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#### 4. Institutions matter for procedural utility: an econometric study of the impact of political participation possibilities

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##### 1. INTRODUCTION

Comparative institutional analysis judges institutions according to their contribution to human welfare. In economics, human welfare is normally evaluated by looking at individual income or measures such as the gross domestic product. Thus standard analysis only considers the outcome of different mechanisms of decision making. It neglects that people partly judge the *process* of decision making independent of the outcome. In addition to this alternative conceptual view referring to procedural utility, direct measures of subjective well-being offer new opportunities for empirical research of individual welfare.

Here *procedural utility* reaped from democratic decision making is theoretically discussed and empirically identified. Procedural utility goes beyond the utility gained from the favourable outcome that is generated by democratic institutions. A fundamental characteristic of democracy is the involvement of citizens in political decision making. Citizens have the possibility of participating in politics and thus the public or political sphere becomes responsive to them. This empowerment (see for example World Bank, 2000) is hypothesised to increase citizens' belief in political influence and, moreover, their subjective well-being.

In a cross-regional study for Switzerland, the effects of direct democratic

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participation possibilities on reported satisfaction with life and the reported belief of political influence are analysed. To identify procedural utility, we consider people's nationality. As political participation in initiatives and referenda is restricted to Swiss nationals, only they can reap the respective procedural utility. We find supporting evidence that citizens gain more life satisfaction from direct democracy than foreigners. It is also shown that people think that they have more political influence in jurisdictions with more extended political participation possibilities. This effect is larger for citizens than for foreigners. However, the difference is small and not statistically significant. The two empirical findings go beyond previous results on the favourable effects of direct democratic decision making on political outcomes (for surveys see Eichenberger, 1999; Kirchgässner et al., 1999). Such findings are in line with previous research on procedural aspects of direct democracy. The discussion endogenously brought about by initiatives and referenda strengthens co-operation between 'winners' and 'losers' of a political decision, because both feel that their preferences have been seriously taken into account in a fair political process (Frey, 1994). This notion of procedural justice affects behaviour, for example with regard to tax compliance (Pommerehne and Weck-Hannemann, 1996; Frey, 1997).

The chapter proceeds as follows. Section 2 categorises the concept of procedural utility in economic research and puts forward subjective well-being measures for empirical work. In Section 3, the relationship between procedural utility and political participation possibilities is discussed. The section closes with two hypotheses. The empirical analysis is presented in Section 4. First, an index for political participation possibilities and measures for life satisfaction and the belief in political influence are discussed. Additionally, a descriptive analysis offers first evidence. Secondly, multiple regression analyses are conducted to control for correlated effects. Section 5 draws conclusions.

## 2. PROCEDURAL UTILITY

Democratic institutions structure the *process* of political decision making that is judged by the people independently of the generated political outcome. In this procedural view, people gain utility from the process itself. In the following sections, procedural utility is first discussed from a general perspective and is then applied to the possibilities of political participation.

The concept of procedural utility is a completely different approach to human well-being than the standard outcome oriented approach in social science research. On the one hand, research in the latter approach follows the tradition of Benthamite utility. It focuses on individual pleasures and pains. On

the other hand, choices between possible outcomes are the basis for inferring utility or expected utility in the standard economic concept. Both approaches, Bentham's 'experienced utility' and 'decision utility', are purely outcome oriented (see Kahneman et al., 1997 for these terms). Therefore, Sen (1995) argues that procedural utility, for example in the case of gambling, is necessarily excluded from von Neumann–Morgenstern utilities.

Procedural utility refers to the pleasure and displeasure of a process as opposed to that of consequences. This utility has rarely been included in economic theory and empirical research. A recent exception is Le Menestrel (2001), who offers axioms for a model of rational behaviour combining processes and consequences. In other social sciences than economics, procedural utility has a long tradition and refers to the concept of Aristotelian eudaimonic well-being. In research done by social psychologists, for example, well-being consists of actualisation of human potentials (Ryff and Singer, 1998), of self-determination (Ryan and Deci, 2000) or of personal control (Grob, 2000; Peterson, 1999; Seligman, 1992).

