

DEPARTMENT OF ECONOMICS

JOHANNES KEPLER UNIVERSITY LINZ

**Satisfaction not guaranteed – Institutions and satisfaction
with democracy in Western Europe**

Friedrich Schneider ^{*)}
Alexander F. Wagner
Mathias Dufour

Working Paper No. 0303
April 2003

**Johannes Kepler University Linz
Department of Economics
Altenberger Straße 69
A-4040 Linz - Auhof, Austria
www.economics.uni-linz.ac.at**

^{*)} Prof. Dr. DDr.h.c. Friedrich Schneider:
friedrich.schneider@jku.at
Tel. +43(0)732-2468-8210, -8209(Fax)

Introduction

In recent years, economists have expended considerable effort to make the notion of “utility” or “well-being” operational. The happiness literature (see Frey and Stutzer (2002) for a review) has related factors ranging from economic growth to religious beliefs to happiness in life. By contrast, scholars interested in the political economy of democracy still tend to compare countries on the basis of more or less objective indicators of the degree of democracy. But quite obviously even countries that achieve exactly the same democracy ranking in, say, the Freedom House index, will not offer the same degree of satisfaction with the way democracy works to their citizens. Much as we want to know what drives subjective perceptions of personal happiness in life, scholars and policymakers should be interested in what drives subjective perceptions of satisfaction with democracy (SWD). From a philosophical point of view, it would be paradoxical, to say the least, to try to build democratic polities in a way that fits with theory (the liberal democratic paradigm shaped by Western political thinkers since the 17th century) but not with the people’s will.

A number of recent papers have focused on SWD and its determinants. We will review some of them in more detail below. The literature suffers from three problems: SWD is conceptualized too easily; certain factors, in particular informal rules of the game in a society have not been considered as determinants of SWD; and the interaction of individual-level factors and society-level institutions has not been interpreted appropriately in quantitative terms. In this paper, we set out to deal with the second and third problem, while we mainly leave it to other papers to explore theoretical problems with the concept of SWD (Canache, Mondak et al. 2001). We will also have a little bit to say about the theoretical concept of SWD, but the character of the paper is strictly empirical.

We quantify the impact of institutions and individual variables on satisfaction with democracy as it is measured by Euro-Barometers, cross-national surveys in Western Europe. Our main findings are the following: We reexamine the existing evidence for consensus versus majoritarian systems in depth and find considerable differences for different types of citizens. The resulting quantitative implications appear to have been overlooked so far. The interaction of institutional and individual variables comes out as quite important for policy decisions. Second, we provide what we believe to be the first analysis of the role of informal institutions in determining SWD. We find that corporatism together with a low degree of

income inequality is good for satisfaction with democracy, as is social capital (as measured by group memberships). By contrast, the evidence for the effect of trust and for the rule of law on satisfaction is mixed.

These results lead us to conclusions about the nature of people's expectations toward democracy. On the one hand, the path toward the liberal democratic ideal is acclaimed by Europeans, who almost systematically support any move toward it. On the other hand, there is not "one best way" along this path, as the 'meaning' of democracy and expectations toward democratic regimes may vary significantly between countries.

Section 2 derives the hypotheses. Section 3 describes how we test the hypotheses and discusses methodological issues. Section 4 presents the main quantitative findings for a few particularly interesting specifications, and Section 5 concludes.

Theoretical background

David Easton's (1965; 1975) studies have served as a seminal work for the understanding of political support. Easton was the first to make the distinction between objects of political support and types of political support. Norris (1999) recently extended Easton's three-level analysis of these 'objects' into five: support for the political community, regime principles, regime performance, regime institutions, and political actors.¹ Empirical studies found evidence that the public actually makes clear distinction between these levels.

We are interested in having a measure for the felt discrepancy between democratic norms and the actual democratic process, and it seems that the SWD item in the Eurobarometer and other surveys is the closest we can get to a measure for this at the moment (Thomassen 1995). It measures the support for the "constitution in operation" (Klingemann and Fuchs 1995). Still, it is problematic that scholars do not offer more in-depth discussion of what the "constitution in operation" can mean in citizens' minds, nor of the extent to which the indicator measures the same thing across countries. Indeed, the key point to keep in mind about this indicator is the absence of an objective and/or clearly identified reference object. Unlike for the other "objects," people differ not only in the way they evaluate it, but also on

¹ The typology runs from the most diffuse to the most specific support.

what they evaluate. People differ with respect to what they have in mind when they think of democracy.

Given these difficulties, it is not surprising that critical observers (Canache, Mondak et al. 2001) have found that what “satisfaction with democracy” measures is neither the support for the idea of democracy (regime principles), nor the confidence in political institutions (regime institutions), nor the support for incumbents (political actors; see Merkl (1988) and Dalton (1999)), nor purely system support (Harmel and Robertson 1986; McDonough, Barnes et al. 1986; Weil 1989; Fuchs 1993; Lockerbie 1993; Fuchs, Guidorossi et al. 1995; Morlino and Tarchi 1996; Anderson and Guillory 1997; Klingemann 1999).

The bottom line is that in a sense, we are in a situation similar to other areas of (economic) policymaking, for example in environmental policy where we sometimes need to rely on contingent valuation, i.e. survey methods to calculate environmental benefits: Is some number better than no number? This paper cannot resolve this controversy. Some argue that the answer to this question is “no.” Canache et al. (2001) suggest that researchers stop using the SWD item of the Eurobarometers altogether because it is not clear what it measures.

By contrast, we take the pragmatic view that the SWD item can act as a summary indicator (Clarke, Dutt et al. 1993). Although it contains some ambiguity, that ambiguity is acceptable. Nevertheless, we expect that “satisfaction with democracy” cannot but be extremely hard to predict, since it is driven by individual interpretation on both sides of the “discrepancy”: what democracy should look like, and the way it works. We do not aim to distinguish the different channels². What the approach does tell us is that in addition to pragmatically controlling for individual level variables in our regressions, we also need to interpret their interaction with the institutional variables in a clearer fashion than done so far in the literature (see below).

Hypotheses, data, and methodology

Hypotheses

Having accepted the SWD item as the most operational variable for support for the constitution in operation, we can ask: What factors do we expect to play a role? Different

² This would be very difficult or indeed just as impossible as deciphering whether a measured increased risk appetite of investors stems from a decrease in risk, a change in the way people perceive risk, or a decreased risk aversion.

scholars have emphasized different factors at different times: democratic history and political culture (Almond and Verba 1965; Inglehart 1997), formal democratic institutions (Lijphart 1994; Anderson 1998; Lijphart 1999; Bowler and Donovan 2002), political and economic performance (Lipset 1994; Anderson and Guillory 1997). We use a very simple theoretical logic to predict signs of our explanatory variables:

First, the worse off an individual is in terms of economic well-being and political influence the less satisfied he will be with the way democracy works in his country. This is almost self-evident and does not need much further theoretical explanation; for recent evidence on the role of winning and losing in elections see Anderson and LoTempio (2002). As a proxy for the position of an individual in society, we use NATIONAL, the perception of change in national economic performance in the past 12 months, PERSONAL, the perception of change in personal economic performance in the past 12 months, and LOSER, a dummy variable which indicates whether the person had not voted for one of the parties which is now in the federal government. In addition, we also use a vector of demographic variables to control for GENDER (sometimes), INTEREST (interest in politics), INCOME, AGE, and EDUCATION.

As a source for the demographic and economic variables, we use a series of Eurobarometers. Although the results remain robust across several years (see the section on robustness tests for more on this), in the tables presented in this paper, we focus on purpose on the panel for fall 1990 (11 countries, about 1000 potential observations each). There are two reasons to do this. First, it allows us to directly compare and contrast our findings with those of Anderson and Guillory (1997). Second, the observations of many of the institutional variables (like corporatism and trust) come from this period.

Second, we hypothesize that institutions that promote the amount and quality of political participation increase SWD. For formal institutions, this idea has been discussed and tested in the literature. The argument is that institutions like consensual democracy – which is measured mostly with respect to the election system, a formal institution - allow even those who voted for parties other than the government parties to be represented by the system. Already Lijphart (1994) makes the point that consensual democracies outperform majoritarian democracies in terms of responsiveness and do at least as well in terms of efficiency, and thus lead to higher levels of satisfaction with democracy. To test the role the

consensuality of the system plays for different individuals, we present a specification that closely follows the ideas of Anderson and Guillory (1997): Losers should be less satisfied, but the higher the consensus orientation of a system is, the better losers are off. Winners, on the contrary, prefer a majoritarian system. This hypothesis can be tested by including an interaction term LOSER*CONSENSUS in a regression³.

