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**MEASURING POLITICAL PREFERENCES:
RATINGS FOR MEMBERS OF THE SWISS
NATIONAL COUNCIL**

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Abstract

Party affiliation as the standard measure of political preferences of Swiss legislators is associated with several problems. To overcome these problems ratings are developed for members of the National Council. The construction of the ratings and their limitations are discussed in detail. The importance of this kind of information for the participants of the political market place as well as some applications in empirical research are outlined.

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List of Abbreviations

AB	Amtliches Bulletin
ADA	Americans for Democratic Action
COPE	Committee on Political Education
CVP	Christlich-demokratische Partei (christian democratic party)
DP	Demokratische Partei (democratic party)
EVP	Evangelische Volkspartei (evangelical party)
FDP	Freisinnig-demokratische Partei (radical or free democratic party)
FP	Freiheits-Partei (freedom party)
GPS	Grüne Partei (green party)
IG	ohne Fraktionszugehörigkeit (no membership in fractions)
LCV	League of Conservation Voters
LdU	Landesring der Unabhängigen (independents party)
LPS	Liberale Partei (liberal party)
NZZ	Neue Zürcher Zeitung
PdA	Partei der Arbeit (labour party)
POCH	Progressive Organisationen der Schweiz
SD	Schweizer Demokraten (Swiss democrats)
SP	Sozialdemokratische Partei (social democratic party)
SVP	Schweizerische Volkspartei (Swiss people's party)

Measuring Political Preferences: Ratings for Members of the Swiss National Council

1. Introduction

The measurement of political preferences is important not only for the participants in the political market place, but also for social scientists interested in empirical tests of hypotheses on the behavior of political actors.¹

A standard measure of political preferences is *party affiliation*. But in the case of Switzerland, party affiliation is not always a reliable indicator of political preferences because party loyalty tends to be rather low. Party affiliation of members in parliament and in the executive also exhibits only minimal fluctuations over time so that the comparative statics condition for empirical tests is violated. And because of the existence of a multiparty system it is difficult to locate the political parties in the policy space.

One alternative² to get more reliable measures of (changes in) legislators' preferences that allow for an assessment of intra-party differences is to use some *ratings* based on roll-call votes of the individual legislators. In the U.S. - where politicians are also observed to show rather low party loyalty - various lobby groups publish such ratings on a regular basis. The intention is "to provide an idea of a legislator's general ideology and the degree to which the legislator represents different groups' interests." (Barone/Ujifusa 1989 xiv) Probably the best known rating is from Americans for Democratic Action (ADA), a liberal lobby group founded in 1947. ADA ratings have been extensively used in scientific research (see e.g. Grier 1991 211), mainly because this lobby group uses a broad spectrum of issues for its vote analysis, and because the ratings are available on an annual basis since 1948.

So far such ratings do not exist for Swiss legislators. The precondition for their construction is the availability of a sufficient number of *roll-call votes*. In the National Council (Council of States) a roll-call vote ("Abstimmung unter Namensaufruf") will only take place if 30 (10) members request

¹ Already the terminology reveals that this paper adopts an economic perspective.

² Another alternative consists in constructing some measures based on the legislators' interest group affiliations. The official lists of interest group affiliation ("Register der Interessenbindungen") that exist since 1985 may serve as the basic data source. See Lüthi/Meyer/Hirter (1991 section 1) for attempts in this direction.

so.³ In the Council of States, this virtually never happens, making a construction of ratings for members of this body not viable. In the National Council roll-call votes do not occur very often either, and also quite irregularly for the period before 1984. Their number increases after 1984, and it explodes after 1993 with the introduction of an electronic voting system. A rating (similar to the one provided by ADA) can be constructed for members of the National Council for the period after 1975. This paper carefully describes the construction of such ratings, discusses the importance of this kind of information for the participants of the political market place, and outlines some applications in scientific research.

The paper proceeds as follows: Section 2 summarizes the problems associated with party affiliation as a measure of political preferences in order to underline the need for alternative measures. Section 3 discusses the basic ingredient required for the construction of ratings, the roll-call votes in the National Council. Section 4 describes the technique of translating roll-call votes into ratings. Section 5 presents an example of how the resulting ratings can be tabled. Section 6 carefully describes their limitations. Section 7 shows how these ratings can be used in (both) the political market place and in scientific research. Section 8 offers some concluding remarks.

2. The Problems Associated with Party Affiliation as a Measure of Political Preferences

If party affiliation is used as a measure of political preferences, it is (implicitly) assumed that all members of a political party share the same political preferences and exhibit the same voting behavior. In the case of Switzerland three major problems are involved with this measure.

First, party affiliation is not always a reliable indicator of political preferences of Swiss legislators, because *party loyalty* is rather low. (Aubert 1987 229; Lehner 1985 119; Steiner 1982 321) Evidence on intra-party differences is provided by Vasella (1956), Lüthi/Meyer/Hirter (1991), and Hohl (1996).

Vasella (1956) analyzes the discipline of the fractions in the National Council using all 108 roll-call votes cast in the period from 1920 to 1953.⁴ He finds that the amount of loyalty differs

³ The Swiss legislature is a bicameral system and is a copy of the U.S. Congress. The National Council is the analogue to the House of Representatives and counts 200 members. The Council of States corresponds with the Senate and comprises 46 members.

⁴ Fractions include all members of the same party from both chambers of the legislature. To form a fraction, at least five legislators have to join in one of the two

considerably across the fractions. Members of the social democratic fraction (SP) clearly show the highest amount of loyalty. The fraction of the Swiss people's party (SVP) - formerly the "Bauern-, Gewerbe- und Bürgerfraktion" - is also quite homogeneous, but less so than the social democrats. Still less loyalty can be observed for the christian democrats (CVP). The most heterogeneous fraction is formed by the radical democrats (FDP). In several cases their votes are even splitted almost equally. No conclusion is drawn for the fraction of the independents party (LdU), because it is small, and because observations are only available for 63 votes. Overall, loyalty seems to decrease over time.

Lüthi/Meyer/Hirter (1991) and Hohl (1996) calculate the Rice-Index for the parties represented in the National Council.⁵ The Rice-Index is the difference between the percentage of the majority and the percentage of the minority of a party in a vote. Values are in the closed interval between 0 and 100. A value of 0 indicates that a party is equally divided in a vote. A value of 100 results if all party members vote the same position. Both studies find that members of the Swiss people's party and the social democratic party show more party loyalty than members of the radical party and especially members of the christian democratic party.

Hohl (1996 section 3.2.1) also compares the votes of individual legislators with the recommendations of party conventions ("Abstimmungsparolen") for ten initiatives. He concludes that all political parties are quite homogeneous. Since the results are derived from a very small number of roll-call votes, where each vote is special in the sense that also a referendum is required, they have to be interpreted with care.

Second, party affiliation shows rather little *variation* in the Swiss legislature. If, for instance, all parties of the National Council are grouped into a block of left and right wing parties (following the classification in Fuchs 1992 18), the ratio of the left wing parties to the whole legislative body shows only little variation: it is 0.335 in 1971, 0.365 in 1975, 0.34 in 1979, 0.325 in 1983, 0.33 in 1987 and 1991, and 0.36 in 1995. Party composition of the legislative committees is also very stable. (See e.g. Jeitziner 1996 40 on the economics committee, the finance committee, and the finance delegation.) The lack of variation in party affiliation is a major obstacle for empirical tests. If party affiliation is used as an independent variable, the

chambers. Membership in fractions is important since only members of fractions can get appointments to committees.

⁵ Lüthi/Meyer/Hirter (1991) cover the time period from 1971 to 1989. Hohl's (1996) analysis extends from 1971 to 1995.

comparative statics condition is violated so that it becomes difficult to measure any influence from this variable.

Third, the existence of *several political parties* raises the problem of locating them in the policy space. Steiner (1982 323) for instance cites the "endless debates without clear results over where to locate, for example, the National Action or the Independents." There is widespread uncertainty and disagreement about which parties are how close together and which others are how far apart in the policy space.

Given these difficulties, alternative measures of political preferences are needed. These measures should be more reliable, allow for an assessment of intra-party differences, exhibit more variation, and avoid the problems involved with the existence of several parties. Ratings may satisfy these requirements.

3. Roll-Call Votes in the National Council: The Basic Ingredient for the Construction of Ratings

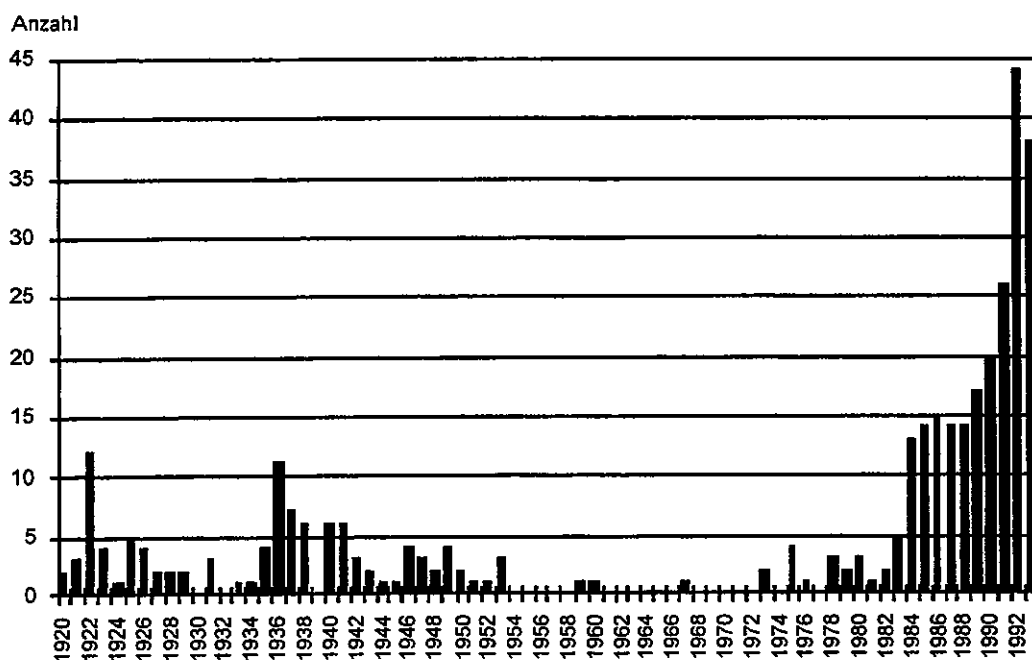
Ratings are constructed on the basis of the legislators' individual voting behavior. The precondition is to know how legislators vote on specific issues. Hence, the construction of ratings depends on the availability of roll-call votes.⁶ This section discusses roll-call votes for the National Council of Swiss parliament. (See also Vasella 1956 54-60, and Lüthi/Meyer/Hirter 1991 section 2.)

Before the installation of an electronic voting system in 1993 roll-call votes took place only if at least 30 members of the Council requested so in written form. (Article 82 of the "Geschäftsreglement des Nationalrates") Figure 1 depicts the *number* of roll-call votes that took place between 1920 and 1993.⁷

⁶ A roll-call vote is a vote by a legislature in which the roll of all members of the body is called, or in which the vote of each member is recorded electronically.

⁷ All roll-call votes assessed from 1920 to 1993 are numbered, yielding a total of 344 votes. The first roll-call vote in this list is from February 10, 1920. Votes that took place before this date are not considered. Votes after 1993 are no longer numbered because they are too numerous and not directly comparable.

Figure 1: Roll-Call Votes from 1920 to 1993



Legislative periods are from beginning of December to beginning of December.