*Empirical* research on individual welfare usually relies on measures, such as income, which are assumed to be close proxies to utility. Survey studies on subjective well-being, however, have shown that income is only weakly correlated with reported individual life satisfaction or happiness, and that in industrial countries the two measures of subjective well-being have been stable over time, despite marked growth of wealth per capita (see Frey and Stutzer, 2002 for a survey). Therefore, here we only rely on survey measures of subjective well-being. For outcome utility, people are usually asked to state their satisfaction with life or their happiness. For procedural utility, additional questions to do with human actualisation and self-determination are included in the surveys. It has been shown that the measures for both concepts are correlated (Compton et al., 1996). Thus, general questions on subjective well-being capture elements of outcome as well as procedural utility. It is difficult to disentangle them empirically. Therefore the conditions to identify procedural utility in the political process are discussed extensively in the next section.

## 3. PROCEDURAL UTILITY AND POLITICAL PARTICIPATION POSSIBILITIES

Political philosophers argue that procedural utility is derived from the democratic process. Special emphasis is put on individuals' possibilities to participate in the political process (Barber, 1984; Keim, 1975; Morell, 1999; Pateman, 1970). With regard to direct democracy, Cronin (1989) notes, for example, that 'giving the citizen more of a role in governmental processes might lessen alienation and apathy' (p. 11). Moreover, the political discussion

induced by initiatives and referenda generates a common understanding for different political opinions and positions. This strengthens the social contract based on consensus and motivates people to act beyond narrow self-interest (Bohnet and Frey, 1994). Participation possibilities are thus considered an important source of perceived procedural fairness shaping individual behaviour. It has, for example, been shown that with more extensive democratic participation rights, people have higher tax morale and evade taxes less (Frey, 1997).

Research on 'procedural fairness' has previously been extensively undertaken by social psychologists (in particular Lind and Tyler, 1988; Tyler and Blader, 2000). They are able to show that people are at least as concerned with procedural justice as with the outcomes of these procedures. They evaluate procedures not only according to the results they yield but by the relational information that they convey, such as assessments of impartiality, trustworthiness of superiors and authorities, and the extent to which individuals perceive themselves to be treated with respect.

Here, procedural justice is evaluated with regard to utility. Political participation possibilities contribute to what Lane (1988) calls procedural goods of democracy. These contain, for example, dignity goods such as self-respect, feeling of personal control or understanding and public resonance. Democracy can further provide utility if it offers relief from procedural pain (e.g. fear, embarrassment or humiliation) or if it directly generates intrinsic pleasure, for example, by facing and meeting a challenge or by expressing oneself (Lane, 1988, pp. 179–85, see also Lane, 2000, chapter 13).<sup>1</sup>

In order to differentiate procedural utility from outcome utility, an identifying criterion has to be found. In this chapter, the status of citizenship is considered. In most countries, the status of being a national fundamentally differs from that of foreigners by having the possibility to vote. In many other ways, the law demands that they are treated equally. Thus, for example, they have the same human rights and, once admitted into the country, they have (with few exceptions) the same rights to participate in economic affairs. It cannot, of course, be denied that the national legislation and political decisions tend to be rigged in favour of nationals. However, it follows that, on average, the nationals derive more utility from political participation possibilities than foreigners do, provided nationals enjoy both outcome and process utility while the foreigners only enjoy outcome utility.

The distinction between nationals and foreigners is largely exogenous. Whether a person may become a citizen is determined by the law, in particular the requirement of having stayed in the host country for a sufficient number of years, having sufficient mastery of the local language and of the content of the constitution. Only after these stringent requirements have been met, does the individual have the choice of whether to become a citizen or not. Of

course, whether those persons eligible for citizenship indeed accept it, depends *inter alia* also on their expected procedural utility, that is their wish to become a community member with full participation rights. Thus, some will decide not to change their citizenship. Becoming a citizen is more or less automatic for young persons and spouses once the head of the household has decided to do so. Resident citizens have no possibility of choosing their status of citizenship. They cannot give up their current citizenship without relocation. The distribution of residents in a country between the two categories, foreigners and citizens, thus strongly reflects formal exogenous criteria for citizenship and not revealed preferences for procedural goods. As a result of these considerations, one may assume that the distinction between nationals and foreigners influences the extent to which one benefits from outcome and process utility.