We thus estimate

$$\begin{aligned}
 SWD_i = & \alpha + \beta_1 GENDER_i + \beta_2 INCOME_i + \beta_3 EDUCATION_i + \beta_4 AGE_i + \beta_5 INTEREST_i \\
 & + \gamma_1 NATIONAL_i + \gamma_2 PERSONAL_i + \gamma_3 LOSER_i + \\
 & + \delta_1 CONSENSUS_i + \delta_2 CONSENSUS_i * LOSER_i
 \end{aligned}
 \tag{1}$$

where CONSENSUS has an index i , but varies only across individuals in different countries.

To be consistent with our hypotheses, we expect $\beta_2 > 0$, $\beta_3 > 0$, $\gamma_1 > 0$, $\gamma_2 > 0$, $\gamma_3 < 0$, $\delta_1 > 0$, $\delta_2 > 0$, while the other variables are pure control variables without any particular “story” associated with them.

The specification as such is not new. Our contribution here lies less with the estimation of this equation as such, but rather with the evaluation of different scenarios. It is surprising that most of the literature omits either individual or institutional variables completely. Even when both are included in estimations, studies typically do not analyze how the impact of certain institutions is in the presence of individual factors. For example, it is true that Anderson and Guillory (1997) find that the “satisfaction gap” between winners and losers of elections decreases along the majoritarian/consensual axis created by Lijphart (1994). But they give no quantitative interpretation of which conclusions hold for which parts of the population.

To our knowledge, there no study so far has considered the effect of institutional variables other than the consensus/majoritarian system. This is quite surprising, since there exists a wide variety of institutional and social indices which can be hypothesized to be related to system support. We take institutions to broadly mean “rules of the game in a society.” Informal rules trust and social capital are supposed to favor satisfaction with democracy

³ An alternative way is to run the model separately for losers and winners. The advantage of this is that one can allow for different coefficients on the other variables. Our experiments with this approach and evaluations with Clarify, the program provided by King et al. (2000), indicate that the quantitative results for the institutional variables and our main findings for the different effects on different types of people do not change. We therefore do not present them here.

because they allow conflicts to be solved more fairly and efficiently (for an application of this idea in a different context see Schneider and Wagner (2001)).

In the present paper, we present and evaluate the results for a few particular specifications: First we introduce an indicator of corporatism (social partnership). The social partnership index is the corporatism index of Tarantelli (1986), where corporatism is defined as a system of societal structure which typically has a high degree of centralization in wage bargaining, a high consensus orientation, and an active role of the government in mediating social conflicts (each of these three elements is evaluated on a scale of 4 to 5. The total score is the sum of the three elements and therefore ranges from 0 to 15)⁴. This is the most formal of alternative institutions we consider.

In variants of this model, besides social partnership, we also consider the effects for trust and group membership (both from Knack and Keefer (1997)), the gini index (i.e. the index of income inequality from Deininger and Squire (1996), a factor that is often categorized as being of institutional character because it contains a strong signal about value judgements in a society), and the degree of the rule of law (from Wagner (2000) who describes the primary sources).

When we add these institutions to equation (1) above, we expect their coefficients to reflect that more corporatism, greater trust, more widespread group membership, lower inequality, and a better rule of law promote SWD.

Estimation technique and interpretation of the results

There are a number of issues related to the choice of estimation technique and the interpretation of the results in order to get the most out of the available data. For the main part of the paper, our dependent variable is a binary variable “Satisfaction” which is 1 when the respondent answered “Very satisfied” or “satisfied” to the question “How satisfied are you with the way democracy works in your country?” It is 0 if the respondent said “Not satisfied”

⁴ For some regressions not further explored in this paper but shown in table 1 as regressions (3) and (4), we also use an interaction term with LOSER for corporatism, on the same grounds as for consensus. Here, we have also tried a centered interaction term, but the results were not suggestive of any additional insight one might gain from this.

or “Not at all satisfied”. We use a probit estimation procedure, implemented via maximum likelihood, to estimate the above equation⁵.

A technical issue also concerns the proper dealing with the panel data setup. In particular, country fixed effects may play an important role. Including institutional variables, which by definition don’t vary within a country without further controls may lead to spurious results since this way one might just pick up some other fixed effect but not the effect one wishes to examine. We have explored several possibilities to deal with this issue. We use two complementary approaches here, which shed light on the questions we are interested in.

First, we run regressions controlling only for the individual level variables for each country separately. We then do simulations (see below for an explanation) and plot predicted probabilities of being satisfied against various institutional variables.

Second, we only consider all observations in one panel but include institutions of interest and a dummy variable for Italy which is clearly the (negative) outlier in terms of satisfaction with democracy (depending on which observations are included, approximately 25-35% of the people as opposed to more than 50-60% in other countries). This allows us to control for the strongest country effect we detected. The advantage of this approach, while not completely immune to the problem just discussed, is that we have actual parameter estimates which can again be used in simulations to make more substantive claims than through the analysis of the first approach. The section on robustness tests reports what we have done to further explore the validity of the results.

Through stacking all observations together and running a probit model over the whole sample, we recognize that there may be other potential problems (bias, wrong standard errors if the coefficients vary across individuals and countries, ignorance of the different sample sizes due to deleted observations). An alternative is to specify a TS-CS-binary model (where the “time” dimension here corresponds to the individuals). The results obtained with the

⁵ As almost always, experiments with logit estimation reveal that the quantitative interpretations do not change. Since the original data is in ordered categorical format (4 categories), we have also explored what happens when we use an ordered probit model. For space reasons – and because the results did not allow us any particular additional insight – we decided to present our findings from the binary probit in the main part of the paper. However, we do include a few figures based on the ordered probit without further comments in the appendix to give the reader a taste of the results in this model.

STATA package suggest that neither the size of the coefficients nor the standard errors are markedly different from the ones we get in our procedure.

Finally, we break with the tradition of reporting only quite unintuitive “probit coefficients.” While we have included a summary table containing “raw” estimation results, we find that a better way to understand the implications of our models and the uncertainty of the results is through statistical simulation. In particular, the usual statement about the statistical significance of certain factors leaves the highly policy-relevant question of the quantitative importance (i.e. the substantive significance) of the effects unanswered. We follow King et al. (2000) here. For a description of the exact procedure, we refer the reader to the appendix.

Empirical results

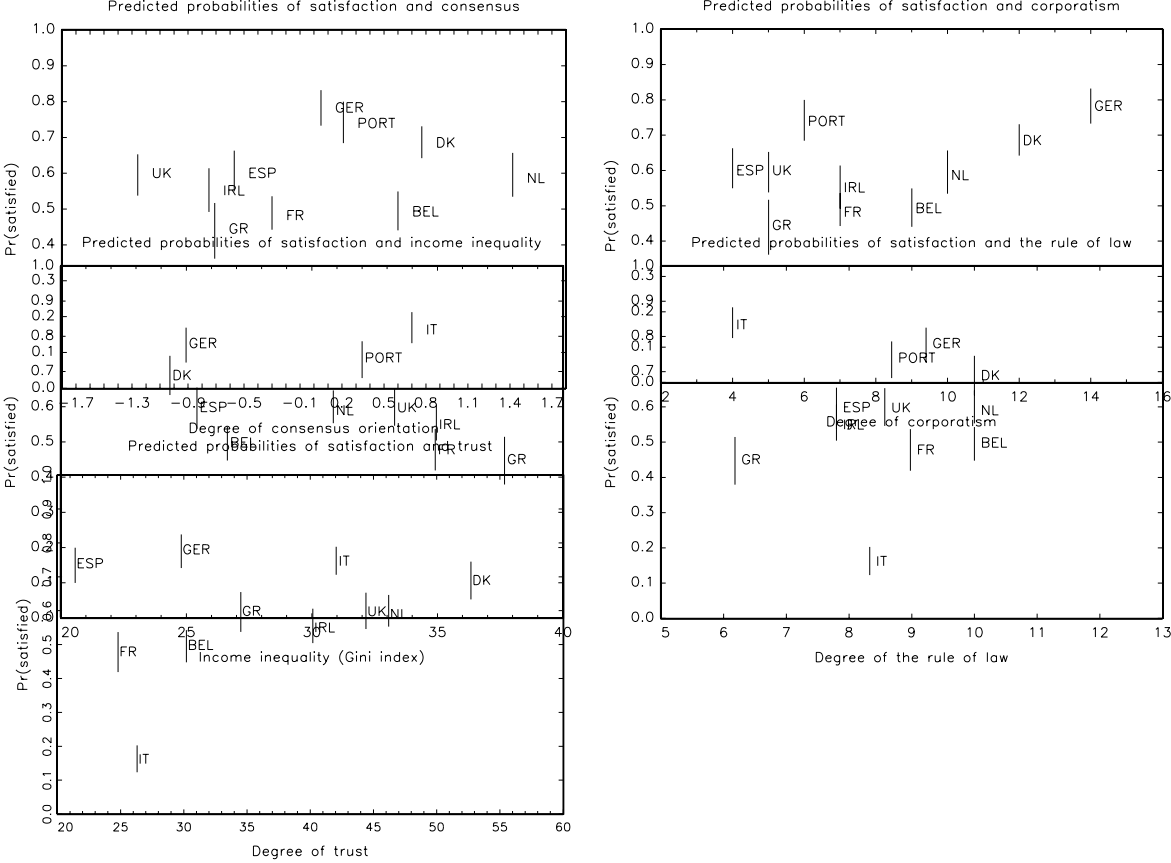
Overview

We focus on what we believe are new findings. We start by exploring graphically the relationship between various institutions and SWD (section 4.2). The analysis in section 4.3 focuses exclusively on consensus since it is this formal institution that has received most attention in this context. After that, we turn to quantitative results for more informal institutions and find that many of them have been unjustly ignored so far.