As figure 1 shows, the number of roll-call votes *fluctuates* over time. Before the eighties only few roll-call votes were requested. Major exceptions are 1922 and 1936 with 12 and 11 votes recorded. Only 3 roll calls took place between 1954 and 1973. Not a single roll-call vote was cast for instance during the legislative period from 1967 to 1971. Their number starts to increase in the early seventies. A sharp rise can be observed after 1983 with a newly elected legislature in action. Lüthi/Meyer/Hirter (1991 58) offer two explanations for this development. In Fall 1983 environmental lobby groups demonstrated that (and how) a legislator's voting behavior can be used in electoral campaigns. And in 1984, after their official candidate failed to be elected to the Federal Council, the social democrats announced that they would request roll-call votes more frequently.⁸

Roll-call votes are often requested for particularly important and controversial issues. Their basic purpose is to increase the *transparency* of the legislative process in parliament and in the public. (See e.g. Seeger 1915 93, and Lüthi/Meyer/Hirter 1991

⁸ Rüttimann (christian democrat) soon reacted to this increase in the number of roll-call votes with a "Motion". He proposed that roll calls should only take place if a *majority* of the Council requested so. His "Motion" was not accepted by the Council. See AB 1984 1914.

section 2.) In parliament roll-call votes may serve to discipline the members of the own fraction, identify the position of the opponent, or put a general pressure on the whole body. (Vasella 1956 59) The public (voters, media) is informed about the legislators' attitude in specific questions. This may rise the voters' interest in political processes in general. In principal-agent terminology, the principal (voter) will find it easier to control its agent (the legislator). This is likely to increase pressure on legislators to vote the interests of their clientele. More generally, the legislators' interest in the political process in the sense of a feeling of responsibility is also assumed to rise. (Seeger 1915 94) This may result for instance in a decline of absences from the debates.

Politicians and researchers do not unanimously welcome this increase in transparency. It is argued that this kind of information offers the opportunity for *abuse*: legislators can be pressured to vote in a specific way. (Vasella 1956 59) This implies that they would vote differently without that pressure. The question is whether politicians should be able to decide freely from political pressures exercised by their principals, their party leadership, and their competitors. Article 91 of the Federal Constitution clearly stipulates that members of parliament shall vote without instructions. Usually, it is not contested that voters should be able to know how their representatives voted.⁹ However, the possibility for the party leadership and members of the same fraction to monitor the individual voting behavior meets some criticism. (See e.g. Vasella 1956.) Resistance against an increase in transparency associated with roll-call votes is regularly justified with the argument that competitors may abuse this information as a political weapon. One possibility is that political opponents pick out single votes during the electoral campaigns. Another possibility is that political parties attempt to request roll-call votes especially for issues where their own members form a more or less homogeneous block, while their opponents do not reach agreement. This offers the homogeneous party an opportunity to demonstrate to voters how diverse (and inconsistent) interests are with the

⁹ Opposition to an increased transparency might be related to the influence of interest groups. It is frequently argued that it is rational for voters to remain ignorant. The resulting political vacuum is filled with interest groups. If interest-group activity is considered to be harmful for an economy, an increased transparency and the implied control of agents by their principals (interest groups) is not welcomed. However, increased transparency might improve the information for voters and tend to reduce the discretion available to interest groups. Moreover, increased transparency is likely to stiffen competition among interest groups and might even have beneficial results. See e.g. Becker 1983.

political opponents. (See e.g. Lüthi/Meyer/Hirter 1991 61-62 on the role of the social democratic party.)

Since roll-call votes are requested rather for particularly important and controversial issues, already their frequency can yield valuable information. If there is a consensus, there won't be any roll-call votes. But in times of dissens, their number will increase. Therefore, we expect more roll-call votes during difficult times. (Lüthi/Meyer/Hirter 1991 58) Figure 1 supports this general argument. During the 50es and 60es, a period with economic growth and prosperity, only very few roll-call votes took place. When the economic (and political) situation gets more difficult, conflicts are more pronounced, and roll-call votes can be observed more frequently. Roll-call votes can be considered as an *indicator* of the severity of conflict (in the legislature).

In a third attempt and 14 years after the idea was first introduced in the National Council the installation of an *electronic voting system* was finally approved and it was installed in 1993. (See AB 1992 2042 for an overview of the history of the electronic voting system.) With this system in operation not only those votes that are requested by at least 30 legislators are recorded and published, but also "Gesamtabstimmungen", "Schlussabstimmungen" (final votes), and "Abstimmungen über die Dringlichkeit" (votes on the urgency of bills). (Article 81a(3) of the "Geschäftsreglement des Nationalrates") This lead to a dramatic increase in the number of recorded votes. In 1994, 294 roll-call votes took place, and in 1995 168 are counted (excluding the last session in Fall). The frequencies for 1994 and 1995 are not included in figure 1 not just because they are too large, but also because they are not directly comparable to the previous years. This number of roll-call votes represents a much better data source and opens up interesting opportunities for empirical research.

Despite the rather small number of roll-call votes available and the high frequency of absences these votes can be used to construct ratings for members of the Swiss National Council for the period after 1975. This is explained in the next section.

4. Translating Roll-Call Votes into Ratings

In the U.S. various lobby groups publish ratings on a regular basis.¹⁰ Probably the best known rating is published by the

¹⁰ The ratings constructed by ten lobby groups are compiled in 'The Almanac of American Politics'. These lobby groups are Americans for Democratic Action (ADA), American Civil Liberties Union (ACLU), Committee on Political Education of the AFL-CIO (COPE), Consumer Federation of America (CFA), League of Conservation Voters (LCV), American Conservative Union (ACU), National Tax-Limitation

Americans for Democratic Action (ADA), a liberal lobby group that pushes for legislation "designed to reduce inequality, curtail rising defense spending, prevent encroachments on civil liberties, and promote international human rights". (Barone/Ujifusa 1989 xiv) The ratings developed here follow to some extent the technique employed by ADA. Particularities of the Swiss data - especially the smaller number of roll-call votes and the high frequency of absences - require some differences in the procedure. In this section, a short description of how ADA constructs its ratings is provided. Then it is carefully explained how corresponding ratings for members of the National Council are (or can be) constructed.

4.1. The Process of Establishing ADA Ratings¹¹

Proceedings and debates of the Congress including all floor votes are published in the "Congressional Record", issued daily by the U.S. government printing office while Congress is in session. (The analogue in the Swiss case is the "Amtliches Bulletin".) The daily digest in the back of each issue allows a quick access to the roll-call votes. Several private organizations take these votes from the "Congressional Record" and commercially publish them, too, after processing. One of these private organizations publishes the "Congressional Quarterly Weekly Report". This journal is issued every Friday and contains a compilation of all individual votes cast during that legislative week. These data are also available electronically. The decisive point is that information on how each legislator voted on specific bills is quite easily available (obviously because there is a demand for this information).

Each year, the *ADA legislative committee* and its staff (the professionals of this lobby group) go through all congressional votes. They virtually screen every single vote on the floor, not just final votes, but also procedural votes (amendments, motions to table, and votes on rules to debate). The committee then *selects 20 votes* which they think display sharply the liberal or conservative stance of a legislator. These are votes on issues which are very important to the interests of ADA. The 20 votes can include all policy areas relevant to the lobbying interests of ADA, ranging over domestic, foreign, economic, military, and social issues. (ADA has clearly elaborated positions in more than

Committee (NTLC), National Security Index of the American Security Council (NSI), Chamber of Commerce of the United States (COC), and Competitive Enterprise Institute (CEI). For a short description of these lobby groups and their ratings, as well as the 'National Journal Ratings' see 'The Almanac of American Politics'.

¹¹ This section benefited from the helpful explanations offered by John Scull, staff member of ADA.

150 policy areas.) They may be final votes or procedural votes. Procedural votes may offer the advantage of revealing attitudes which are often obscured in a final vote. A vote on an amendment for instance which ADA thought to be a good or important amendment may be very suitable. The votes picked for the House and the Senate usually differ. The legislative committee submits the list of selected votes as recommendations to the Board of Directors of the lobby group.

The *Board of Directors* of ADA - which is made up by informed citizens that come from all over the U.S. - usually accepts the recommendations of the legislative committee.

The selected votes are then *converted into ratings*. For each vote ADA determines whether a 'yes' or a 'no' vote is in favor of its position. The voting record of each individual legislator is analyzed and points are distributed. If the legislator voted what in ADA's judgement was the correct vote, he gets a plus (+), which is worth 5 points. (Notice that a 'yes' or a 'no' vote can get a plus, depending on the position of ADA.) If the legislator voted 'incorrectly', he gets a minus (-) and thus 0 points. All points are then summed over the 20 votes. Hence, each vote is weighted equally. The resulting sum is called the *liberal quotient*. A legislator can achieve a maximum of 100 points, which is identical to the political position preferred by ADA. In ADA's judgement he is a perfect liberal. A legislator can get a minimum of 0 points, if he always votes against ADA's liberal position. A liberal Quotient of 0 indicates the most conservative position.

The treatment of *absence* is a controversial issue.¹² Most organizations establishing ratings do not count absences. ADA, however, argues that it is the obligation of members of Congress to be present and to vote. This is what they are paid for. Moreover, being absent means not voting in the interests of ADA. Absence is interpreted as a vote *against* the interests of ADA and is counted as a minus. The same treatment is applied to 'not voting' (abstention).¹³ Only a plus raises the liberal quotient.

The resulting scores are *published* each year (usually in February) in a newsletter, called "ADA Today - A Newsletter for Liberal Activists", which is sent to all interested groups around the U.S. Those legislators attaining a 'perfect score' (100 points) are specially highlighted.

¹² Unlike in Swiss Parliament absence is an issue in U.S. politics. Absence is rather unusual for members of Congress. It is even said that there are members in Congress who never missed a vote for 20 years. Absences are usually excused because of illness.

¹³ In the ADA tables 'not voting' because of absence or abstention is indicated with a questionmark for informational use.

ADA also establishes *lifetime* ADA voting records for individual legislators. This is especially the case for legislators which are nominees for important positions (for instance Senator Al Gore as candidate for vice president). The lifetime voting records can be issued in the form of a press release. Of course, these records are used to lobby for or against that legislator.¹⁴

Meanwhile there exist several organizations issuing these types of ratings. They all construct their ratings in a similar way. Major differences to the ADA rating consist with respect to the treatment of absences, the selection of the policy spectrum, and the date the rating was started:

- ADA treats absence (and 'not voting') as a minus, while most other (lobby) organizations do not count them.
- ADA picks votes over the whole policy spectrum, and not just votes from a narrow policy area.
- ADA ratings are the oldest ratings. They are issued since 1948 on an annual basis, so that there is a long time series available.

Especially the last two features make ADA ratings an appealing quantitative variable to be used in empirical research work.

4.2. Constructing Ratings for Swiss Legislators

For the construction of the ratings for Swiss legislators the traditional *left-right dimension* is chosen for the following reasons:

- The ratings are not established from the perspective of one special interest group (with the intention to use the ratings as a political weapon afterwards).
- The left-right dimension is encompassing in the sense that most other political dimensions can be reduced to it. This is of special importance here, since the small number of roll-call votes (especially before 1994) does not allow for a more specialized distinction of policy areas.
- The left-right dimension can be made operational relatively easy in the present context, because of widespread agreement about characteristics of the political left and right. (See e.g. Fuchs 1992 18.)
- In Swiss politics the party space is actually reduced to the left-right continuum in most cases.