According to the previous discussion the following general hypothesis can be formulated:

Citizens value the possibility of engaging themselves directly in politically relevant issues, irrespective of the outcome.

Moreover, two empirically testable hypotheses can be put forward. Hypothesis I captures procedural utility in terms of subjective well-being.

*Hypothesis I.* The utility derived from the possibility of participating in the direct democratic process supports the subjective well-being of the citizens. Foreigners living in the same country, who are excluded from this process, experience lower happiness compared to the citizens.

A procedural 'good' that may mediate procedural utility from political participation possibilities is people's feeling of political effectiveness (see for example Bowler and Donovan, 2001). In Hypothesis II, this effectiveness is measured with survey data on people's reported belief that they exert some political influence.

*Hypothesis II.* The possibility of participating in political decision making increases people's belief that they exert some political influence. Foreigners, who do not have formal political participation rights, think that they have no political influence.

In both hypotheses, the strategy to identify procedural utility is based on the formal distinction between citizens and foreigners. The corresponding statistical approach is in analogy to the difference-in-differences estimator for time series. In a crude formulation, procedural utility is the additional positive effect of more extended political participation possibilities on citizens' well-being compared to that of foreigners (Hypothesis I). Or, an indicator for procedural utility is the difference between the increase in people's reported belief

in their political influence due to more extended political participation possibilities for citizens and non-citizens, respectively (Hypothesis II).

#### 4. EMPIRICAL ANALYSIS

##### 4.1 Data and Descriptive Analysis

###### Political participation possibilities

It is hypothesised that citizens gain procedural utility from political participation possibilities. In Switzerland, there are several ways of engaging directly in the political process at three state levels over and above regular elections. The most important are the direct democratic instruments. They exist at the national level as well as at the level of the 26 cantons (states). Here the cantonal level is considered because the participation rights differ considerably between them. In cantons, the major direct democratic instruments are the popular initiative to change the canton's constitution or laws, a compulsory and optional referendum to prevent new laws, or the changing of existing laws, and an optional financial referendum to prevent new state expenditure. Due to the federal structure of Switzerland, major areas of competence reside within the cantons and, thus, there is a high potential influence of direct legislation on the outcome of the political process in Swiss cantons. However, citizens' access to the instruments mentioned above differs substantially from one canton to another. Thus, for example, the number of signatures required to launch an initiative or an optional referendum, or the time span within which the signatures have to be collected, varies. A referendum on public expenditures may be launched with different levels of additional outlays. We construct an index designed to reflect the extent of direct democratic participation possibilities in the 26 cantons (for details of the index construction, see the Appendix). This index is defined using a six-point scale, with 1 indicating the lowest, and 6 the highest degree of participation possibilities for the citizens.

The variation in citizens' possibilities in political participation is necessary to test our two hypotheses on the effects of these possibilities on subjective well-being and on the belief in one's political influence.

###### Subjective well-being

Hypothesis I is tested with data on people's reported subjective well-being or 'happiness'. In a number of studies, the validity of these survey measures has been documented. Happy people are, for example, more often smiling during social interactions (Fernández-Dols and Ruiz-Belda, 1995) and are rated as happy by friends and family members (Sandvik et al., 1993), as well as by spouses (Costa and McCrae, 1988). Furthermore, the measures of subjective

well-being reflect life-changes (Ehrhardt et al., 1999), persons' recall of positive versus negative life-events (Seidlitz et al., 1997) and are, to a large extent, unbiased with regard to social desirability (Konow and Earley, 1999). But there is, of course, room for methodological concerns (for example Diener et al., 1999, pp. 277–8).

The survey at hand is the result of more than 6000 interviews with residents of Switzerland, collected by Leu et al. (1997)<sup>2</sup> The proxy measure for individual utility is based on the answers to the following question: 'How satisfied are you with your life as a whole these days?' Simultaneously, the respondents were shown a table with a 10-point scale of which only the two extreme values ('completely dissatisfied' and 'completely satisfied') were verbalised. The survey found a high general life satisfaction in Switzerland, with an average of 8.2 out of 10 points.