A first cut at the role of institutions

Consider first the results from probit regressions on the individual level variables (here omitting gender because it is never significant; for space reasons we do not report this regression here but note that personal and national economic performance come out to be the most significant and important factors). As described in the methodological section and in the appendix, we then do simulations and obtain predicted values for the probability of satisfaction. In the graphs below we plot these predictions against an array of institutional variables. The lines indicate the 95% confidence interval. From these pictures, it seems to be the case that corporatism and income inequality are relatively good predictors for satisfaction with democracy. For trust and the rule of law, the evidence seems to be less clear and as we emphasize later, this suspicion turns out to be correct since the effect of these two variables comes out as sometimes positive and sometimes negative, depending on the specification. For consensus, there seems to be a somewhat positive effect. However, here we can most clearly see that Italy is an outlier with respect to its citizens’ level of satisfaction with democracy.

Figure 1: Probability of satisfaction and institutional variables (all individual level variables held at their median; results based on 10,000 simulations. Standard errors/confidence intervals shown as vertical bars).



While these pictures allow us some first insights, we need to make the analysis more statistically rigorous by including the institutional variables of interest into the regressions. Table 1 contains several specifications. First note that also with controlling for institutional variables, we find that the effects of the individual level variables go in the expected direction: Losers are generally less satisfied; those who evaluate the national economic performance positively are more satisfied as are those that judge the development of their personal economic situation positively; wealthier individuals are also more satisfied. These three effects also dominate in quantitative terms. We cannot find robust statistical evidence for political interest, education or age being relevant for SWD, although several equations appear to suggest that more educated citizens tend to be less satisfied and that older people tend to be more satisfied. This allows speculations about the dual character of SWD we mentioned above, namely that SWD is the outcome of both individual expectations towards democracy (which may be higher for more educated individuals and lower for people who have experienced democracy longer) and individual perceptions of the performance of democracy (which may be more critical for more educated individuals and more positive for older people). Likelihood ratio tests confirm that leaving out all institutional variables does worse than including some combination of them. The hypothesis that the restricted model is indistinguishable from the unrestricted one (the latter being created by adding one or more institutional variables) is rejected for each institution considered here at the highest confidence levels⁶.

⁶ The overall fit of the different specifications can be evaluated by comparing predicted and actual values. See the appendix.

Table 1: Binary probit estimation (Dependent variable: 1= satisfied or very satisfied, 0 = not satisfied or not at all satisfied)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Loser	-0.377 (11.00)* *	-0.358 (9.79)**	-0.578 (6.37)**	-0.588 (6.45)**	-0.342 (9.65)**	-0.386 (11.38)* *	-0.406 (11.92)* *	-0.365 (10.17)* *
National Economic Performance	0.265 (14.96)* *	0.247 (12.98)* *	0.263 (14.91)* *	0.260 (14.74)* *	0.273 (14.90)* *	0.278 (15.88)* *	0.267 (15.15)* *	0.234 (12.39)* *
Personal Economic Performance	0.141 (7.44)**	0.124 (6.04)**	0.144 (7.57)**	0.132 (6.88)**	0.144 (7.18)**	0.145 (7.67)**	0.131 (6.87)**	0.127 (6.31)**
Political Interest	-0.018 (1.00)	-0.005 (0.23)	-0.030 (1.63)	-0.023 (1.27)	-0.013 (0.69)	-0.013 (0.71)	-0.016 (0.88)	-0.017 (0.86)
Income	0.017 (3.40)**	0.020 (3.47)**	0.017 (3.24)**	0.022 (4.26)**	0.013 (2.31)*	0.015 (2.95)**	0.025 (4.88)**	0.019 (3.28)**
Education	-0.004 (1.08)	-0.006 (1.79)	-0.007 (2.04)*	-0.008 (2.35)*	-0.004 (1.05)	-0.005 (1.50)	-0.006 (1.96)	-0.004 (1.01)
Age	0.002 (1.84)	0.001 (0.55)	0.001 (1.43)	0.002 (1.49)	0.002 (1.48)	0.002 (1.66)	0.002 (1.80)	0.001 (1.31)
Corporatism	-	0.023 (3.04)**	0.035 (3.93)**	0.013 (1.26)	-	-	-	0.023 (1.90)
Loser*Corporatism	-	-	0.024 (2.19)*	0.024 (2.19)*	-	-	-	-
Gini (Inequality)	-	-0.026 (4.55)**	-	-0.025 (5.23)**	-	-	-0.037 (9.48)**	-0.047 (6.31)**
Attitude towards) change(gradual=hig h	-	0.212 (6.03)**	-	-	-	-	-	-
Trust	-	-0.005 (2.28)*	-	-	-	-	-	-0.027 (4.94)**
Consensus	0.057 (1.78)	-	-	-	-	-	-	-
Loser*Consens	0.152 (3.74)**	-	-	-	-	-	-	-
Groups	-	-	-	-	0.171 (2.31)*	-	-	1.153 (4.88)**
Rule of law	-	-	-	-	-	0.089 (5.83)**	-	-0.157 (4.83)**
Italy	-1.288 (17.19)* *	-1.074 (13.77)* *	-0.969 (13.14)* *	-1.032 (13.79)* *	-1.193 (16.80)* *	-1.107 (15.74)* *	-1.107 (15.78)* *	-1.491 (12.18)* *
Constant	-0.581 (4.42)**	-0.195 (0.77)	-0.812 (6.44)**	0.151 (0.68)	-0.747 (5.96)**	-1.428 (9.08)**	0.513 (2.89)**	2.302 (5.60)**
Observations	6742	5862	6742	6742	6141	6742	6742	6141

Absolute value of z-statistics in parentheses

* significant at 5% level; ** significant at 1% level

Notes: 1. The long regression with all country dummies but without a constant is omitted for space reasons. Most dummies are generally significant (exceptions are Denmark, Germany, Portugal, and Great Britain) and take on a value around -0.5 up to -0.7 . Italy clearly is an outlier with a value of -1.7 . Similarly, the by country regressions used to create the groups in section 4.2 are omitted.

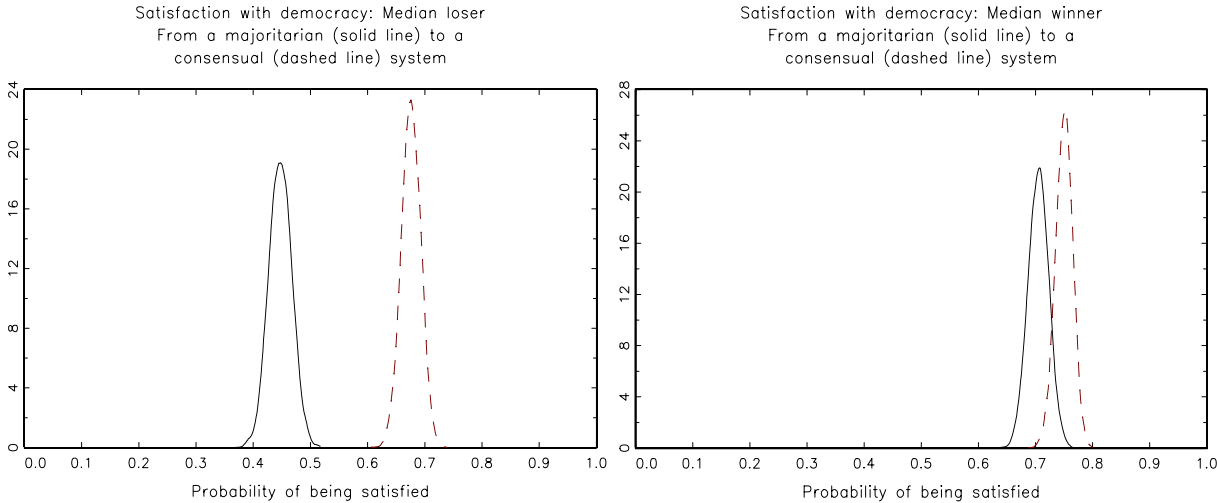
2. Gender was only included in the first regression, since it turned out to be quite insignificant (coefficient 0.02, s.e. 0.03).