Of course, working with the traditional left-right dimension also has its drawbacks. (See e.g. Kleinewefers 1992 109-111.)

¹⁴ To this end lobby groups do not only carry out extensive media and mail campaigns. Personal contacts and campaign funds for Senators and Representatives do play an important role. Lobby groups also regularly encourage constituents to contact their legislators and to communicate their interests.

The primary *data source* for roll-call votes is the official publication of Swiss parliament, the "Amtliches Bulletin" (until 1963 called "Amtliches Stenographisches Bulletin"). The following sources facilitated access to the roll-call votes:

- Vasella (1956 114-121): all roll-call votes between 1920 and 1953
- electronic data bank for roll-call votes between 1967 and 1983 established by Hirter at the "Forschungszentrum für schweizerische Politik" at the University of Berne
- electronic data bank for roll-call votes between 1984 and 1991 established by Lüthi/Meyer at the same institute.

Roll-call votes for all remaining years (especially after 1991) were retrieved from the "Amtliches Bulletin".

4.2.1. Determining the Number of Roll-Call Votes to be Selected for Each Rating

The construction of a rating in general and the number of votes to be selected for each rating in particular are constrained by the availability of roll-call votes. Given the distribution of these votes over time (see figure 1 and table 1) ratings are viable for the period after 1975¹⁵, if each rating is constructed on the basis of ten votes. Of course, it would be preferable to choose a larger number of roll-call votes per rating - e.g. twenty (as ADA does) - to enhance precision and reliability of this measure. But there are simply not enough roll-call votes available. The number of ten corresponds with the number of roll-call votes cast in the 1975 to 1979 period.

For the period between 1975 and 1983 only a small number of roll calls is available, forcing the construction of one rating for the whole four-year legislative period. To achieve the minimum number of ten votes for the legislative period from 1975 to 1979 the four roll-call votes that took place in 1975 - before the 1975 elections - are also employed. This implies that no rating can be constructed for freshmen of 1975 because the number of votes for which they are eligible is insufficient. This weakens the informational content of this first rating.

Beginning with 1984, at least ten roll-call votes are available for each legislative year (ranging from beginning of December to beginning of December). Therefore, a rating can be constructed for every single year. While the ratings for the two legislative periods from 1975 to 1979 and from 1979 to 1983 are based on 10 roll-call votes, the ratings for the following legislative

¹⁵ For the period before 1975 - especially between 1954 and 1974 - roll-call votes are too scarce. 1975 is chosen as the starting point in order to construct a time series that can be used in empirical work.

periods are the average scores over four years and are thus based on 40 roll-call votes each. This considerably improves their reliability.

After the introduction of the electronic voting system in 1994 the frequency of roll-call votes sharply increases. This offers the opportunity to expand the number of votes to be selected for each rating in order to augment the precision of this measure of political preferences. To conserve consistency and to allow for a comparison, the present study selects ten roll-call votes for the two remaining years (1994 and 1995). (However, in the next section an alternative procedure is suggested that does not require a fixed number of votes per rating.)

4.2.2. Selecting Ten Roll-Call Votes for Each Period

For each (legislative) period ten roll-call votes are selected. For the legislative period from 1975 to 1979 all 10 observed votes have to be chosen. But the remaining periods offer the opportunity to choose among votes, as table 1 illustrates.

Table 1: Frequency of Roll-Call Votes after 1975

Period (Year)	Number of Roll-Call Votes	Period (Year)	Number of Roll-Call Votes
1975-1979	10*	1989	17
1979-1983	11	1990	20
1984	13	1991	26
1985	14	1992	44
1986	15	1993	38
1987	14	1994**	294
1988	14	1995**	168***

Legislative periods are from beginning of December to beginning of December.

* Includes 4 roll calls that took place in 1975, before the 1975 elections.

** Electronic voting system installed.

*** Excluding the last session in Fall.

For these periods every single roll-call vote is screened and ten votes are selected, whereby the following criteria are employed (if applicable):

- low number of absences and abstentions

This criterion enjoys priority. Votes with low numbers of absences and abstentions yield the highest amount of information. Especially absences should be avoided, since they do not yield any information on political preferences (at least with respect to the left-right dimension employed here.) Abstentions do reveal preferences. They can be

interpreted as a sign of indifference. But this does not allow for an assignment to the political left or right.

- broad spectrum of issues
Votes are selected such that a broad spectrum of policy issues is covered.
- distribution of votes into left and right
To identify the position of legislators on a left-right spectrum, votes on issues where this dimension obviously is at the forefront are preferred. Votes on ideological issues, for instance, may be very suitable. Votes where the left-right dimension is difficult to apply, however, are dropped. This implies that votes on national issues are preferred to votes on regional issues. Votes where obvious regional interests are involved may obscure the political attitude of legislators.
Votes where the political extremes on the left and right confront the political middle are also avoided. A good example is the vote on the introduction of the electronic voting system cast in December 1984. (AB 1984 1913) Legislators situated on both extremes of the political spectrum sponsored this bill because they welcomed the increase in transparency that would result. Legislators located towards the middle of the spectrum opposed it.
To distinguish legislators on the extremes from those in the political middle, not only votes with a sharp division into left and right are chosen, but also votes where these differences are less pronounced. It is these votes where party loyalty is likely to be low, so that intra-party differences can be identified and measured.
To this end, votes are selected such that the following proportions result: Two to three votes where legislators on the extreme right oppose the rest, two to three votes where legislators on the extreme left oppose the rest, and four to six votes where the left and right are more equally divided. These proportions are not always viable, because the extreme left opposes the rest of the Council more frequently.

It is obvious that the selection of suitable votes is decisive for the quality of the ratings. And there is no doubt that the precision of the ratings can be improved by enhancing the number of roll-call votes being included. One might even argue that it is best to choose all roll-call votes. This could be accomplished as follows:

- (i) Calculate the percentage of times that the legislator voted the left position and multiply this result by -1.
- (ii) Calculate the percentage of times that the legislator voted the right position.
- (iii) Take the sum of these two percentages as the rating. The advantage of this procedure is that the rating is not adversely

affected by the fluctuations in the number of roll-call votes. One disadvantage is that it can become quite cumbersome because of the large number of votes that has to be analyzed and processed for the period after 1993. Another disadvantage is that the rating may be biased by votes that are not really controversial (especially "Gesamtabstimmungen" and "Schlussabstimmungen") or where the left-right dimension is not central.

4.2.3. Determining the Left and Right Positions for Each Vote

For each of the ten votes selected it is determined how a typical member of the political left and right should have voted. To solve this problem, the following two (complementary) procedures are employed:

First, it is analyzed how a legislator situated on the left (right) of the political spectrum *should* have voted, given the attributes that are typically associated with the platforms of left (right) parties. Information on the political platforms of the parties is retrieved from Fuchs (1992) and Gabriel (1993). The summary of the debates published in the NZZ on the following day helps to determine the left and right position for each specific roll call.

Second, it is verified how the majority of legislators that are assumed to be situated on the left (right) of the political spectrum *actually* voted. For this purpose the voting results for the four largest parties are analyzed. Members of the social democratic party (SP) usually vote quite homogeneously. In about three quarters of the votes selected they form a fairly homogeneous opposition to the members of the three 'bourgeois' parties, i.e. the radicals (FDP), the christian democrats (CVP), and the Swiss people's party (SVP). Hence, for most votes selected, the voting behavior of the majority of the social democrats indicates the left position, while the mostly opposing voting behavior of members of the radical party and the Swiss people's party indicate the right position. Table 2 serves to illustrate this point.

Table 2: Identifying the Left and Right Position by Analyzing the Voting Results*

Vote	CVP	FDP	SVP	SP	Position
yes	2	1	0	40	=> left
no	39	47	24	1	=> right

* Results are for the roll-call vote on the popular initiative "Schweiz ohne Armee" (Switzerland without Army) cast on December 12, 1988. See AB 1988 1767.

4.2.4. Assigning Points to Individual Votes

To convert the votes into ratings, the voting record of each individual legislator is analyzed and points are distributed. For each roll-call vote four possibilities exist: The legislator can vote 'yes', vote 'no', abstain (for instance because of indifference, or because he is president)¹⁶, or be absent. This information is retrieved from the "Amtliches Bulletin".

For the distribution of points the following scheme is applied: If the legislator votes the left position, he gets a -1. If he votes the right position, he gets a +1. And if he abstains, or if he is absent, he gets a 0.¹⁷

The reader should be alerted here that this choice of plus or positive values for the right and minus or negative values for the left position is completely *arbitrary* and does not imply any preference for the right position. Points could be equally well distributed in just the opposite way!

Abstentions also reveal political preferences. They can be interpreted as a sign of indifference between a 'yes'- and a 'no'-vote. They cannot be used to assign a legislator to the left or right of a political spectrum. Hence, a value of 0 is distributed for abstention to locate the legislator at the political middle.

So far, the scheme with +1, 0, and -1 allows for a consistent ordering. The main difficulty is caused by *absences*. In comparison to the U.S. legislature where absences occur only rarely (since it is generally acknowledged that it is the duty of congressmen to participate in debates and especially in votes), absences are a very frequent phenomenon in the Swiss parliament.¹⁸ Absences do not reveal political preferences with respect to the political left-right dimension. Hence, they cannot be used to locate a legislator in the political left-right spectrum.

One option is to simply drop these votes. But this raises a serious problem for the construction of the ratings because of the high frequency of absences. Moreover, while absences do not help to locate legislators in the political left-right dimension, they do provide another type of information that may be quite valuable for the participants in the political market place. This kind of information should not be eliminated.

¹⁶ Article 83 of the "Geschäftsreglement des Nationalrates" states that the president of the Council does not vote, except for a draw. In this case he can justify his vote.

¹⁷ This system, which deviates from the practice of ADA, was chosen to account for the numerous absences and also the quite frequent abstentions in the Swiss legislature.

¹⁸ Possible explanations for the high frequency of absences are the different 'culture' in the political market place, and the fact that Swiss legislators work only part time.

The other option is to count absences. Here it is decided to apply an equal treatment to abstentions and absences. It could be argued that absence is a signal of indifference with respect to that roll-call vote. While this argument may be valid in some cases, it does certainly not hold in the case of illness. Since absences and abstentions are not really identical problems, each rating is accompanied with the total number of absences. And each rating should always be interpreted *together* with the number of absences.

4.2.5. Aggregating the Points to a Rating

All pluses and minuses are then summed. Hence, all votes are weighted equally. A legislator can get a minimum of -10 points and a maximum of +10 points. A score of -10 implies that a legislator was never absent, never abstained, and always voted the left position. He is a perfect 'left' (or 'liberal' in the American terminology). A sum of +10 means that a legislator always voted the right position, was never absent, and never abstained. This value indicates the most 'conservative' position. A score of 0 locates a legislator in the political middle. This value can result for instance if a legislator voted the left and the right positions with the same frequencies, without abstentions and absences. It can also result if a legislator was always absent and/or if he always abstained, and so on.

Because of the importance of absences, not just the ratings thus calculated, but also the number of absences is indicated. A legislator with a score of +5 and 5 absences is likely to be situated further to the right than is indicated by the +5. The number of absences can be a valuable source of information. Voters for instance can interpret absences as a lack of support for their preferences or interests!

To repeat, interpretations of the ratings should also take into account the number of absences. For this reason, they are listed along with the scores reached.