According to Hypothesis I, more extended participation possibilities are expected to increase reported satisfaction with life, due to a larger gain in procedural utility. In Table 4.1, the difference in life satisfaction between residents living in cantons with weak participation possibilities (index of participation possibilities is lower than 4) and with strong participation possibilities is listed. On average, residents with strong participation rights report a 0.22 point higher well-being. However, this calculated difference may also be due to a favourable outcome of the political process. There is ample evidence that, in more direct democratic jurisdictions, the outcome of the political process is closer to the wishes of the residents (see for example the surveys by Eichenberger, 1999 and Kirchgässner et al., 1999). To differentiate between

Table 4.1 Political participation possibilities and satisfaction with life, descriptive statistics

	Political participation possibilities		Difference
	Weak	Strong	
Whole sample	8.099 (0.033)	8.318 (0.029)	0.218 (0.044)
Foreigners	7.625 (0.090)	7.602 (0.104)	-0.023 (0.136)
Swiss citizens	8.176 (0.036)	8.402 (0.029)	0.226 (0.046)
Difference	0.551 (0.096)	0.800 (0.092)	0.249 (0.133)

Note: Standard errors in parentheses.

Data source: Leu et al. (1997).

outcome and procedural utility, the proposed identification criterion of people's nationality is considered. As foreigners are excluded from political participation rights, but not from the outcome of the political process, differences in levels of satisfaction between citizens and foreigners in cantons with weak and strong participation possibilities have to be compared. Where participation rights are weak, a difference in well-being between Swiss citizens and foreigners of 0.55 points is measured. The corresponding difference in cantons with extended direct democratic rights is 0.80 points. Both gaps in subjective well-being are due to differences in individual characteristics, incomplete assimilation and, above all, citizens' opportunity to reap procedural utility. The difference-in-differences between cantons with weak and strong participation possibilities then reflects the gain in procedural utility of citizens due to more extended participation possibilities (provided that individual characteristics and incomplete assimilation are distributed equally across cantons). The raw data show a large effect of procedural utility in terms of reported satisfaction with life, namely 0.25 points.<sup>3</sup> A multiple regression analysis has to test whether this result still holds if individual characteristics are controlled for. An ordered probit estimation and extended discussion of the result is provided in subsection 4.2.

### Belief in political influence

Hypothesis II considers what people think about their political influence. This belief can be captured in surveys. We use answers to the following question: 'How much influence do you think someone like you can have on government policy?'. Respondents indicate their belief on a scale from 0 'no influence' to 10 'very strong influence'. The data are part of the first wave of the Swiss Household-Panel conducted in 1999/2000, in which 7521 people were interviewed and responded to the question about political influence. They believe, on average, that they have a political influence of 3.13 (with a standard deviation of 2.66) on the scale from 0 to 10.

Hypothesis II puts forward that people's belief in political influence is increased by more extended participation possibilities in political decision making. This hypothesis is not trivial, because it is sometimes argued that direct democratic participation possibilities 'disturb' the representative democratic process of elected politicians to follow the will of the voters. Critics of direct democracy often argue that political pressure from interest groups and random decisions in referenda by badly informed voters worsen the outcome of the political process and actually reduce the impact of citizens. An empirical test of Hypothesis II is thus also a test of this alternative argument.

The first row of Table 4.2 compares people's belief in their political influence in cantons with strong and weak participation possibilities. The

Table 4.2 Political participation possibilities and the belief of political influence, descriptive statistics

	Political participation possibilities		Difference
	Weak	Strong	
Whole sample	2.836 (0.044)	3.408 (0.043)	0.572 (0.061)
Foreigners	1.998 (0.132)	2.052 (0.144)	0.054 (0.196)
Swiss citizens	2.950 (0.046)	3.544 (0.044)	0.593 (0.064)
Difference	0.953 (0.134)	1.492 (0.146)	0.539 (0.199)

Note: Standard errors in parentheses.

Data source: Swiss Household-Panel, 1999.

extent of participation possibilities is again measured with the index discussed above, whereby cantons with an index below (above) 4 are considered as the ones with weak (strong) possibilities. It shows that people in jurisdictions with developed participation possibilities report, on average, 0.57 index points higher belief in one's political influence than people with weak participation possibilities. However, perceived political influence may also be higher because the outcome of the political process corresponds better to people's preferences in these jurisdictions. In order to isolate the effect of the procedural differences from outcome considerations, the belief in political influence of citizens and foreigners is compared. As foreigners have no formal participation rights in political decision making, their perceived effectiveness in politics is assumed to be independent of the variation in the extent of participation rights across cantons. In the first column, capturing respondents living in cantons with weak participation possibilities, citizens think that they have, on average, a 0.95 points higher political influence than foreigners. In cantons with strong participation possibilities, this difference is 1.49 points. Thus the difference-in-differences estimate for the belief in political influence due to more extended participation rights is 0.54 points. This result is consistent with a gain in procedural utility by the citizens from political participation possibilities, as put forward in Hypothesis II.