Quantitative results for consensus

A problem in the existing literature is that scholars have typically stopped short of making statements about the relative importance of different factors influencing SWD. Knowing that variable X has a statistically significant impact on SWD does not help the policymaker judge whether it is worth to change X, if there is no statement about the relative size of the effect. Scenario analysis can help bring some light to this question.

Consider first the impact of consensual systems on the satisfaction of the “median citizen”. Since we have argued that losers will benefit more from such a system, we present the results separately for male median winners and losers (the results are virtually the same for women).

Figure 2: Minimum and maximum consensus and satisfaction for male median losers and median winners (smooth histogram from 10,000 simulations based on parameter estimates in regression (1)).



As can be seen from the figure, a loser who is at the median in terms of age, education, income and his/her perception of national and personal economic performance is expected to gain roughly 20-30 percentage points of probability of being satisfied. The figure also clearly indicates that losers gain more from a consensus system than winners (we show the results for a change from the minimum value of consensus in the sample (Great Britain) to the maximum value (Netherlands)). In fact, for winners there is a relatively big uncertainty as to which way the effect will go. This can be seen from the overlap of the two kernel plots.

Having established that consensus is not unambiguously good for SWD overall, we want to add to the literature by documenting more in depth the quite substantial interaction between individual and institutional variables. For this purpose, we consider four scenarios, shown in the next figure⁷.

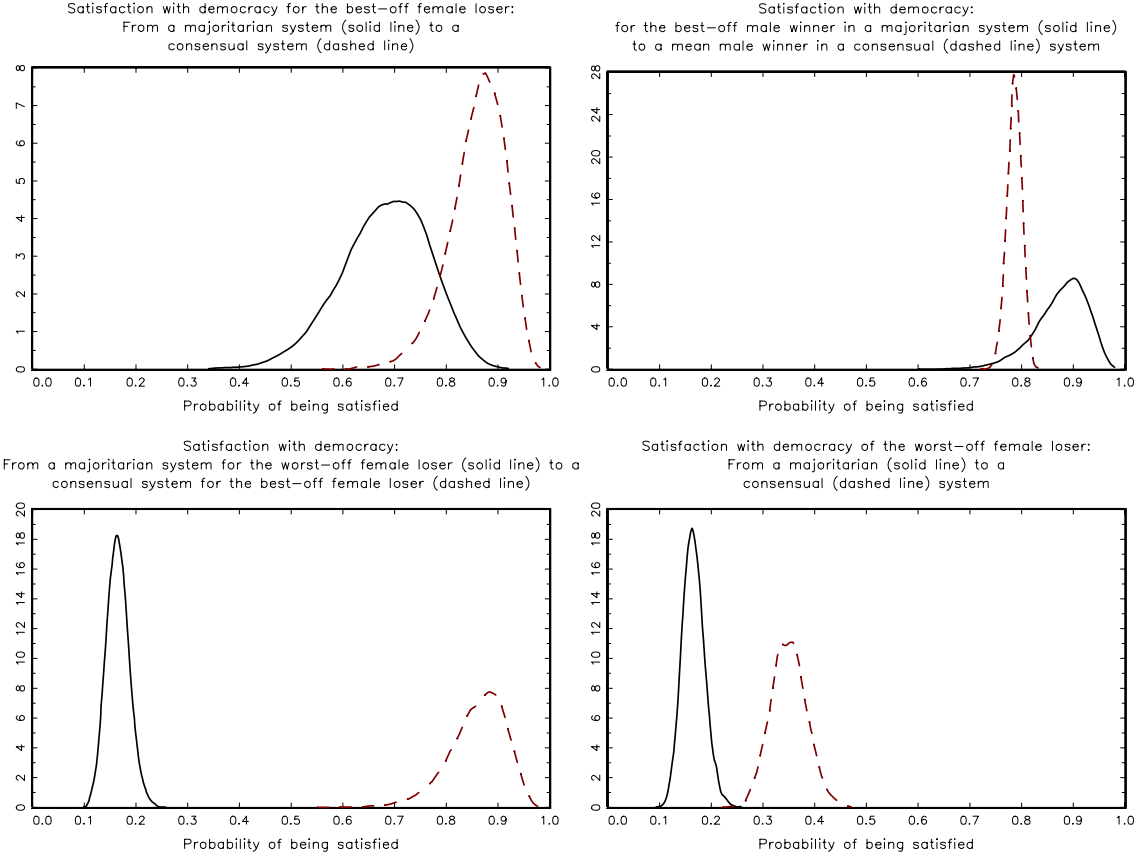
For example, the best-off female loser (i.e. a woman ranking highest on all individual level characteristics, shown in the top left panel) has a high probability of being satisfied under both systems. While the point estimates suggest that a change from a majoritarian to a consensus system may bring a substantial gain (up to 20 percentage points here, leading to a probability of being satisfied of 90% instead of 70%) with it, there is a considerable amount of uncertainty associated with such a change, which is again indicated by the overlap of the kernel plots.

We find it interesting to consider an extreme case like the one in the lower left corner. Making losers better off economically and in terms of education (which would bring them approximately two thirds of the way from the solid kernel plot to the dashed one (not shown)) and having a more consensual system clearly improves satisfaction with democracy. The second effect is highlighted separately in the lower right panel.

By contrast, and plausibly, a person with a strong position in society in terms of education and income who belongs to the group of winners rather prefers a majoritarian type of system, which gives him 90% of SWD as opposed to 76%, although there is again some overlap between the distributions (top right panel).

⁷ Note that while we report results for women and men, since the gender variable is never significant, this does not amount to much. We just wanted to construct concrete and maybe not unrealistic scenarios.

Figure 3: Minimum and maximum consensus and satisfaction for four different types of people (smooth histogram from 10,000 simulations based on parameter estimates in regression (1)).



Results for informal rules of the “society game”

The second contribution of this paper is that we consider for the first time systematically – at least to our knowledge – institutional variables other than consensus and their interaction with individual level variables. The “raw” estimation results in table 1 (columns (2) and (8)) suggest that the institutional variables in general have a significant effect on SWD, although there are some surprises (like the strongly negative coefficient for trust). Again, simulation is the method we use to get more interesting and interpretable results. All the results presented in table 2 and discussed in the following are based on regression (8) in table 1, unless otherwise stated.

Table 2 is quite self-explanatory. To understand how to read it, first select a “rule of the game” of interest. For example, let us consider inequality. Then select one of the three scenarios in the three columns. For example, take the loser who perceives national economic

performance to be very bad and has all other control variables at their median (column 1). Then, the table tells us that at the median of inequality in the sample, the probability of being satisfied is 48%, with a 95% confidence interval between 44% and 52%. By contrast, if inequality is lower, for example only in the first quartile (25%-Percentile), the probability of being satisfied goes up to 58%. From the minimum to maximum inequality, SWD decreases by 20%. Thus, inequality is strongly regarded as being incompatible with the idea that most people have of democracy in Europe. For both winners and losers, at all levels of personal and economic performance, inequality substantially decreases satisfaction with democracy (cf. the findings of Alesina (2001) who reports a relatively high degree of caring for the issue of inequality among Europeans).

Secondly, corporatism turns out to be a reliable but not so strong predictor of satisfaction with democracy as well. For example, ceteris paribus, a maximal increase of the degree of corporatism (which amounts to quite a system change) increases satisfaction for losers by 10% on average, whereas winners only gain 5%. The effects of corporatism and inequality are even stronger when one takes into account that typically the two variables move in opposite directions (see also the simple correlations in the appendix). The kernel plot in the following figure shows just that.

Figure 4: Inequality and corporatism (minimum and maximum values) and satisfaction for the median citizen (smooth histogram from 10,000 simulations based on parameter estimates in regression (2) in table 1).