5. Example: Ratings for 1994

Using the technique described in section 4.2. ratings for members of the National Council are constructed for the period from 1975 to 1995. In order to preserve space, these ratings are not presented here. To illustrate how they can be listed, the ratings for 1994 are picked out. (A compilation of roll-call votes and resulting ratings for all 473 members of the National Council assessed for the period from 1975 to 1995 is available from the authors upon request.)

Reported results include two parts:

- a table with the ratings for the individual legislators and
- a list with a short description of the 10 roll-call votes selected for that period.

In the tables with the ratings legislators are filed in alphabetical order. Legislators who enter or leave the Council during the period under consideration may not be eligible for the rating because of an insufficient number of roll-call votes.¹⁹ Since they are not included, less than the total of 200 legislators may appear on the list. Legislators who chair the Council are indicated with "President". No rating is constructed for them, since the chairman usually doesn't vote. For each legislator, party affiliation, his voting record for the ten roll-call votes, and the resulting rating are listed. (Zeros in bold and italic indicate abstentions.) The rating itself contains two elements of information, the rating which determines his position on the left-right dimension, and the total number of absences.

The table containing the ratings is accompanied by a short description of the ten roll-call votes selected. This includes the primary data source ("Amtliches Bulletin"), as well as the issue of the "Neue Zürcher Zeitung" (NZZ) which publishes a short summary of the debates on the following day. This summary facilitates access to each vote. For the four largest parties it is indicated how many members voted for and against. (See also table 2.) Complementary to the political platforms of the parties and the comment in the NZZ this information is used to determine whether a 'yes'- or a 'no'-vote corresponds with the left (right) position. It is also stated whether the 'extreme' left (right) opposes the rest, or whether votes are more equally divided. Notice that the votes of the four parties listed do not add up to the total voting results, since the smaller parties are not filed.

¹⁹ For this reason the following legislators do not appear on the list for the 1994 rating: Bugnon, Cornaz, Daepf-Heiniger, Gardiol, Ostermann, Rebeaud, Schmid Samuel, Schweingruber, Weyeneth, Wyss Paul and Zölch-Balmer.

Table 3: Ratings for 1994

				Roll-Call Votes										Rating	
				A	B	C	D	E	F	G	H	I	J	position	absence
+ = right position															
- = left position															
0 = abstention or absence															
1	Aguet	Pierre	SP	-	-	-	-	-	-	+	-	-	-	-8	0
2	Allenspach	Heinz	FDP	+	+	+	0	+	+	+	+	+	+	9	1
3	Aregger	Manfred	FDP	+	+	+	+	+	+	+	+	+	+	10	0
4	Aubry	Geneviève	FDP	+	+	-	+	+	0	+	0	-	0	3	2
5	Bär	Rosmarie	GPS	-	-	-	-	-	-	-	-	-	-	-10	0
6	Baumann	Ruedi	GPS	-	-	-	-	-	-	-	-	-	-	-10	0
7	Baumberger	Peter	CVP	+	+	+	+	+	-	+	-	-	+	4	0
8	Bäumlin	Ursula	SP	-	-	-	-	-	-	-	-	0	-	-9	0
9	Béguelin	Michel	SP	-	0	0	-	-	-	-	-	-	-	-8	2
10	Berger	Jean-P.	SVP	+	+	+	+	+	0	0	0	0	0	5	5
11	Bezzola	Duri	FDP	+	+	+	+	+	+	+	+	-	+	8	0
12	Binder	Max	SVP	+	+	0	+	+	+	+	-	+	+	7	1
13	Bircher	Peter	CVP	-	+	+	-	+	-	+	-	-	+	0	0
14	Bischof	Hardi	SD	-	+	+	-	+	0	+	-	+	0	2	1
15	Blatter	Ueli	CVP	+	+	+	+	+	0	0	0	0	0	5	5
16	Blocher	Chr.	SVP	+	+	+	+	+	+	+	+	+	+	10	0
17	Bodenmann	Peter	SP	-	-	-	-	-	-	-	-	-	-	-10	0
18	Bonny	Jean-P.	FDP	+	+	+	+	+	+	+	+	+	+	8	0
19	Borel	François	SP	-	-	-	-	-	-	-	-	-	-	-10	0
20	Borer	Roland	FP	+	+	+	+	+	+	+	-	-	+	6	0
21	Borradori	Marco	DP	-	+	+	-	+	+	+	-	-	+	2	0
22	Bortoluzzi	Toni	SVP	+	+	+	+	+	0	+	-	-	+	5	1
23	Brügger	Cyrill	SP	-	-	-	-	-	-	0	0	0	0	-6	4
24	Brunner	Christiane	SP	-	-	-	-	-	-	-	-	-	-	-10	0
25	Bühler	Simeon	SVP	+	+	+	+	-	-	+	-	-	+	2	0
26	Bühlmann	Cécile	GPS	-	-	-	-	-	-	-	-	-	-	-10	0
27	Bührer	Gerold	FDP	+	+	+	-	0	+	0	0	0	0	3	5
28	Bündl	Martin	SP	-	-	-	-	0	-	-	-	-	-	-9	1
29	Bürgi	Jakob	CVP	+	+	+	-	+	-	+	-	+	+	4	0
30	Caccia	Fulvio	CVP	0	+	-	-	+	-	+	-	-	+	-1	1
31	Camponovo	Geo	FDP	-	+	+	+	+	+	+	-	-	+	4	0
32	Carobbio	Werner	PSA	-	-	-	-	-	0	0	0	0	0	-5	5
33	Caspar-Hutter	Elisabeth	SP	-	-	-	-	-	-	-	-	+	0	-7	1
34	Cavadini	Adriano	FDP	+	0	-	-	+	0	0	0	0	0	0	6
35	Chevallaz	Olivier	FDP	+	-	+	+	+	+	+	-	-	+	4	0
36	Cincera	Ernst	FDP	+	+	+	-	+	+	+	+	-	+	6	0
37	Columberg	Dumeni	CVP	-	+	+	-	+	-	+	-	-	+	0	0
38	Comby	Bernard	FDP	+	+	0	-	+	-	+	-	-	+	1	1
39	Couchepin	Pascal	FDP	+	+	-	-	-	+	0	0	0	0	0	4
40	Danuser	Menga	SP	-	-	-	-	-	-	-	-	-	-	-10	0
41	Darbellay	Vital	CVP	+	+	-	0	0	0	+	-	-	+	1	3
42	David	Eugen	CVP	-	0	-	-	-	-	+	-	-	+	-5	1
43	de Dardel	Jean-Nils	SP	-	-	-	-	-	0	-	-	-	-	-9	1
44	Deiss	Joseph	CVP	+	+	+	+	+	-	+	-	-	+	4	0
45	Dettling	Toni	FDP	+	+	+	+	+	+	+	+	-	+	8	0
46	Diener	Verena	GPS	-	-	-	-	-	-	0	-	-	-	-9	0
47	Dormann	Rosm.	CVP	-	-	-	-	-	-	+	-	+	+	-4	0
48	Dreher	Mich.	FP	+	+	+	+	+	+	-	+	-	+	6	0
49	Ducret	Domin.	CVP	0	+	-	+	+	+	+	-	-	+	3	1

Table 3: Ratings for 1994 (continued)

				Roll-Call Votes										Rating	
				A	B	C	D	E	F	G	H	I	J	position	absence
+ = right position															
- = left position															
0 = abstention or absence															
50	Dünki	Max	EVP	-	-	-	-	-	+	+	-	-	-	-6	0
51	Duvoisin	Pierre	IG	0	-	-	-	0	0	-	-	-	0	-6	4
52	Eggenberger	Georges	SP	-	-	-	-	-	-	-	-	-	-	-10	0
53	Eggy	Jacques	LPS	+	-	-	+	0	+	0	0	0	0	1	5
54	Engler	Rolf	CVP	-	+	+	-	+	-	+	-	-	+	0	0
55	Epiney	Simon	CVP	+	+	-	+	+	-	+	-	-	+	2	0
56	Eymann	Christoph	LPS	+	+	-	-	-	+	+	-	-	+	0	0
57	Fankhauser	Angeline	SP	-	-	-	-	0	-	-	-	0	-	-8	1
58	Fasel	Hugo	CVP	-	-	-	-	-	-	-	-	-	+	-8	0
59	Fehr	Lisbeth	SVP	+	+	+	+	+	+	+	+	-	+	8	0
60	Felten, von	Margrith	SP	-	-	-	-	-	-	-	-	-	-	-10	0
61	Fischer	T., Häggi	SVP	+	+	+	+	+	+	+	-	+	+	8	0
62	Fischer	T., Sursee	CVP	+	+	+	-	-	+	+	-	-	+	2	0
63	Fischer	U., Seeng	FDP	+	+	+	+	+	+	+	+	-	+	8	0
64	Frey	Claude	FDP	+	+	0	+	+	+	+	-	+	+	7	1
65	Frey	Walter	SVP	+	+	+	+	+	+	+	+	+	+	10	0
66	Friderici	Charles	LPS	+	0	-	+	+	+	+	0	-	+	4	1
67	Fritschi	Oscar	FDP	+	+	+	+	-	+	+	+	0	+	7	0
68	Früh	Hans-R.	FDP	+	+	+	+	+	+	+	+	-	+	8	0
69	Giezendanner	Ulrich	FP	+	+	+	+	+	+	+	+	-	+	8	0
70	Giger	Titus	FDP	+	+	+	0	+	+	+	+	-	+	7	1
71	Gobet	Alex	CVP	+	+	+	-	+	+	+	-	-	+	4	0
72	Goll	Christine	SP	-	-	-	-	-	0	-	-	0	-	-8	1
73	Gonseth	Ruth	GPS	-	-	-	-	-	0	0	-	-	-	-8	1
74	Graber	Rolf	LPS	+	+	-	+	+	+	+	-	-	+	4	0
75	Grendelmeier	Verena	LdU	-	0	-	-	-	+	+	-	-	-	-5	0
76	Gros	Jean-M.	LPS	+	-	-	+	+	+	+	-	-	+	2	0
77	Gross	Andreas	SP	-	-	-	-	-	-	-	-	0	-	-9	0
78	Grossenbacher	Ruth	CVP	-	+	+	-	-	-	+	-	+	+	0	0
79	Gysin	Hans-R.	FDP	+	+	+	+	-	+	+	+	+	+	8	0
80	Haering	Barbara	SP	-	-	-	-	-	-	-	-	-	0	-9	1
81	Hafner	Rudolf	GPS	-	-	-	-	-	-	-	-	-	-	-10	0
82	Hafner	Ursula	SP	-	-	-	-	-	-	-	-	-	-	-10	0
83	Halter	Gret	SP	0	0	0	0	0	0	0	0	0	0	President	
84	Hämmerle	Andrea	SP	-	-	-	-	-	-	-	-	-	-	-10	0
85	Hari	Fritz	SVP	+	+	0	+	+	+	+	0	-	+	6	1
86	Heberlein	Trix	FDP	+	+	+	-	+	+	+	+	-	+	6	0
87	Hegetschweiler	Rolf	FDP	+	+	+	+	+	+	+	+	-	+	8	0
88	Herczog	Andreas	POCH	-	-	-	-	0	-	0	-	-	0	-7	3
89	Hess	Otto	SVP	+	+	+	+	+	+	+	-	-	+	6	0
90	Hess	Peter	CVP	+	+	+	-	+	-	+	-	-	+	2	0
91	Hildbrand	Franz-J.	CVP	+	+	+	-	+	-	+	-	+	+	4	0
92	Hollenstein	Pia	GPS	-	-	-	-	-	-	-	-	-	-	-10	0
93	Hubacher	Helmut	SP	0	-	-	-	-	-	-	-	-	-	-9	1
94	Iten	Josef	CVP	+	+	+	+	-	0	+	-	-	+	3	1
95	Jaeger	Franz	LdU	-	-	-	-	-	+	+	-	-	-	-6	0
96	Jäggi	Paul	CVP	-	+	+	-	+	-	+	-	-	+	0	0
97	Jeanprêtre	Francine	SP	-	-	-	-	-	0	-	-	-	-	-9	1
98	Jenni	Peter	FP	+	+	+	+	+	+	+	+	-	+	8	0