In the next section, the robustness of this result is studied in a multiple regression analysis controlling for a large number of individual characteristics.

## 4.2 Multiple Regression Analysis

The descriptive analysis presented above offers preliminary evidence for positive procedural utility caused by more extended political participation possibilities for both measures: reported satisfaction with life and people's belief in their political influence. A multiple regression analysis has to show whether these results are robust. Once more a difference-in-differences estimation strategy is applied to identify procedural utility. Technically, an interaction term is included in the estimation equation that combines the variable that captures the proposed source of procedural utility with the identifying criterion. Here, the identifying characteristic is being a Swiss national or a foreigner. For the institutional variable political participation possibilities, the full variation on the index scale from 1 to 6 is considered.

### Political participation possibilities and subjective well-being

Table 4.3 refers to Hypothesis I and presents the estimated coefficients and marginal effects of a microeconomic well-being function, taking into account political participation possibilities in addition to a large set of control variables. In order to exploit the ranking information contained in the originally scaled dependent variable, a weighted ordered probit model is applied. The weighting variable used allows representative results on the individual level for Switzerland.<sup>4</sup> Throughout the remainder of the chapter, we use a robust estimator of variance because random disturbances are potentially correlated within groups or clusters. Here, dependence refers to residents of the same canton.<sup>5</sup>

The estimation results show sizeable effects for both variables considered in Hypothesis I (see the top of Table 4.3). The overall effect of participation rights on reported satisfaction with life is positive. In an ordered probit estimation, a positive coefficient indicates that the probability of stating a well-being greater than or equal to any given level increases. This positive effect can be attributed to a gain in outcome or procedural utility in cantons with more extended participation rights. The interaction term in the second row reveals the difference in the positive effects for Swiss citizens and foreigners. The negative coefficient indicates that foreigners gain less from stronger participation rights than the people in the reference group, that is the citizens. This result is consistent with Hypothesis I that foreigners reap less procedural utility from direct democratic participation possibilities than Swiss nationals. If it is further assumed that foreigners do not reap any procedural utility at all, but cannot be excluded from the outcome of the political process, the relative size of procedural utility can be assessed. A comparison of the negative coefficient of the interaction variable, which under these assumptions captures procedural utility, and the coefficient for the variable participation possibilities, which captures combined

Table 4.3 Procedural utility: political participation possibilities and satisfaction with life

	Coefficient	Dependent variable: satisfaction with life	
		T-value	Marginal effect (score 10)
Political participation possibilities	0.097	3.223	0.033
Political participation possibilities × foreigner	-0.067	-1.749	-0.023
<i>Socio-demographic characteristics</i>			
Age 30–39	-0.089	-0.998	-0.030
Age 40–49	-0.013	-0.169	-0.004
Age 50–59	-0.009	-0.149	-0.003
Age 60–69	0.302	4.244	0.108
Age 70–79	0.378	4.514	0.137
Age 80 and older	0.355	3.067	0.130
Female	0.033	1.019	0.011
Foreigner	-0.042	-0.287	-0.014
Bad health	-0.434	-7.631	-0.132
Middle education	0.077	2.217	0.026
High education	0.039	0.875	0.014
Separated, without partner	-0.590	-2.298	-0.163
Separated, with partner	-0.664	-1.823	-0.177
Widowed, without partner	-0.204	-4.015	-0.066
Widowed, with partner	0.078	0.511	0.027
Divorced, without partner	-0.348	-4.144	-0.107
Divorced, with partner	-0.094	-0.735	-0.031
Single, without partner	-0.175	-2.549	-0.058
Single, with partner	-0.085	-1.373	-0.028
Self-employed	0.056	1.061	0.019
Unemployed	-0.780	-4.564	-0.201
Student	-0.022	-0.238	-0.008
Housewife	0.119	2.086	0.042
Retired	-0.157	-2.584	-0.053
Other employment status	0.082	0.599	0.029
Equiv. income SFr. 2000–3000	0.065	1.861	0.022
Equiv. income SFr. 3000–4000	0.121	2.659	0.042
Equiv. income SFr. 4000–5000	0.259	4.665	0.093
Equiv. income SFr. 5000 and more	0.184	3.539	0.065
Member in associations	0.167	6.976	0.057
Urbanisation	-0.057	-1.340	-0.020
<i>Language</i>			
French-speaking canton	-0.075	-0.957	-0.025
Italian-speaking canton	0.297	4.302	0.108
Number of observations		6124	