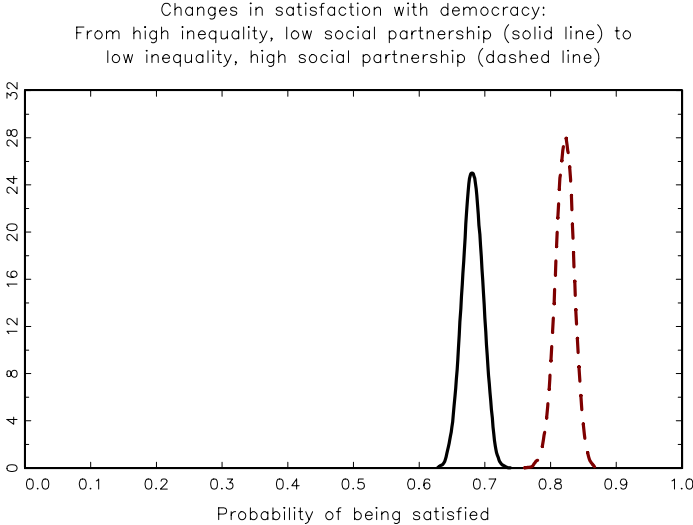


Table 2: Predicted probabilities of satisfaction with democracy and first differences (FD) under different scenarios (10,000 simulations based on regression (8) in table 1; 95% confidence intervals in parentheses)

		<i>Loser, National economic performance perception minimal</i>	<i>Loser, National economic performance perception</i>	<i>Winner, median personal economic performance</i>	<i>median economic</i>
All other variables at their medians					
Corporatism	25%-Percentile	.46	.64	.77	
	Low	(.41 .51)	(.60 .68)	(.73 .80)	
	Median	.48	.66	.78	
	High	(.44 .52)	(.63 .69)	(.75 .81)	
High	75%-Percentile	.51	.68	.80	
	Low	(.47 .54)	(.66 .71)	(.78 .82)	
	Median	.09	.08	.06	
	High	(-.01 .19)	(-.01 .17)	(.008 .13)	
Rule of law	25%-Percentile	.52	.72	.81	
	Low	(.48 .56)	(.69 .75)	(.78 .83)	
	Median	.48	.69	.78	
	High	(.44 .52)	(.66 .71)	(.75 .81)	
High	75%-Percentile	.42	.63	.76	
	Low	(.36 .47)	(.60 .65)	(.73 .79)	
	Median	-.14	-.12	-.08	
	High	(-.20 -.08)	(-.17 -.07)	(-.12 -.04)	
Group membership	25%-Percentile	.32	.53	.64	
	Low	(.28 .37)	(.48 .59)	(.60 .69)	
	Median	.48	.69	.78	
	High	(.44 .52)	(.66 .71)	(.75 .81)	
High	75%-Percentile	.53	.73	.82	
	Low	(.48 .59)	(.70 .76)	(.78 .85)	
	Median	.31	.28	.24	
	High	(.19 .42)	(.17 .39)	(.15 .32)	
Inequality	25%-Percentile	.58	.75	.85	
	Low	(.52, .64)	(.70 .79)	(.81 .88)	
	Median	.48	.66	.78	
	High	(.44 .52)	(.63 .69)	(.75 .81)	
High	75%-Percentile	.43	.62	.75	
	Low	(.40 .47)	(.59 .64)	(.72 .77)	
	Median	-.20	-.18	-.14	
	High	(-.26 -.14)	(-.22 -.13)	(-.18 -.10)	
Trust	25%-Percentile	.57	.76	.84	
	Low	(.50 .63)	(.72 .80)	(.80 .88)	
	Median	.48	.69	.78	
	High	(.44 .52)	(.66 .71)	(.75 .81)	
High	75%-Percentile	.37	.58	.69	
	Low	(.34 .41)	(.54 .63)	(.67 .72)	
	Median	-.32	-.30	-.26	
	High	(-.44 -.21)	(-.41 -.19)	(-.35 -.16)	

Third, in the regression shown here, trust is strongly negatively related to satisfaction with democracy. This is completely at odds with all predictions. However, we are quick to emphasize that this happens in this particular specification but not in others. We picked this one on purpose to show which effects are possible. It is very hard to explain why groups are

so positively (and robustly) related to satisfaction whereas trust is sometimes positive and sometimes negative. One lesson we draw from this exercise, however, is that taking individual level factors into account is crucial. Leaving them out of a regression gives a positive impact of trust always (as found by Anderson (1998)) – but this is a spurious correlation as we show here. A possible explanation for the ambiguous results for trust lies in its potential to increase rent-seeking in a society (Schneider and Wagner 2001).

By contrast, the degree to which a society fosters group memberships of its members is almost always significantly related to satisfaction with democracy. Here, a jump from the 25th percentile to the median boosts satisfaction of the loser with a dark perception of national economic performance by 15% points. Here we have a clear policy implication: fostering the degree to which people engage in social interactions improves their support of the regime per se. This is related to arguments of Putnam (1993).

Finally, and equally surprisingly, the rule of law actually has a small but significant negative impact on satisfaction with democracy. The effect is stronger for losers (up to minus 12 percentage points) than for winners (up to minus 8 percentage points). Again, however, we note that in alternative specifications other results arise. Table 1 reports a regression, for example, which gives a positive coefficient on the rule of law (regression (5)). The most we can say for this institution is that its effect on SWD is not clear.

Conclusion and policy implications

A first major policy message is that, much as there exists no economic project that is truly Pareto-improving, there also exists virtually no policy to improve everybody's satisfaction with democracy (SWD). A consensual system generally promotes satisfaction, but one needs to distinguish different types of citizens. Losers, poorer and less educated people gain in terms of satisfaction with democracy when a consensual system is present. Our findings lead us to reject the hypothesis that a consensus system is unambiguously better able to provide high degrees of satisfaction of the population than a majoritarian system.

Second, we present evidence for the role other institutions and rules of the game in a society play for SWD. We find that corporatism and group membership as a measure of social capital are good for satisfaction. By contrast people who live in countries with a high degree of income inequality tend to be less satisfied. The findings for trust and the rule of law are ambiguous.

We interpret the lack of unambiguous results for some institutions as corresponding to different expectations of citizens in different countries. Conversely, one should be careful in demanding, say "more corporatism" too fast. Thus, while our empirical results are interesting, they also point to a severe shortcoming in the theory of satisfaction with democracy. The theory that provides a convincing account of ideals of democracy as related to perceptions of its actual workings together with the two apparently most important dimensions of institutions, conflict management potential and efficiency, remains to be written. We regard this as the big challenge for future research.

Appendix

Descriptive statistics and data sources

<i>Variable</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Min</i>	<i>Max</i>
Satisfaction with democracy	.613	.481	0	1
Loser	.556	.501	0	1
National economic performance (NatEc)	2.760	1.038	1	5
Personal economic performance (PerEc)	2.964	.947	1	5
Interest in politics	2.416	.932	1	4
Income (categorical)	6.831	3.544	1	12
Years of education	17.215	5.138	6	98
Age	45.210	16.994	15	99
Sex	1.492	.50	1	2
Attitude towards social change	2.206	.520	0	3
Consens	-.0920	.813	-1.56	1.08
Loser*Consens	-.065	.598	-1.56	1.08
Trust	35.961	10.090	21.4	52.7
Corporatism	7.808	3.240	4	14
Loser*Corporatism	4.309	4.575	0	14
Gini (Inequality)	30.472	4.412	24.34	37.67
Rule of law	8.755	1.117	6.18	10

Data used for the tables in the main part of the paper are generally from the Eurobarometer 34.2 (1990). Data on corporatism (social partnership) is from Tarantelli (1986), data on trust from the World Values Surveys as reported by Knack and Keefer (1997), data on income inequality (GINI) from Deininger and Squire (1996), Consensus vs. majoritarian democracy from Lijphart (1994), the rule of law from Wagner (2001) who describes the primary source. Data on governments is from <http://www.terra.es/personal2/monolith/00europa.htm>. LOCORP=LOSER*CORPO.

LOCON=LOSER*CONSENS. Most of the individual level variables are self-explanatory. Loser was defined as 1 if the person had not voted for a party that was in the government at the time of the survey. Attitude towards social change is 3 if the person prefers gradual change, and 1 if the person believes that “we need a revolution.” Higher income categories earn more. People with a value of 4 on interest with politics are very interested, those with a value of 1 are not interested at all. Both personal and national economic performance refer to the change over the past 12 months and have higher values if the person said her or his situation got “better”. Gender is coded such that 2=woman, 1=man. Gini is higher for more unequal countries. The rule of law index is higher in more orderly societies.