Table 3: Ratings for 1994 (continued)

				Roll-Call Votes										Rating	
				A	B	C	D	E	F	G	H	I	J	position	absence
+ = right position															
- = left position															
0 = abstention or absence															
99	Jöri	Werner	SP	-	-	-	-	-	-	-	-	-	-	-10	0
100	Keller	Anton	CVP	-	+	+	-	+	-	+	-	-	+	0	0
101	Keller	Rudolf	SD	-	+	+	0	+	+	+	-	-	+	3	1
102	Kern	Armin	FP	+	+	+	+	+	+	-	+	-	+	6	0
103	Kühne	Josef	CVP	+	+	+	-	+	0	+	-	-	+	3	1
104	Ledergerber	Eimar	SP	-	-	-	-	-	-	-	-	-	0	-9	1
105	Leemann	Ursula	SP	-	-	-	-	-	-	-	-	-	-	-10	0
106	Lepori Bonetti	Giuseppe	CVP	+	-	-	-	+	-	+	-	-	+	-2	0
107	Leu	Joseph	CVP	+	+	+	-	-	+	+	-	0	+	3	0
108	Leuba	Jean-F.	LPS	+	+	-	+	+	+	+	-	0	+	5	0
109	Leuenberger	Ernst	SP	-	-	-	-	-	-	-	-	-	-	-10	0
110	Leuenberger	Moritz	SP	-	-	-	-	-	-	-	-	-	-	-10	0
111	Loeb	François	FDP	+	+	-	-	-	+	+	-	-	+	0	0
112	Maeder	Herbert	LdU	-	+	-	-	-	-	+	-	-	-	-6	0
113	Maitre	Jean-P.	CVP	+	0	0	+	+	0	0	0	0	0	3	7
114	Mamie	Philippe	FDP	+	-	+	+	+	+	+	-	-	+	4	0
115	Marti	Werner	SP	-	-	-	-	-	-	0	-	-	-	-9	1
116	Maspoli	Flavio	SD	+	+	0	-	+	+	+	-	-	+	3	1
117	Matthey	Francis	SP	-	-	-	0	-	-	0	0	0	0	-5	5
118	Mauch	Rolf	FDP	-	0	0	0	0	+	+	-	+	+	2	4
119	Mauch	Ursula	SP	-	-	-	-	-	-	-	-	-	-	-10	0
120	Maurer	Ueli	SVP	+	+	+	+	+	+	+	+	+	+	10	0
121	Meier	Hans	GPS	-	-	-	-	-	-	-	-	+	-	-8	0
122	Meier	Samuel	LdU	-	+	-	-	-	+	0	+	-	-	-3	1
123	Meyer	Theo	SP	-	-	-	-	-	-	-	-	-	-	-10	0
124	Miesch	Christian	FDP	+	+	+	+	-	+	+	+	+	+	8	0
125	Misteli	Marguerite	GPS	-	-	-	-	-	-	-	-	0	-	-9	0
126	Moser	René	FP	+	+	+	+	+	+	+	+	-	+	8	0
127	Mühlemann	Ernst	FDP	+	+	+	+	+	0	+	+	-	+	7	1
128	Müller	Reinhard	SVP	+	+	+	+	+	+	+	+	-	+	8	0
129	Nabholz	Lili	FDP	-	+	-	-	0	0	0	-	-	0	-4	4
130	Narbel	Jean-Marc	LPS	+	+	-	+	+	+	+	-	-	+	4	0
131	Nebiker	Hans-R.	SVP	+	+	-	+	+	+	+	-	-	+	4	0
132	Neuenschwander	Willy	SVP	+	+	+	+	+	+	+	-	-	+	6	0
133	Oehler	Edgar	CVP	+	+	+	-	+	-	+	-	-	+	2	0
134	Perey	André	FDP	+	+	+	+	+	-	+	-	-	+	4	0
135	Philipona	Jean-N.	FDP	+	+	-	+	+	0	+	-	-	+	3	0
136	Pidoux	Philippe	FDP	0	0	0	0	0	0	+	-	-	+	0	6
137	Pini	Massimo	FDP	0	0	0	-	+	-	0	0	0	0	-1	6
138	Poncet	Charles	LPS	+	-	-	-	0	+	+	-	+	+	1	0
139	Raggenbass	Hansueli	CVP	+	+	+	0	+	-	+	-	-	+	3	1
140	Rechsteiner	Paul	SP	-	-	-	-	-	-	-	-	-	-	-10	0
141	Reimann	Max.	SVP	+	+	+	+	+	+	+	-	-	+	6	0
142	Robert	Leni	GPS	-	-	-	-	-	0	-	-	-	-	-9	1
143	Rohrbasser	Bernard	SVP	+	+	0	+	+	0	+	-	-	+	4	2
144	Ruckstuhl	Hans	CVP	+	+	+	+	+	-	+	-	-	0	3	1
145	Ruf	Markus	SD	-	+	+	-	+	-	0	-	0	+	0	2
146	Ruffy	Victor	SP	-	-	-	-	-	-	0	0	0	0	-6	4
147	Rutishauser	Paul	SVP	+	+	+	+	+	-	+	-	-	+	4	0

Table 3: Ratings for 1994 (continued)

				Roll-Call Votes										Rating	
				A	B	C	D	E	F	G	H	I	J	position	absence
+ = right position															
- = left position															
0 = abstention or absence															
148	Rychen	Albrecht	SVP	0	+	0	0	-	+	+	-	-	+	1	3
149	Sandoz	Suzette	LPS	+	+	-	+	+	+	+	0	0	+	6	0
150	Savary	Pierre	FDP	+	-	+	+	+	+	+	-	-	+	4	0
151	Scherrer	Jürg	FP	+	+	+	+	0	+	+	+	-	+	7	1
152	Scherrer	Werner	EDU	0	0	+	+	-	+	-	-	+	+	2	2
153	Scheurer	Rémy	LPS	+	+	-	+	+	+	+	-	-	+	4	0
154	Schmid	Peter	GPS	-	-	-	-	-	-	-	-	-	-	-10	0
155	Schmidhalter	Paul	CVP	+	+	+	-	+	-	+	-	-	+	2	0
156	Schmied	Walter	SVP	+	+	+	+	-	0	+	-	+	+	5	1
157	Schnider	Theodor	CVP	+	+	+	-	+	-	+	-	-	+	2	0
158	Schwab	Heinz	SVP	+	+	0	+	+	+	+	0	+	+	8	1
159	Segmüller	Eva	CVP	-	+	+	-	-	0	+	0	-	+	0	1
160	Seiler	Hanspeter	SVP	+	0	+	+	+	0	+	0	-	+	5	2
161	Seller	Rolf	CVP	-	-	-	-	-	-	+	-	-	0	-7	0
162	Sieber	Ernst	LdU	0	-	-	0	-	+	+	-	-	-	-4	2
163	Spielmann	Jean	PdA	0	-	-	-	-	-	-	-	-	-	-9	1
164	Spoerry	Vreni	FDP	+	0	+	-	-	+	+	0	-	+	2	2
165	Stalder	Fritz	SD	-	+	+	+	+	+	0	-	-	+	3	0
166	Stamm	Judith	CVP	-	0	0	-	-	-	+	-	+	+	-2	2
167	Stamm	Luzi	FDP	+	+	+	+	-	+	+	+	0	+	7	0
168	Steffen	Hans	SD	-	0	+	0	+	+	+	-	+	+	4	2
169	Steiger	Hans	SP	-	-	-	-	-	-	-	-	-	-	-10	0
170	Steinegger	Franz	FDP	+	+	0	+	+	+	+	+	-	+	7	1
171	Steinemann	Walter	FP	+	+	+	+	+	+	-	+	-	+	6	0
172	Steiner	Rudolf	FDP	+	+	+	+	+	+	+	-	+	+	8	0
173	Strahm	Rudolf	SP	-	-	-	-	0	-	0	0	0	0	-5	4
174	Stucky	Georg	FDP	+	0	+	+	-	+	+	+	+	+	7	1
175	Suter	Marc	FDP	-	+	-	-	-	+	+	-	0	+	-1	0
176	Theubet	Gabriel	CVP	+	+	-	-	+	-	+	-	-	+	0	0
177	Thür	Hanspeter	GPS	-	-	-	-	-	-	0	-	-	-	-9	1
178	Tschäppät	Alexander	SP	-	-	-	-	-	-	-	-	-	-	-10	0
179	Tschopp	Peter	FDP	-	+	-	-	0	+	0	0	0	0	-1	5
180	Tschuppert	Karl	FDP	+	+	+	+	+	+	+	+	-	+	8	0
181	Vetterli	Werner	SVP	+	+	+	+	+	+	+	+	-	+	6	0
182	Vollmer	Peter	SP	-	-	-	-	-	-	-	-	-	-	-10	0
183	Wanner	Chr.	FDP	-	+	+	-	0	+	+	-	-	+	1	0
184	Weder	Hansjörg	LdU	-	-	-	-	-	-	+	-	-	-	-8	0
185	Wick	Hugo	CVP	+	+	+	-	-	-	+	-	-	+	0	0
186	Wiederkehr	Roland	LdU	-	+	-	-	0	0	+	-	-	-	-4	2
187	Wittenwiler	Milli	FDP	+	+	+	+	+	+	+	+	-	+	8	0
188	Wyss	William A.	SVP	+	+	+	+	-	+	+	-	-	+	4	0
189	Zbinden	Hans	SP	-	-	-	-	-	-	-	-	-	-	-10	0
190	Ziegler	Jean	SP	0	0	0	-	-	0	-	-	-	-	-6	4
191	Zisnyadis	Joseph	POCH	-	-	0	0	-	0	-	-	-	0	-6	4
192	Züger	Arthur	SP	-	-	-	-	-	-	-	-	-	-	-10	0
193	Zwahlen	Jean-C.	CVP	+	0	0	0	0	0	+	-	-	+	1	5
194	Zwygart	Otto, jun	EVP	-	-	0	-	-	+	+	-	-	-	-5	1