Notes: Standard errors are adjusted for clustering on 26 cantons. In the reference group are 'people younger than 30', 'men', 'Swiss', 'healthy people', 'people with low education', 'married people', 'employed people', 'people with a lower equivalence income than SFr. 2000', 'people who are neither active nor passive members of associations', 'people living in non-urban areas' and 'people living in a German-speaking canton'.

Data source: Leu et al. (1997).

outcome and procedural utility, shows that two-thirds of the positive effect of more extended political participation possibilities are due to procedural utility and one-third stems from outcome utility.

A useful interpretation of the size of the effects is provided by the marginal effects. The marginal effect indicates the change in the proportion of persons belonging to a stated satisfaction level when the independent variable increases by one unit.<sup>6</sup> In the case of dummy variables, the marginal effect is evaluated with regard to the reference group. For simplicity, only the marginal effects for the top class of complete satisfaction with life (score 10) are shown in Table 4.3. An increase in the index of participation possibilities by one point raises the proportion of persons indicating very high satisfaction with life by 3.3 percentage points. For foreigners, however, this effect is smaller, as the interaction term has to be considered, so 2.3 percentage points of the increased probability to report maximum subjective well-being cannot be reaped by the foreigners. In our interpretation, this is because they are excluded from the political process and thus from procedural utility.

The effect of procedural utility as reflected in reported life satisfaction is in itself sizeable. This can be seen from a comparison with marginal effects for numerous control variables. The marginal effect capturing procedural utility is, for example, as large as the effect of living in the second-bottom (Sfr. 2000–3000) instead of the bottom income category (< Sfr. 2000). The effect is even larger when the total variation in participation possibilities is considered, that is when citizens in canton Basel Land (with the highest index for political participation possibilities, 5.69) are compared to citizens in canton Geneva (with the lowest index for political participation possibilities, 1.75). The former reap procedural utility that increases their probability to be completely satisfied by approximately 11.7 percentage points.

The results discussed so far hold *ceteris paribus*, that is a large number of determinants or correlates of happiness are controlled for. Most important are individual socio-demographic characteristics. In the estimation equation, the respondent's age, gender, health status, education level, civil status, employment status and household income are considered. The results for these variables are discussed in Frey and Stutzer (2000) and are in size and direction similar to those found in other microeconomic happiness functions (see, for example, Blanchflower and Oswald, 2000). In addition, four variables are included in the equation in Table 4.3 that control for three potential alternative explanations. First, a dummy variable for people's participation in clubs or associations is used to test whether in cantons with stronger participation possibilities citizens may have accumulated more Putnam (2000) style social capital and thus enjoy higher subjective well-being than citizens in cantons with less extended democratic participation possibilities. Second, a dummy variable for living in an urban area is included to investigate the argument that

direct democratic participation possibilities could be weaker in urban areas where most of the foreigners live and thus the raw effect may reflect urbanisation. Third, dummies for the language that is spoken in the canton are included in order to test whether the patterns in the descriptive statistics may capture cultural differences within Switzerland instead of institutional variation. However, even controlling for these factors, political participation possibilities have a sizeable effect on individual procedural utility.

### Political participation possibilities and people's belief in their political influence

The descriptive analysis in Section 4.1 showed that citizens are perceived to have more political influence than foreigners and that the difference is larger in cantons where citizens have more extended possibilities of participating in political decision making. This result is tested in a multiple regression approach in order to control for alternative explanations of the result. Similar control variables to the previous equation are included and the same econometric approach using ordered probit estimation is applied. The results of the micro-econometric estimation are presented in Table 4.4.