Correlation between the institutional variables

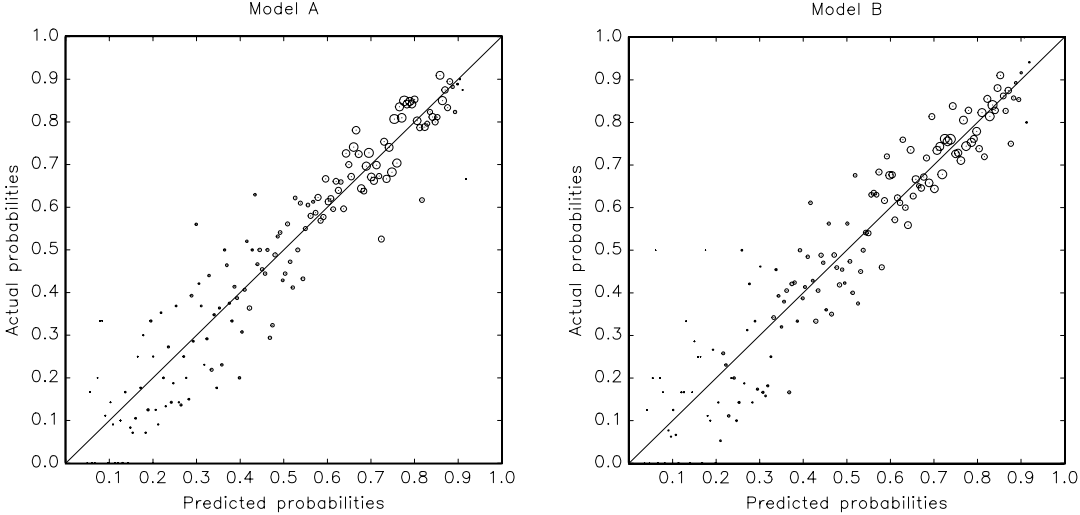
	<i>Consens</i>	<i>Trust</i>	<i>Corporatism</i>	<i>Gini</i>	<i>Rule of law</i>	<i>Groups</i>
Consens	1.0000					
Trust	0.0711	1.0000				
Corp.	0.4283	0.3033	1.0000			
Gini	-0.2734	-0.2136	-0.5501	1.0000		
Rulelaw	0.4424	0.3460	0.7207	-0.4038	1.0000	
Groups	0.3281	0.8187	0.3630	-0.0471	0.3780	1.0000

Overall fit of the models

The figures shown here reveal that neither of the specifications is really superior to the others. All of them produce reasonable good overall fits, with no systematic over- or underprediction, but with a few outlier predictions every now and then. It is important to realize that these figures do not tell us, say, whether the consensus variable is more important or other institutional variables are.

In the graphs, “Model A” refers to a specification with consensus as the institutional variable, whereas “Model B” is a specification with corporatism.

Figure 5: Goodness of fit in two specifications



The predicted probabilities of satisfaction with democracy were sorted into 150 intervals by size. For each interval, the average probability of satisfaction is plotted on the y-axis against the average prediction on the x-axis. The closer the circles (which indicate the number of observations in that particular “bin”) are to the 45 degree line, the better the fit.

Simulation technique

Recall that the probit model can be expressed with two core equations (King 1998): $Y_i = f(\theta, \alpha)$ and $\theta = g(X_i, \beta)$ where the first equation indicates that the dependent variable is drawn from $f(\theta, \alpha)$, i.e. the stylized normal distribution in the present case. θ represents the features that vary across observations (modeled here as a linear term $X_i\beta$), while α is a set of ancillary parameters (the threshold parameter τ is set to zero for convenience). Now, consider the following procedure: First, specify a “scenario”, i.e. a vector of values for the explanatory variables that we are interested in. Second, draw m sets of estimated parameters from the multivariate normal distribution, which takes as inputs the estimated coefficients from the regressions and their variance-covariance matrix. The multivariate normal distribution is appropriate since a Central Limit Theorem holds. Third, use these simulated parameters and the scenario vector to calculate m values of $\theta = X_i\beta$. Since for the present model, this also gives the expected value, these values can directly be used to learn something about mean predictions of satisfaction with democracy (including confidence intervals), first differences and other quantities of interest. An intuitive way of characterizing effects of institutions on democracy are so-called kernel plots, i.e. smoothed histograms based on many expected values. In that case, the vertical axis reports the frequency of a given predicted value⁸. All simulations and plots are based on 10,000 simulations. For all the simulations in section 4.3, we set the Italy dummy equal to zero. This means that the results should be interpreted as pertaining to all countries except Italy. Leaving out all observations for Italy in the first place does not affect the results.

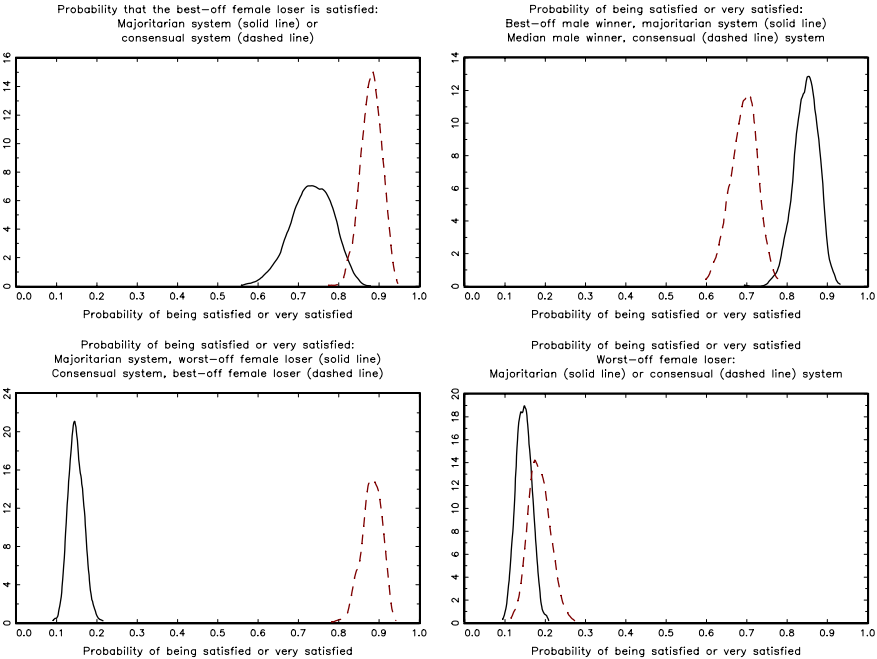
Robustness tests

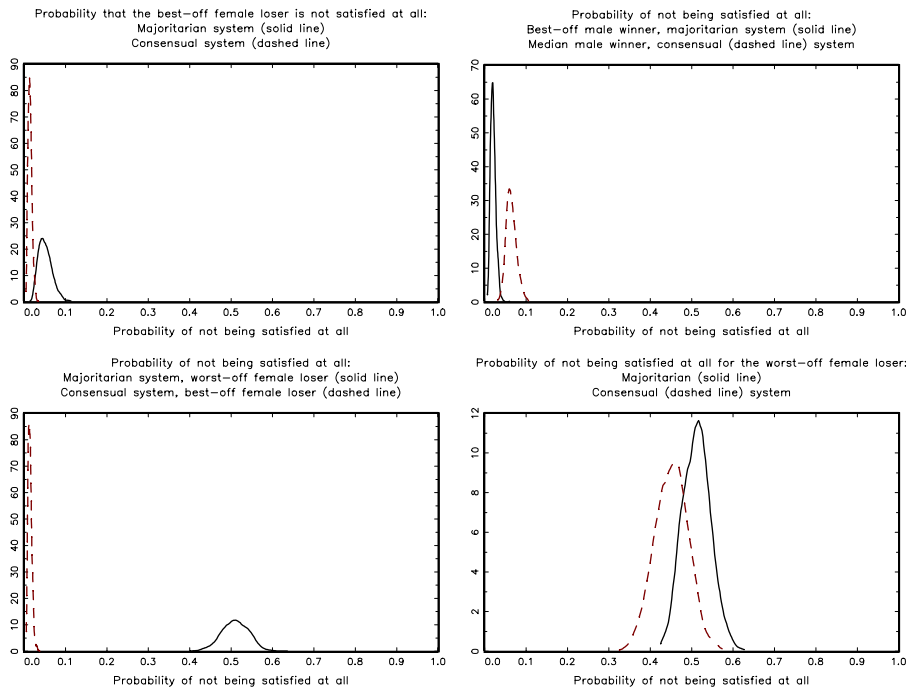
We have considered several robustness tests of our calculations. Most importantly, in many different specifications (for example, dropping one of the demographic variables at a time, adding additional variables like unemployment or actual GDP growth), the direction of the effects remains the same (including the ambiguity of results for trust and the rule of law). Of course, the magnitude of the effects is different. But the differences are small and thus do not warrant a further discussion here. We have also experimented with different Eurobarometer

⁸ We choose to report absolute frequencies because this seems to us to be a better way to think that we actually are interested in individuals’ satisfaction with democracy. These can easily be transformed into relative frequencies.

datasets. Unfortunately, not all the same questions were asked in the same Eurobarometers. The same items are available for only a few Eurobarometers. The substantive results remain robust when we use Eurobarometer 42 instead. Applying a logit instead of a probit setup does not change the substantive results. Including more country dummies in addition to Italy does not alter the qualitative results. Neither does leaving out all observations pertaining to Italy; the consensus variable gets a slightly stronger positive effect then, though. In quantitative terms, the effect of consensual systems are less pronounced for most types of individuals considered (except for the worst-off female). By contrast, the predicted first differences of changes in national economic performance evaluations and personal economic well-being are bigger by between 0.02 and 0.04 percentage points. Finally, the substantive conclusions are not altered when we consider an ordered probit model, as can be seen from the following figures.