Description of Roll-call Votes Selected for the 1994 Rating

No. A	AB Jg. 1993, p. 2089 NZZ, 01.12.1993, p. 25	CVP	FDP	SP	SVP	total
		1 23	35	0	21	101
Verbandsbeschwerde		2 12	6	37	0	86
Die Mehrheit beantragt die Föderalisierung des Beschwerdeverfahrens. 1 = right position; 2 = left position (more equally divided)						
No. B	AB Jg. 1994, p. 361 NZZ, 16.03.1994, p. 26	CVP	FDP	SP	SVP	total
		1 29	34	0	21	111
Krankenversicherungsgesetz		2 4	4	36	0	71
Die Minderheit beantragt, bei der Umverteilung zusätzlicher Subventionsgelder, die von einzelnen Kantonen nicht für die Prämienverbilligung benötigt wurden, auf den Beschluss des Ständerates einzulernen. 1 = für Beschluss des Ständerates 1 = right position; 2 = left position (left wing opposes the rest)						
No. C	AB Jg. 1994, p. 340 NZZ, 15.03.1994, p. 25	CVP	FDP	SP	SVP	total
		1 10	9	36	1	91
Zwangsmassnahmen im Ausländerrecht		2 24	28	0	17	86
Abgestimmt wird, ob der Richter (= 1) oder die zuständige Behörde (Fremdenpolizei) (= 2) die Vorbereitungs- beziehungsweise Ausschaffungshaft anordnen soll. 1 = left position; 2 = right position (more equally divided)						
No. D	AB Jg. 1994, p. 493 NZZ, 18.03.1994, p. 25	CVP	FDP	SP	SVP	total
		1 26	14	37	0	109
Gleichstellung		2 8	26	0	21	76
Beantragt wird eine Präzisierung des Klagerechts für Organisationen: Organisationen, die eine Verbandsklage einreichen wollen, sollen vorgängig die Betroffenen informieren und ihnen damit die Möglichkeit zur Stellungnahme oder zur Beseitigung der Diskriminierung geben. 1 = left position; 2 = right position (right wing opposes the rest)						
No. E	AB Jg. 1994, p. 561 NZZ, 19.03.1994, p. 25	CVP	FDP	SP	SVP	total
		1 24	28	0	18	95
Steueramnestie		2 11	10	35	4	87
In einer Motion wird eine Steueramnestie verlangt. 1 = right position; 2 = left position (more equally divided)						

if not indicated otherwise: 1 = accept; 2 = reject

Description of Roll-call Votes Selected for the 1994 Rating (continued)

No.	F	AB Jg. 1994, p. 1317 NZZ, 21.09.1994, p. 17	CVP	FDP	SP	SVP	total	
			1	4	32	1	15	86
			2	26	5	34	2	84
		Ausgabenbremse						
		Eine Minderheit beantragt, auf die zehnjährige Befristung der Ausgabenbremse zu verzichten.						
		1 = für Minderheitsantrag						
		1 = right position; 2 = left position (more equally divided)						
No.	G	AB Jg. 1994, p. 1962 NZZ, 08.10.1994, p. 17	CVP	FDP	SP	SVP	total	
			1	34	35	2	21	123
			2	1	1	32	0	51
		Ausbau der AHV und IV						
		Schlussabstimmung über den Bundesbeschluss zur Ablehnung der Volksinitiative "für den Ausbau von AHV und IV". 1 = rejection of the popular initiative						
		1 = right position; 2 = left position (left wing opposes the rest)						
No.	H	AB Jg. 1994, p. 1964 NZZ, 08.10.1994, p. 17	CVP	FDP	SP	SVP	total	
			1	34	16	36	14	141
			2	0	20	0	5	34
		Krankenversicherung						
		Schlussabstimmung über die Verlängerung des Bundesbeschlusses über eine Tarif- und Prämienbremse in der Krankenversicherung bis längstens Ende 1996.						
		1 = left position; 2 = right position (right wing opposes the rest)						
No.	I	AB Jg. 1994, p. 1965 NZ, 08.10.1994, p. 17	CVP	FDP	SP	SVP	total	
			1	29	28	29	15	146
			2	5	7	2	6	27
		Volljährigkeit						
		Schlussabstimmung über die Herabsetzung des zivilrechtlichen Mündigkeits- und Ehefähigkeitsalters von 20 auf 18 Jahren im ZGB.						
		1 = left position; 2 = right position (right wing opposes the rest)						
No.	J	AB Jg. 1994, p. 1968 NZZ, 08.10.1994, p. 17	CVP	FDP	SP	SVP	total	
			1	33	35	1	21	118
			2	0	1	31	0	56
		Bauernverband-Initiative						
		Schlussabstimmung über den Bundesbeschluss, welcher Volk und Ständen die Ablehnung der Bauernverband-Initiative "für eine umweltgerechte und leistungsfähige bäuerliche Landwirtschaft" und die Annahme eines neuen Agrarartikels als Gegenvorschlag empfiehlt. 1 = rejection						
		1 = right position; 2 = left position (left wing opposes the rest)						

if not indicated otherwise: 1 = accept; 2 = reject

6. Limitations of these Ratings

As ADA points out, ratings based on voting records cannot give a true picture of a legislator's work. They do not measure how hard legislators work, leadership skills, constituent service, or work in the committees. Ratings are a measure of how legislators vote on particular issues. As such they should be viewed as merely one factor in evaluating the performance of a legislator. (ADA Today). The ratings developed here cannot be used to evaluate the legislative performance of individual members of the National Council, because they are not established and valued from the perspective of a special interest group. They only serve to *locate* legislators on the left-right dimension. Thus they help to overcome (some of) the problems associated with party affiliation. Still, they have obvious defaults. These defaults follow immediately from the limitations of the data source (the roll-call votes) and the technique employed to construct them. The main weaknesses of the *data source* are the rather small number of roll-call votes which seriously limits the possibilities of choice among votes, and the numerous cases of absences. With more votes available, the ratings could be based on a larger sample in order to increase their precision and reliability. Interpretation and treatment of absences is difficult and remains controversial.

Another difficulty of the data source is related to the very nature of the votes used. Roll-call votes are often requested for particularly important and controversial issues. Only for these issues the cumbersome and time-consuming procedure is chosen.²⁰ This is why they may be particularly informative. But they are unlikely to be representative of all votes cast in the legislature. Roll-call votes may introduce a systematic *bias* relative to the overall of votes cast in the legislature. This potential bias should be kept in mind when working with ratings that are derived thereof.

As to the *technique* used to construct the ratings, the two main difficulties are the choice of the left-right dimension and the selection of roll-call votes.

The *left-right dimension* may not be appropriate to assess the political position of a legislator. To avoid the difficulties involved with this, more specialized ratings can be developed: environmental ratings, foreign policy ratings, social policy ratings, economic policy ratings, ratings on public spending and so on. After the introduction of the electronic voting system the

²⁰ After the introduction of the electronic voting system in 1993 this argument is no longer valid.

construction of such more specialized ratings becomes viable, especially if each rating is based on four-year legislative periods.

The ratings are vulnerable to the *selection* of roll-call votes. To reduce this dependence on the choice of roll-call votes, the lifetime voting records of each individual legislator can be compiled, and the average score of all ratings for the whole period during which a legislator was a member of the Council can be calculated. While the minimum number of roll-call votes included remains ten, this lifetime rating can be based on a maximum of 140 roll-call votes for legislators sitting in the National Council for the five legislative periods from 1975 to 1995 that are covered.²¹ The problem with the lifetime rating is that it neglects the possibility that a legislator changes its preferences over time, especially across (re)election periods. This problem is accounted for by using ratings for four-year legislative periods. Except for the two legislative periods from 1975 to 1983, where each legislative rating is based on just 10 votes, all subsequent legislative period ratings are based on 40 roll-call votes each. This appears to be a quite plausible preference measure for individual legislators.

All the limitations just discussed should be clearly kept in mind when some applications in the next section are presented.

7. Applications: What can be done with these Ratings?

Ratings may be of interest for the participants in the political market place, and for social scientists doing empirical research work.

7.1. Information for the Participants in the Political Market Place

Ratings can be a valuable source of information for the participants in the political market place. In the U.S. this was also the original motivation for lobby groups to construct them.

As a summary statistic on a legislator's voting behavior ratings can perform the following functions:

- They provide an additional piece of information to *voters*, which may enable them to make more informed choices among politicians. Of course, this argument holds only for those legislators running for reelection.

²¹ While only 3 national councillors (Hubacher, Nebiker, Oehler) achieve this record, 22 legislators reach 4 legislative periods. Their lifetime rating is based on a maximum number of 130 roll-call votes.

- *Legislators* themselves are informed about their own location in the political spectrum relative to their competitors. This may help them to define their political platforms.
- For *political parties* (especially their leadership) it may become easier to monitor the behavior of their members. This enhances the possibility to foster party loyalty, since those members who are loyal to the party leadership can be remunerated while those who are not (or less) loyal are sanctioned. Remunerations and sanctions can take the form of committee assignments. (See e.g. Crain 1990 on this.)
The party leadership can also perform an overall assessment of the homogeneity of party members (or members of fractions), homogeneity being a determinant of a party's political weight, again relative to the competing parties.
For these purposes political parties may prefer to construct their own ratings, where the party's ideal position serves as a benchmark.
- *Lobby groups* may direct their support in terms of votes and money more specifically to those legislators furthering their interests. For this purpose, ratings based on a left-right dimension may not be appropriate. Instead, more specialized ratings, such as environmental, foreign policy, social policy and so on ratings need to be developed. This is also what can actually be observed in the U.S., where various lobby groups establish their own specialized ratings. Of course, all other participants in the political market place can also benefit from these more specialized ratings.

Participants of the political market might be interested to observe the ratings for specific legislators over time. For this purpose, lifetime voting records can be compiled and ratings established for different legislative periods can be compared.

It can be expected that the political control of legislators by voters and interest groups increases and that survival as a legislator may become more difficult.²² Especially absences, but also abstentions, may eventually become an issue in Swiss politics.

Overall, the increased transparency tends to increase the competition in the political market. Whether this also enhances its efficiency remains a controversial issue. If an analogy to capital markets is valid, gains in efficiency can be expected, in the sense that transfers on the political market are made at lower costs.

²² This may depend on the location in the policy space, however. For those legislators located at the extremes the opposite effect may occur, since the ratings can be used to highlight their distinct political attitude.

7.2. Applications in Empirical Research

7.2.1. Analysis of the Ratings Themselves

As a quantitative measure of political preferences ratings can be of scientific interest in themselves. These measures can be used as a key to analyze the legislature.

The individual ratings can be *aggregated* for groups of the Council (fractions, political parties, committees) to get one single measure for the political preference of that group. Of course, the implied assumption of equal weights might be problematic. The distributions of the ratings for political parties for instance can be compared and changes thereof can be analyzed. The standard deviations can be used as a measure for intra-party differences.

The ratings may serve to analyze the *structure* of the legislature. Especially for research related to the committee system the ratings can be a valuable data source. One prominent question is whether committees are composed of preference outliers. (See e.g. Benson 1981, Krehbiel 1990, and Shepsle 1978.)

Another possibility is to analyze the *distribution* of political preferences on a left-right spectrum. This can be performed by plotting frequency distributions for annual ratings, or for ratings covering legislative periods. To get an impression of the development of legislative preferences over time the sequence of these plots can be compared. Figures 2 to 6 display the distributions of the legislative preferences - as measured by the ratings - for the 5 legislative periods covered. The plots clearly show that the National Council is getting more polarized. The hypothesis of an increasing polarization in the National Council, advanced for instance by Lüthi/Meyer/Hirter (1991), is supported by these graphic means.

If it can be assumed that legislative preferences reflect - at least to some extent - voter preferences, the distribution and development of the latter can be measured. Then it can be concluded that the distribution of voter preferences changed indeed from a sugar loaf to a volcano, as a model developed by Kleinewefers (1992) predicts.

The plots need to be interpreted with caution, however. The increasing number of roll-call votes allows for the selection of votes where absences are less numerous. With fewer absences ratings tend to spread more over the spectrum. The effect of polarization (or at least part of it) might be caused by this.