More extended political participation possibilities increase people's belief that they exert some political influence, *ceteris paribus*. The effect is smaller for foreigners, as indicated by the negative interaction effect between participation possibilities and being a foreigner. However, the interaction effect is not statistically significantly different from zero. Although a direct interpretation of the survey question would indicate higher procedural utility due to a higher perceived political influence in cantons with more extended political participation possibilities, the effect could also be due to outcome consideration. In cantons with stronger direct democratic participation possibilities, the outcome of the political process is closer to people's wishes and thus they perceive higher effectiveness. Our strategy to disentangle outcome and procedural effects using citizenship as an identifying criterion gives no clear answer. The coefficient of the interaction variable fails to be well determined. Its size is about one-third of the size of the coefficient for the general effect.

The general effect on citizens' perceived political influence is quite sizeable. If the marginal effect for the full variation of political participation possibilities is considered, the effect on what people think about their political influence (0.032) is almost half the size of having high education rather than low education (0.075). A marginal effect of 0.032 indicates that the proportion of people who believe they have political influence above 5 is increased by 3.2 percentage points, that is from a base probability of 18.5 per cent to 21.7 per cent.

For the interaction variable, the marginal effect for a one index point

Table 4.4 *Procedural utility: political participation possibilities and the belief of political influence*

	Dependent variable: belief of political influence		
	Coefficient	T-value	Marginal effect (scores 5 to 10)
Political participation possibilities	0.031	2.440	0.008
Political participation possibilities × foreigner	-0.011	-0.356	-0.003
<i>Socio-demographic characteristics</i>			
Age	-0.006	-4.363	-0.002
Female	-0.095	-2.513	-0.025
Middle education	0.157	3.458	0.042
High education	0.260	7.550	0.075
Foreigner	-0.449	-3.392	-0.101
Single	0.078	1.851	0.021
Separated	0.151	1.446	0.043
Divorced	0.008	0.131	0.002
Widowed	-0.173	-2.987	-0.043
Part-time paid work	0.026	0.602	0.007
School or apprenticeship	0.075	1.332	0.020
Work in the family company	0.030	0.285	0.008
Work in protected atelier	-0.546	-0.649	-0.110
Work at home	0.054	1.378	0.015
Retired	-0.023	-0.411	-0.006
Unemployed	-0.057	-0.440	-0.015
Other occupation status	-0.107	-0.921	-0.027
<i>Member in associations</i>			
Local or parents assoc. (active member, am)	0.172	3.393	0.049
ditto (passive member, pm)	0.015	0.283	0.004
Cultural assoc. (am)	0.069	2.209	0.019
ditto (pm)	0.133	3.562	0.037
Syndicate (am)	0.160	2.826	0.045
ditto (pm)	0.074	1.376	0.020
Political party (am)	0.409	8.994	0.126
ditto (pm)	0.265	4.849	0.078
Protection of the environment (am)	0.215	4.054	0.062
ditto (pm)	0.146	3.734	0.041
Charitable organisation (am)	0.156	2.865	0.044
ditto (pm)	0.014	0.365	0.004
Tenants rights assoc. (am)	0.180	2.484	0.052
ditto (pm)	0.007	0.183	0.002
<i>Urbanisation</i>	0.003	6.264	0.001
<i>Language</i>			
French speaking	-0.189	-3.424	-0.048
Italian speaking	-0.280	-5.414	-0.066
Number of observations	7079		

Notes: Standard errors are adjusted for clustering on 26 cantons. In the reference group are 'men', 'people with low education', 'Swiss', 'married people', 'employed people', 'people who are not members of a certain association' and 'German speaking people'.

Data source: Swiss Household-Panel, 1999.

increase in the political participation possibilities is  $-0.003$ . For the full variation in the interaction variable the effect is  $-0.017$ . Thus roughly half of the effect of more extended political participation possibilities on citizens' belief in their political influence is due to procedural considerations, as put forward in the general hypothesis.

There are several socio-demographic characteristics that also have a sizeable and statistically significant effect on one's belief in one's political influence. Younger people, men, people with more education and the Swiss perceive more political effectiveness than older people, women, people with low education and foreigners. Foreigners report a 10 percentage points lower probability than the Swiss in believing that they have political influence exceeding level 5.