Figure 6: Minimum and maximum consensus and degree of satisfaction for four different types of people (smooth histogram from 10,000 simulations from ordered probit regression).





References

- Alesina, A. (2001). *Inequality and Happiness: Are Europeans and Americans Different?* Cambridge, Harvard University.
- Almond, G. and S. Verba (1965). *The Civic Culture*. Boston, Little, Brown.
- Anderson, C. and C. Guillory (1997). "Political Institutions and Satisfaction with Democracy: A Cross-National Analysis of Consensus and Majoritarian Systems." *American Political Science Review* **91**(March): 66-81.
- Anderson, C. J. (1998). "Parties, Party Systems, and Satisfaction with Democratic Performance in the New Europe." *Political Studies* **46**: 572-588.
- Anderson, C. J. (1998). *Political Satisfaction in Old and New Democracies*, Cornell University, Institute for European Studies Working Paper 98.4.
- Anderson, C. J. and A. J. LoTempio (2002). "Winning, Losing and Political Trust in America." *British Journal of Political Science* **32**: 335-351.
- Bowler, S. and T. Donovan (2002). "Democracy, Institutions and Attitudes about Citizen Influence on Government." *British Journal of Political Science* **32**: 371-390.
- Canache, D., et al. (2001). "Meaning and measurement in cross-national research on satisfaction with democracy." *Public Opinion Quarterly* **65**: 506-528.
- Clarke, H. D., et al. (1993). "The Political Economy of Attitudes toward Polity and Society in Western European Democracies." *Journal of Politics* **55**: 998-1021.
- Dalton, R. J. (1999). *Political Support in Advanced Industrial Democracies. Critical Citizens: Global Support for Democratic Governance*. P. Norris. New York, Oxford University Press.
- Deininger, K. and L. Squire (1996). "A New Data Set Measuring Income Inequality." *World Bank Economic Review* **4**: 565-591.
- Easton, D. (1965). *A System Analysis of Political Life*. New York, McGraw Hill.
- Easton, D. (1975). "A Re-Assessment of the Concept of Political Support." *British Journal of Political Science* **5**(October): 435-437.
- Frey, B. and A. Stutzer (2002). "What can economists learn from happiness research?" *Journal of Economic Literature* **40**(2): 402-435.

- Fuchs, D. (1993). Trends of Political Support in the Federal Republic of Germany. Political Culture in Germany. D. Berg-Schlosser and R. Rytlewski. London, Macmillan.
- Fuchs, D., et al. (1995). Support for Democratic System. Citizens and the State. H.-D. Klingemann and D. Fuchs. New York, Oxford University Press.
- Harmel, R. and J. D. Robertson (1986). "Government Stability and Regime Support: A Cross-National Analysis." Journal of Politics **48**: 1029-40.
- Inglehart, R. (1997). Modernization and Postmodernization. Princeton, Princeton University Press.
- King, G. (1998). Unifying Political Methodology. Ann Arbor, The University of Michigan Press.
- King, G., et al. (2000). "Making the Most of Statistical Analyses: Improving Interpretation and Presentation." American Journal of Political Science **44**(2): 341-355.
- Klingemann, H.-D. (1999). Mapping Political Support in the 1990s: A Global Analysis. Critical Citizens: Global Support for Democratic Governance. P. Norris. New York, Oxford University Press.
- Klingemann, H.-D. and D. Fuchs (1995). Citizens and the State. New York, Oxford University Press.
- Knack, S. and P. Keefer (1997). "Does Social Capital Have an Economic Payoff? A Cross-Country Investigation." Quarterly Journal of Economics **112**(4): 1251-1288.
- Lijphart, A. (1994). "Democracies: Forms, Performance, and Constitutional Engineering." European Journal of Political Research **25**(January): 1-17.
- Lijphart, A. (1999). Patterns of Democracy: Government forms and Performance in 36 countries. New Haven, Yale University Press.
- Lipset, S. M. (1994). "The Social Requisites of Democracy Revisited." American Sociological Review **59**(February): 1-22.
- Lockerbie, B. (1993). "Economic Dissatisfaction and Political Alienation in Western Europe." European Journal of Political Research **23**(281-93).
- McDonough, P., et al. (1986). "The Growth of Democratic Legitimacy in Spain." American Political Science Review **80**: 735-759.
- Merkel, P. H. (1988). Comparing Legitimacy and Values among Advanced Democratic Countries. Comparing Pluralist Democracies. M. Dogan. Boulder, Westview.
- Morlino, L. and M. Tarchi (1996). "The Dissatisfied Society: The Roots of Political Change in Italy." European Journal of Political Research **30**: 41-63.
- Norris, P. (1999). Critical Citizens: Global Support for Democratic Government. New York, Oxford University Press.
- Putnam, R. D. (1993). Making Democracy Work. Princeton, Princeton University Press.
- Schneider, F. and A. Wagner (2001). "Institutions of Conflict Management and Economic Growth in the European Union." Kyklos **54**(4): 509-532.
- Tarantelli, E. (1986). "The regulation of inflation and unemployment." Industrial Relations **25**: 1-15.
- Thomassen, J. (1995). Support for Democratic Values. Citizens and the State. H.-D. Klingemann and D. Fuchs. New York, Oxford University Press.
- Wagner, A. F. (2000). Institutions and Growth: Theoretical foundations and empirical evidence. Department of Economics. Linz, University of Linz.
- Weil, F. D. (1989). "The Sources and Structure of Legitimation in Western Democracies: A Consolidated Model Tested with Time-Series Data in Six Countries since World War II." American Sociological Review **54**: 682-706.

