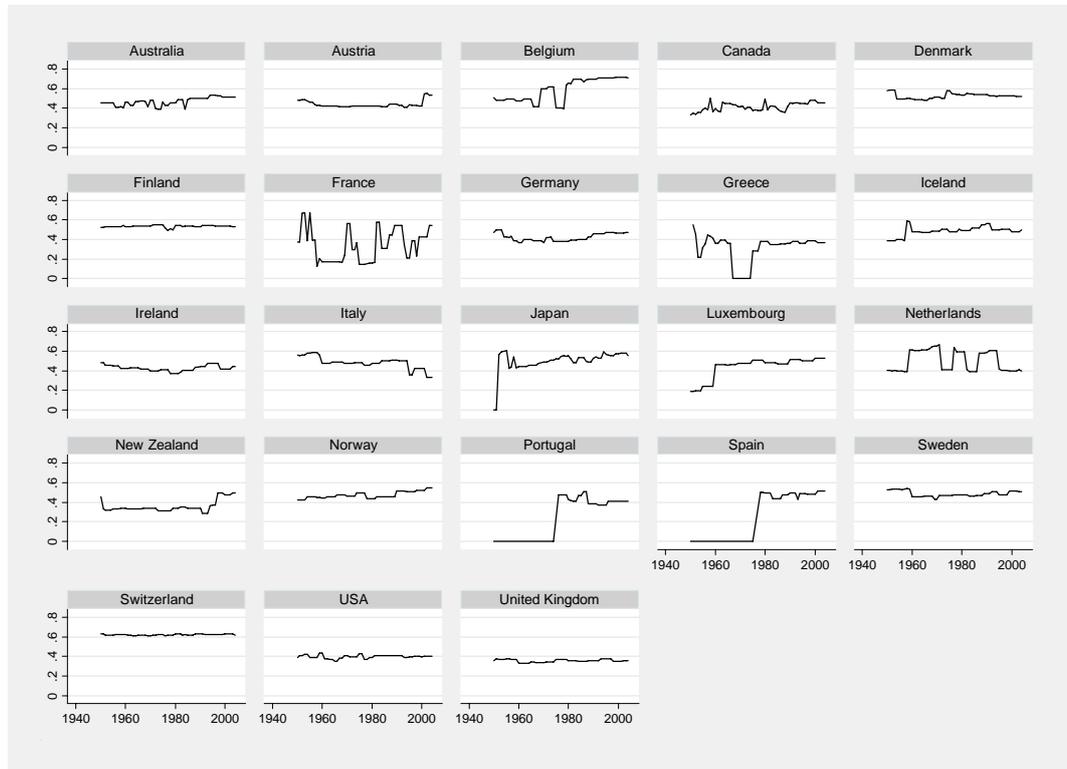
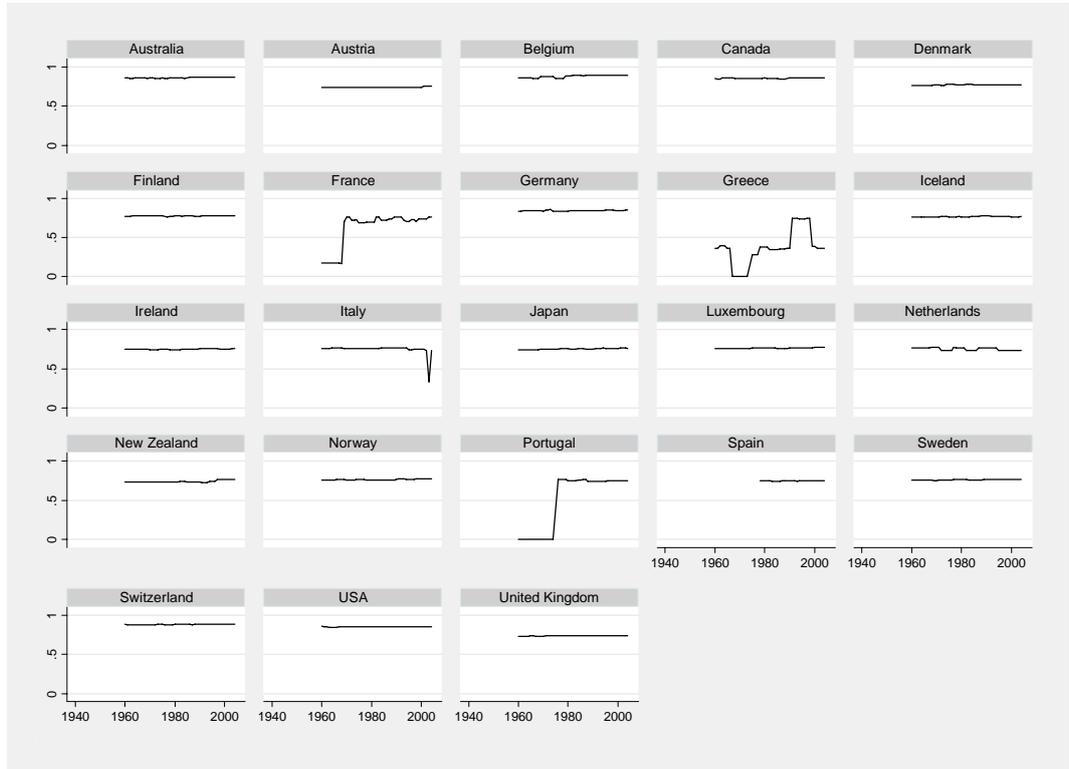Figure 6: Political Constraints on Policy Change (polcon5)
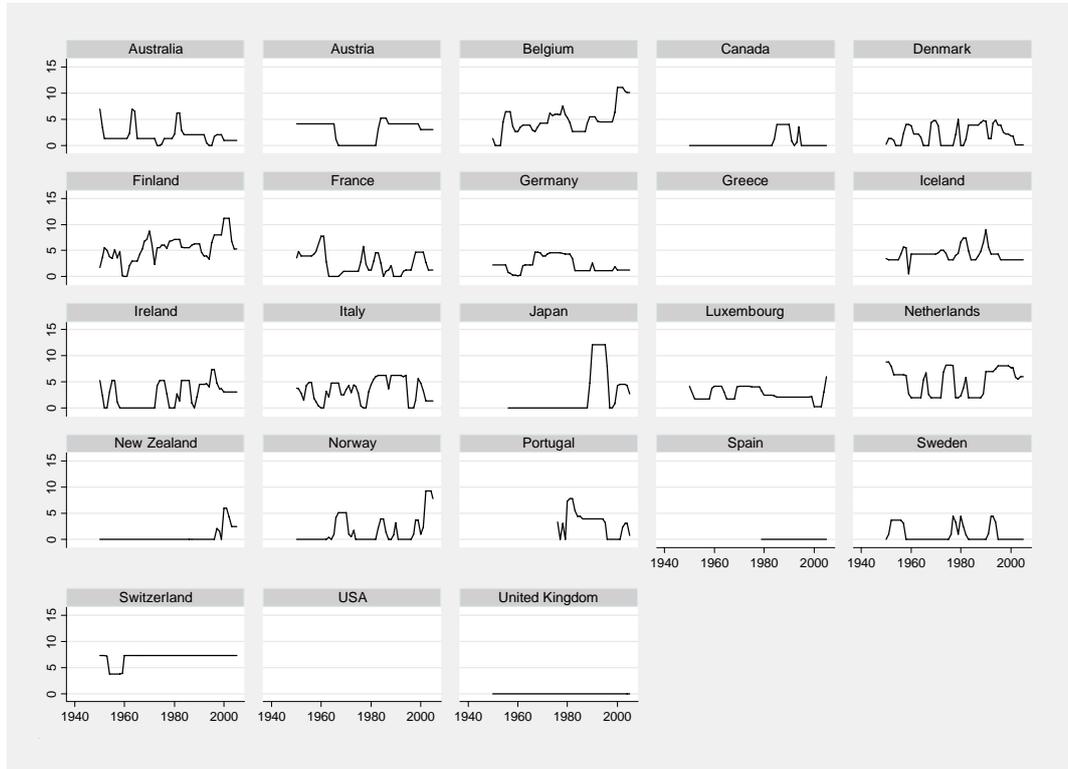