Figure 2: Frequency Distribution of Rating for 1975 - 1979

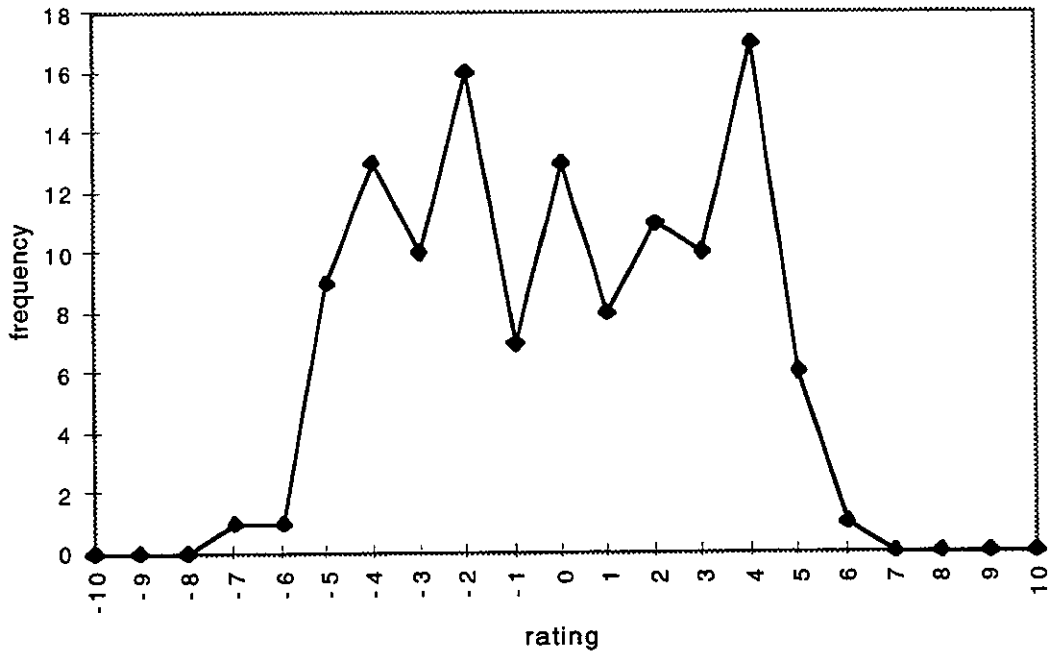


Figure 3: Frequency Distribution of Rating for 1980 - 1983

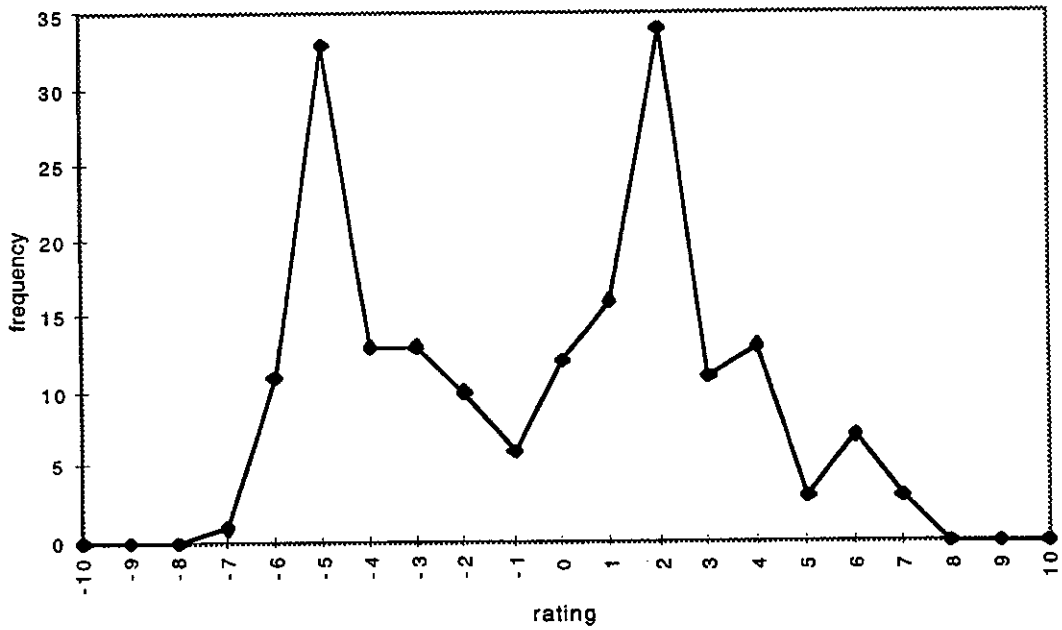


Figure 4: Frequency Distribution of Rating for 1984 - 1987

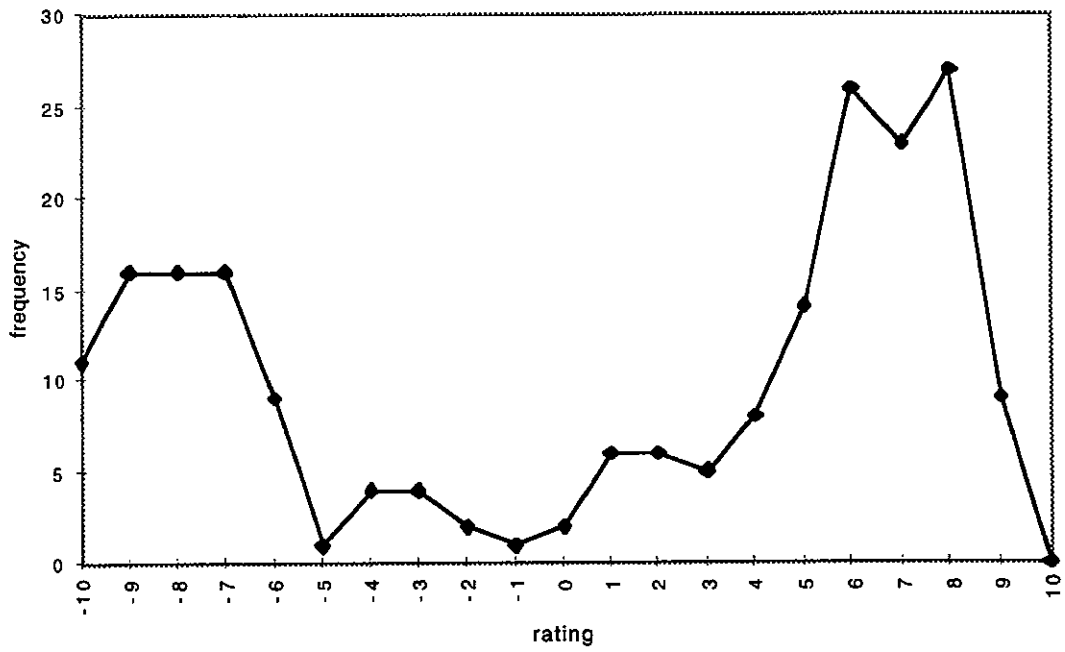


Figure 5: Frequency Distribution of Rating for 1988 - 1991

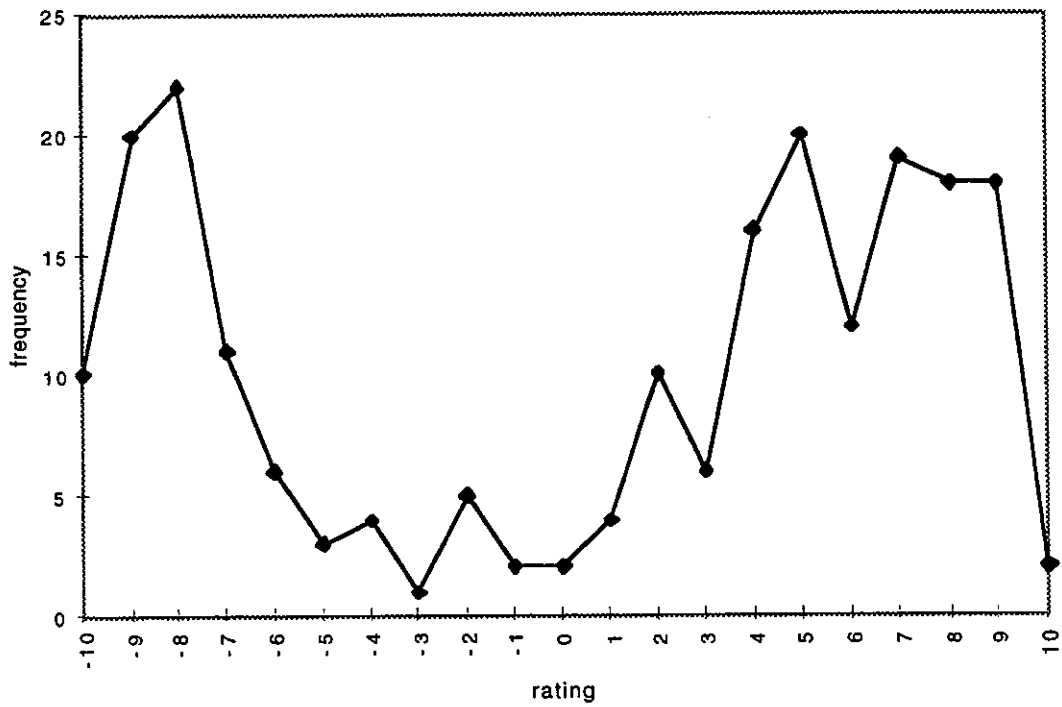
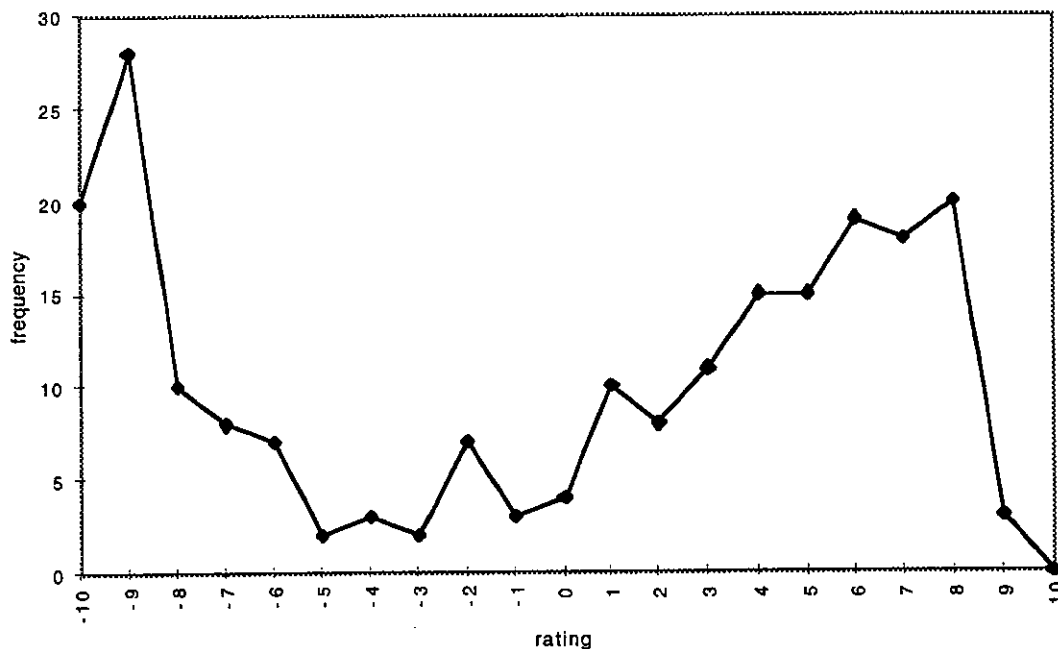


Figure 6: Frequency Distribution of Rating for 1992 - 1995



7.2.2. Using Ratings for Hypothesis Testing

Interpreted as measures of legislators' preferences the ratings can also be used as quantitative variables in empirical tests of hypotheses that involve legislative (political) preferences. To illustrate these applications two examples are outlined subsequently.

a) Ideology versus Self-Interest

Do elected representatives vote strictly in terms of constituents' interests? Or does ideology affect their voting behavior, in the sense that personal value judgements are exercised? There exists a considerable debate on this in the Public Choice literature.²³

The concept of ideology as it is utilized in this literature starts from the principal-agent relationship between voters and legislators. Legislators in their role as agents may either be effectively controlled by their principals, or they may enjoy discretion because of ineffective monitoring.