Three sets of additional variables control for alternative explanations of the descriptive results.<sup>7</sup> Due to similar counterarguments to the previous section, we include several variables for Putnam-style social capital, a variable for urbanisation (measuring the share of urban population in a canton) and two variables for possible cultural differences within Switzerland.

Our data show that active members of all the associations explicitly listed in Table 4.4 have a higher perceived influence on the political process than non-members. The largest effect is estimated for active members of political parties. They report, with a 12.6 percentage points higher probability, a feeling of political effectiveness above 5. People in more urbanised cantons think that they have more political influence than people in less urbanised cantons. Compared to German speaking residents, French as well as Italian speaking people report a quantitatively sizeable lower feeling of political effectiveness.

Considering that these powerful alternative hypotheses are controlled for, the effect of more extended political participation possibilities on citizens' belief in their political influence is robust.

## 5. CONCLUSIONS

The concept of procedural utility represents a completely different approach to comparative institutional analysis than the standard outcome oriented approach in economics. Procedural utility refers to the utility that people gain from the decision-making process itself, irrespective of the outcome.

In this chapter, participatory decision making in politics is considered a possible source of procedural utility. Possibilities of participating directly in the democratic process give citizens a feeling that their preferences are seriously taken into account in a fair political process. Foreigners, who are excluded from political decision making, cannot reap such procedural utility. The results of our empirical analysis are consistent with this notion of procedural utility. Citizens,



as well as foreigners, living in jurisdictions with more extended political participation possibilities enjoy higher levels of subjective well-being. The positive effect on reported satisfaction with life is, however, smaller for foreigners, reflecting their exclusion from procedural utility. It is thus empirically feasible to distinguish between outcome and process utility. Moreover, it is possible to get a notion of the relative size of outcome and process utility. The positive effect of participation rights is three times larger for citizens than it is for foreigners, that is a major part of the welfare gain from the favourable political process is due to procedural utility.

In the second test of the concept of procedural utility, we find that in cantons with more extended political participation possibilities, people think that they have substantially higher political influence. The maximum size of the institutional effect is almost half the size of having a high education rather than a low education. However, the institutional effect could also be due to outcome considerations as the difference in perceived political effectiveness between Swiss nationals and foreigners does not increase at the level of political participation possibilities in a statistically significant way.

Overall, the chapter can give a better understanding of what value individuals derive from specific institutions. We find that institutions matter for procedural utility and, in particular, that individuals derive substantial utility from political participation possibilities. Procedural utility is a source of welfare that has so far been neglected in comparative institutional analysis.

## NOTES

1. Lane (1988) argues that '[d]emocratic theory makes inadequate provision for procedural goods other than distributive justice' (p. 186).
2. The survey data were collected between 1992 and 1994 in order to investigate the problem of poverty in Switzerland. The information contained in the data set is based on personal interviews and tax statistics.
3. An alternative differences-in-differences interpretation considers the rows in Table 4.1 instead of the columns. Given that foreigners cannot reap procedural utility from the democratic process because they are formally excluded, the difference in reported life satisfaction between people living in cantons with weak and with strong participation possibilities is due to a difference in outcome utility. For the raw data, differences in outcome utility are close to zero. In the case of Swiss citizens, the difference includes procedural as well as outcome utility. The raw effect of stronger participation rights is on average 0.2 points on the satisfaction scale. Considering foreigners and Swiss citizens, the differences-in-differences due to procedural utility is 0.2 points.
4. Due to clustering and stratification, in contrast to pure random sampling, weights are necessary to get approximately unbiased point estimates. Weights are proportional to the inverse of the probability of being sampled. In addition, the weights are adjusted to the demographic structure in 1992.
5. Ignoring the clustering in the estimation model is likely to produce downward biased standard errors, due to the effects of aggregate variables on individual data (Moulton, 1990). To get unbiased standard errors for the aggregate variable 'political participation possibilities', the 26 cantons are used as sampling units.

6. Alternatively, the marginal effect indicates the change of the probability belonging to a stated satisfaction level when the independent variable increases by one unit.
7. As two separate data sets are analysed, the additional control variables are not identical, but they are similar enough to capture the same correlated effects.

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