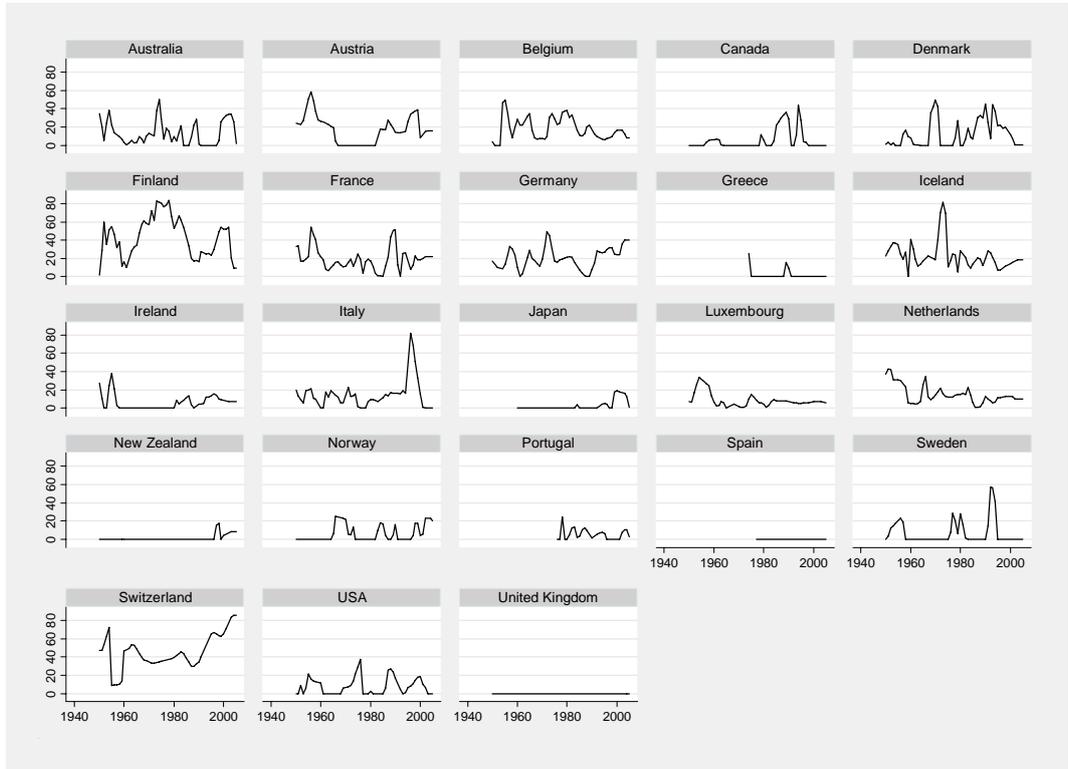
Figure 7: Veto Player Analysis (Tsebelis)

Figure 8: Veto Player Analysis (Jahn 1)

Figure 9: Veto Player Analysis (Jahn 2)