In the case of *effective monitoring* the legislators' behavior will simply reflect the voters' interests. Though voters are normally assumed to be privately interested, it cannot be excluded that they are also publicly interested. Publicly interested behavior of legislators which is due to catering to the voters' demand is not

²³ See e.g. the contributions in volume 76 of the Public Choice journal issued in 1993.

considered as ideology in Public Choice. In empirical research the voters' private *and* public interests have to be filtered out from the agent's behavior.

Because of imperfect information and rational ignorance *discretion* may frequently be available to actions in political markets. (Rowley 1992 100) Any slack in the principal-agent relationship allows for discretionary consumption by the agent. The legislator can use the discretion to pursue economic or nonideological goals. Or he can rationally promote altruistic-ideological, self-defined notions of the 'public interest'. Only the latter constitutes ideological shirking by the legislator.

Hence, ideology occurs if there exists a principal-agent relationship where the agent (legislator) enjoys discretion and where he uses this discretion to pursue the 'public interest'.

Pure ideology is the manifestation of public interest and altruism in the political sector.²⁴ Just as tastes as well as opportunities affect ordinary consumption decisions, a legislator's ideology will affect his voting behavior. (Nelson/Silberberg 1987 16)

To test for the presence of pure ideology in the legislature the following statistical model is postulated (Peltzman 1984 181):

$$Y = DX + CI + \text{error term}$$

The probability Y that a legislator will vote 'yes' on a particular issue is a function of an 'economic interest' X and its ideology I . D and C are the parameters to be estimated.

Since neither X nor I is directly observable, the following regression is estimated to determine how much of the variation in Y can be explained by 'interest' and how much by 'ideology':

$$y = dM + cR$$

y is a dummy variable that equals 1 if the legislator votes 'yes' and equals 0 if he votes 'no' on a particular issue.²⁵ M is a vector of economic and ideological characteristics related to constituents' demand for votes. It contains all the economic and ideological interests of those individuals and groups in the constituency who have a stake in the particular issue. R is some

²⁴ Kalt/Zupan (1984 281) define political ideologies as "more or less consistent sets of normative statements as to best or preferred states of the world. Such statements are moralistic and altruistic in the sense that they are held as applicable to everyone, rather than merely to the actor making the statements. Accordingly, political ideologies are taken here to be statements about how government can best serve their proponents' conceptions of the public interest."

²⁵ Since the dependent variable (voting 'yes' or 'no') is a qualitative variable logit estimation techniques have to be used.

crude ideology measure for the legislator. Usually, legislative ratings (such as the ADA rating, the LCV rating, the COPE rating) are chosen to measure R. (Kau/Rubin 1979 369)

R is an impure measure of a legislator's ideology, since it may also reflect apparent ideology that is in fact proxying for constituents' interests. The residualization technique is used to get a 'pure' measure of ideology. (Kau/Rubin 1979 370) The crude ideology measure R is regressed on a list of economic variables to split measured ideology into that part that can be explained by constituent characteristics and the remaining legislator-specific residual component. The residual is then interpreted as a 'pure' measure of ideology and is substituted into the above model (in place of R) to see whether it has any explanatory power.

The main problem is the one of left-out variables: what looks like legislator ideology may simply reflect left-out economic or ideological interests. By further fishing for relevant economic variables, reflecting 'constituent interests', the importance of the residual or ideology variable may be further reduced. (Peltzman 1984 and 1985) Therefore, it is still an unresolved issue whether a significant coefficient for an ideology variable indicates 'ideological shirking' by legislators. (Nelson/Silberberg 1987 15)

Further complications arise if the possibility of interstate lobbying and logrolling is taken into account (Kalt/Zupan 1984 288-289), or if a legislator's vote has to be interpreted as a signal of party loyalty (Crain 1990). Logrolling can be tested for by using conditional logit estimates, where votes are treated as a function of each other. (Kau/Rubin 1979)

b) 'Old' versus 'New' Theory of Bureaucracy

The question whether government agencies are independent of or controlled by their principals is the subject of the controversy between 'old' and 'new' theory of bureaucracy. The 'old' theory of bureaucracy argues that legislators lack incentives to monitor and influence agency policy so that government agencies operate independently of the legislature. This view has been challenged by the theory of legislative control - which is also referred to as the 'new' theory of bureaucracy here. (Weingast/Moran 1983) Building on principal-agent models this theory argues that principals are able to control their agents effectively. To determine which model is superior quantitative evidence is needed.

The major refutable comparative statics prediction of the legislative control model is that as preferences of the relevant legislative oversight committee(s) change, agency behavior will

change, too. The main difficulty with an empirical test of this hypothesis is the measurement of political preferences and changes thereof.

It is exactly here where ratings can be employed as dependent variables. Agency behavior is explained with (changes) in preferences - as measured by (changes in) the ratings - and some more control variables that depend on the specific agency under investigation.

Empirical tests of the 'new' theory of bureaucracy employing such ratings are performed for instance by Weingast/Moran (1983), Moe (1985), Grier (1991), Rowley/Thorbecke (1993), and Vachris (1996).

Jeitziner (1996) tests the legislative control model for the Swiss legislature. Using the ratings developed for members of the National Council, it is analyzed whether the whole chamber or specialized legislative committees thereof exert any influence on Swiss monetary policy.

8. Conclusions

Party affiliation as the standard measure of political preferences of Swiss legislators is associated with several problems: It is unreliable because of low party-loyalty. It does not allow for a measurement of intra-party differences. It exhibits hardly any variation over time. And because of the existence of a multiparty system it is difficult to locate political parties in the policy space.

To overcome these problems, alternative measures for political preferences are developed. One alternative measure are ratings for individual legislators. Starting from a discussion of the basic ingredient, the roll-call votes, it is explained in detail how such ratings can be constructed for Swiss legislators. The limitations of the resulting ratings are carefully discussed, before some applications are outlined.

In the U.S. the construction of ratings is motivated by the interests of lobby groups. The ratings for Swiss legislators presented here are developed for scientific purposes. Nevertheless, they can also represent a valuable source of information for all participants in the Swiss political market place. The negative aspects of "apostrophizing and classifying legislators" (AB 1984 1914) can be avoided if the ratings are established in a representative manner.

References

ADA Today. A Newsletter for Liberal Activists.

Amtliches Bulletin der Bundesversammlung (AB). Nationalrat. Different volumes.

Barone, Michael, and Grant Ujifusa, *The Almanac of American Politics* 1990. Washington 1989.

Becker, Gary S., "A Theory of Competition Among Pressure Groups for Political Influence", *Quarterly Journal of Economics* 98, No. 3, August 1983, 371-400.

Benson, Bruce L., "Why are Congressional Committees Dominated by 'High-Demand' Legislators? - A Comment on Niskanen's View of Bureaucrats and Politicians", *Southern Economic Journal* 47, No. 1, 1981, 68-77.

Bundesgesetz über den Geschäftsverkehr der Bundesversammlung sowie über die Form, die Bekanntmachung und das Inkrafttreten ihrer Erlasse (Geschäftsverkehrsgesetz) (Federal Law of the Legislature) vom 23. März 1962. (Stand am 1. Januar 1995).

Crain, Mark W., "Legislative Committees: A Filtering Theory", in W. Mark Crain and Robert D. Tollison (eds.), *Predicting Politics*. Ann Arbor 1990, 149-166.

Fuchs, Jakob, *Staatskunde*. 4. Aufl., Rothenburg 1992.

Gabriel, Jürg M., *Das politische System der Schweiz*. 4. Aufl., Bern 1993.

Geschäftsreglement des Nationalrates vom 22. Juni 1990 (Stand am 1. Juli 1995).

Geschäftsreglement des Ständerates vom 24. September 1986 (Stand am 1. Januar 1995).

Grier, Kevin B., "Congressional Influence on U.S. Monetary Policy", *Journal of Monetary Economics* 28, 1991, 201-220.

Hohl, Tobias, *Messung von Politikerpräferenzen*. Lizentiatsarbeit, Universität Freiburg 1996.

Jeitziner, Bruno, "Legislative Influence on Monetary Policy? The Case of Switzerland", Working Paper, Seminar für Wirtschafts- und Sozialpolitik der Universität Freiburg/Schweiz, Freiburg 1996.

Kau, James B., and Paul H. Rubin, "Self-Interest, Ideology, and Logrolling in Congressional Voting", *Journal of Law and Economics* 22, 1979, 365-384.

Kalt, Joseph P., and Mark A. Zupan, "Capture and Ideology in the Economic Theory of Politics", *American Economic Review* 64, 1984, 279-300.

Kleinewefers, Henner, "Skizze eines dynamischen Modells der Wählerzufriedenheit und der Stabilität parlamentarischer Demokratien", *Jahrbuch für Sozialwissenschaft* 43, H. 1, 1992, 108-129.

Krehbiel, Keith, "Are Congressional Committees Composed of Preference Outliers?", *American Political Science Review* 84, No. 1, March 1990, 149-163.

Lüthi, Ruth, Luzius Meyer, und Hans Hirter, "Fraktionsdisziplin und die Vertretung von Partikulärinteressen im Nationalrat", in *Parlamentdienste* (Hrsg.), *Das Parlament - oberste Gewalt des Bundes*. Bern 1991, 53-72.

Moe, Terry M., "Control and Feedback in Economic Regulation: The Case of the NLRB", *American Political Science Review* 79, No. 4, December 1985, 1094-1116.

Nelson, Douglas, and Eugene Silberberg, "Ideology and Legislator Shirking", *Economic Inquiry* 25, January 1987, 15-25.

Peltzman, Sam, "Constituent Interest and Congressional Voting", *Journal of Law and Economics* 27, April 1984, 181-210.

Peltzman, Sam, "An Economic Interpretation of the History of Congressional Voting in the Twentieth Century", *American Economic Review* 75, No. 4, September 1985, 656-675.

Rowley, Charles K., *The Right to Justice*, Edward Elgar 1992.

Rowley, Charles K., and Willem Thorbecke, "The Role of the Congress and the Executive in U.S. Trade Policy Determination: A Public Choice Analysis", in Meinhard Hilf and Ernst-Ulrich Petersman (eds.), *National Constitutions and International Law*. Dordrecht 1993, 347-370.

Seeger, Hans, *Das Gesetzgebungsverfahren in der schweizerischen Bundesversammlung*. Dissertation, Bern 1915.

Shepsle, Kenneth A., *The Giant Jigsaw Puzzle. Democratic Committee Assignments in the Modern House*. Chicago and London 1978.

Vachris, Albert M., "Federal Antitrust Enforcement: A Principal-Agent Perspective", *Public Choice* 88, 1996, 223-238.

Vasella, Marco, *Die Partei- und Fraktionsdisziplin als staatsrechtliches Problem*. Winterthur 1956.

Weingast, Barry R., and Mark J. Moran, "Bureaucratic Discretion or Congressional Control? Regulatory Policymaking by the Federal Trade Commission", *Journal of Political Economy* 91, No. 5, 1983, 765-800.

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