WORKINGPAPERS 1991-2003

Department of Economics, Johannes Kepler University Linz

- 9101 WEISS, Christoph: Price inertia and market structure under incomplete information. Jänner 1991. in: *Applied Economics*, 1992.
- 9102 BARTEL, Rainer: Grundlagen der Wirtschaftspolitik und ihre Problematik. Ein einführender Leitfaden zur Theorie der Wirtschaftspolitik. Jänner 1991; Kurzfassung erschienen unter: Wirtschaftspolitik in der Marktwirtschaft, in: *Wirtschaft und Gesellschaft*, 17. 1991,2, S. 229-249
- 9103 FALKINGER, Josef: External effects of information. Jänner 1991
- 9104 SCHNEIDER, Friedrich; Mechanik und Ökonomie: Keplers Traum und die Zukunft. Jänner 1991, in: R. Sandgruber und F. Schneider (Hrsg.), "Interdisziplinarität Heute", Linz, Trauner, 1991
- 9105 ZWEIMÜLLER, Josef, WINTER-EBMER, Rudolf: Manpower training programs and employment stability, in: *Economica*, 63. 1995, S. 128-130
- 9106 ZWEIMÜLLER, Josef: Partial retirement and the earnings test. Februar 1991, in: *Zeitschrift für Nationalökonomie / Journal of Economics*, 57. 1993,3, S. 295-303
- 9107 FALKINGER, Josef: The impacts of policy on quality and price in a vertically integrated sector. März 1991. Revidierte Fassung: On the effects of price or quality regulations in a monopoly market, in: *Jahrbuch für Sozialwissenschaft*.
- 9108 PFAFFERMAYR, Michael, WEISS, Christoph R., ZWEIMÜLLER, Josef: Farm income, market wages, and off-farm labour supply, in: *Empirica*, 18, 2, 1991, S. 221-235
- 9109 BARTEL, Rainer, van RIETSCHOTEN, Kees: A perspective of modern public auditing. Pleading for more science and less pressure-group policy in public sector policies. Juni 1991, dt. Fassung: Eine Vision von moderner öffentlicher Finanzkontrolle, in: *Das öffentliche Haushaltswesen in Österreich*, 32. 1991,3-4, S. 151-187
- 9110 SCHNEIDER, Friedrich and LENZELBAUER, Werner: An inverse relationship between efficiency and profitability according to the size of Upper-Austrian firms? Some further tentative results, in: *Small Business Economics*, 5. 1993,1, S. 1-22
- 9111 SCHNEIDER, Friedrich: Wirtschaftspolitische Maßnahmen zur Steigerung der Effizienz der österreichischen Gemeinwirtschaft: Ein Plädoyer für eine aktivere Industrie- und Wettbewerbspolitik. Juli 1991, in: *Öffentliche Wirtschaft und Gemeinwirtschaft in Österreich*, Wien, Manz, 1992, S. 90-114
- 9112 WINTER-EBMER, Rudolf, ZWEIMÜLLER, Josef: Unequal promotion on job ladders, in: *Journal of Labor Economics*, 15. 1997,1,1, S. 70-71
- 9113 BRUNNER, Johann K.: Bargaining with reasonable aspirations. Oktober 1991, in: *Theory and Decision*, 37, 1994, S. 311-321.
- 9114 ZWEIMÜLLER, Josef, WINTER-EBMER, Rudolf: Gender wage differentials and private and public sector jobs. Oktober 1991, in: *Journal of Population Economics*, 7. 1994, S. 271-285
- 9115 BRUNNER, Johann K., WICKSTRÖM, Bengt-Arne: Politically stable pay-as-you-go pension systems: Why the social-insurance budget is too small in a democracy. November 1991, in: *Zeitschrift für Nationalökonomie = Journal of Economics*, 7. 1993, S. 177-190.
- 9116 WINTER-EBMER, Rudolf, ZWEIMÜLLER, Josef: Occupational segregation and career advancement. Dezember 1991, in: *Economics Letters*, 39. 1992, S. 229-234
- ***
- 9201 SCHNEIDER, Friedrich: Ecological objectives in a market economy: Three simple questions, but no simple answers? Jänner 1992, in: Giersch, H. (Hrsg.), *Environmental economics*, Heidelberg, Springer-Verl., 1993
- 9202 SCHNEIDER, Friedrich: The federal and fiscal structures of representative and direct democracies as models for a European federal union: Some preliminary ideas using the public-choice approach, in: *Journal des Economistes et des Etudes Humaines*, 3. 1993,2
- 9203 SCHNEIDER, Friedrich: The development of the shadow economy under changing economic conditions: Some tentative empirical results for Austria. Revised version. März 1992.
- 9204 HACKL, Franz, SCHNEIDER, Friedrich, WITHERS, Glenn: The public sector in Australia: A quantitative analysis. März 1992, in: Gemmell, N. (ed.), *The growth of the public sector*, Aldershot, Elgar, 1993, S. 212-231
- 9205 SCHNEIDER, Friedrich: The federal and fiscal structures of western democracies as models for a federal union in former communist countries? Some thoughts using the public-choice approach. April 1992, in: Wagner, H.-J. (ed.), *On the theory and policy of systematic change*, Heidelberg, Springer-Verl., 1993, S. 135-154
- 9206 WINTER-EBMER, Rudolf: Endogenous growth, human capital, and industry wages. in: *Bulletin of Economic Research*, 4/1994, 289-314.
- 9207 BARTEL, Rainer: Gleichgewicht, Ungleichgewicht und Anpassung in der komparativen Statik. August 1992; 1. Teil erschienen unter: Auf welchen Grundlagen beruhen unsere ökonomischen Aussagen? in: *Wirtschaft und Gesellschaft*, 19, 2, 1993, S. 153-170; 2. Teil erschienen unter: Neoklassische Rationierung, in: *WiSt*, 23, 3, 1993, S. 151-154
- 9208 WEISS, Christoph R.: Market structure and pricing behaviour in Austrian manufacturing. August 1992, in: *Empirica*, 21. 1994, S. 115-131.
- 9209 WINTER-EBMER, Rudolf: Unemployment and individual pay: Wage curve or compensating differentials? erscheint u.d.T.: Wage Curve, Unemployment Duration and Compensating Differentials, in: *Labour Economics*, 3/1996,4, S. 425-434
- 9210 SCHUSTER, Helmut: Chaostheorie und Verkehrswissenschaft? September 1992, in: *Österreichische Zeitschrift für Verkehrswissenschaft*, 1-2, 38. 1992, S. 48-51
- 9211 BARTEL, Rainer, PRUCKNER, Gerald: Strukturelle und konjunkturelle Charakteristika der Budgetpolitik von Bund und Gesamtstaat in Österreich. Oktober 1992, in: *Wirtschaftspolitische Blätter*, 40. 1993,2, S. 134-154
- 9212 PFAFFERMAYR, Michael: Foreign direct investment and exports: A time series approach. Oktober 1992
- 9213 HACKL, Franz, SCHNEIDER, Friedrich: Austrian economic policy since 1945: An exploratory analysis. Oktober 1992, in: Paldam, M. (ed.), *Economic development of small open economies in Europe and South America*, Basingstoke, Macmillan, forthcoming 1994
- 9214 SCHNEIDER, Friedrich: Die Kunst als Wirtschaftsfaktor - vernachlässigbar oder beachtenswert? Oktober 1992, in: *Musicologica Austriaca*, 11. 1993,1, S. 19-29
- 9215 SCHNEIDER, Friedrich: Measuring the size and the development of the shadow economy: Can the causes be found and the obstacles be overcome? November 1992, in: Brandstätter, Hermann and Güth, W. (eds.), *Essays on Economic Psychology*, Heidelberg, Springer-Verl., 1994, S. 208-211
- 9216 SCHNEIDER, Friedrich: Public choice - economic theory of politics: A survey in selected areas. Dezember 1992, in: Brandstätter, Hermann and Güth, W. (eds.), *Essays on Economic Psychology*, Heidelberg, Springer-Verl., 1994, S. 188-192

- ***
- 9301 SCHUSTER, Helmut: Energiepolitik im Spannungsfeld zwischen Wirtschaft und Umwelt. Jänner 1993, in: Friedrich Schneider (Hrsg.), *Energiepolitik in Österreich*, Linz, Trauner, 1993
- 9302 WINTER-EBMER, Rudolf: Motivation to migrate and economic success. März 1993, erscheint u.d.T.: Motivation for Migration and Economic Success, in: *Journal of Economic Psychology*, 15. 1994, S. 282-284
- 9303 LANDESMANN, Michael and GOODWIN, Richard: Productivity growth, structural change and macroeconomic stability. März 1993
- 9304 PFAFFERMAYR, Michael: Foreign outward direct investment and exports in Austrian manufacturing. März 1993
- 9305 BARTEL, Rainer: Zur Ökonomie der öffentlichen Finanzkontrolle. April 1993, erschienen unter: Öffentliche Finanzkontrolle als politische Machtkontrolle. Eine ökonomische Fundierung, in: *Politische Vierteljahresschrift*, 34. 1993,4, S. 613-639
- 9306 HACKL, Franz: Die Internalisierung von überbetrieblichen Leistungen der Landwirtschaft aus allokatorentheoretischer Sicht. April 1993.
- 9307 ZWEIMÜLLER, Josef, WINTER-EBMER, Rudolf, FALKINGER, Josef: Retirement of spouses and social security reform, in: *European Economic Review*, 40/1996, S. 471-472
- 9308 BRUNNER, Johann K.: Abilities, needs, and the size of the cake: an axiomatic bargaining approach to redistributive taxation. Juli 1993.
- 9309 HACKL, Franz, PRUCKNER, Gerald: Touristische Präferenzen für den ländlichen Raum: Die Problematik ihrer empirischen Erfassung und Internalisierung. Juli 1993. Ersch. in: *Gesellschaftliche Forderungen an die Landwirtschaft / Gesellschaft für Wirtschafts- und Sozialwissenschaften des Landbaues (GEWISOLA)*, hrsg. von Konrad Hagedorn ... 1994, Schriften der GEWISOLA, Bd. 30
- 9310 NECK, Reinhard, SCHNEIDER, Friedrich: Steuersystem und Schattenwirtschaft. Juli 1993.
- 9311 POINTNER, Johannes und SCHNEIDER, Friedrich: Österreich im internationalen Wirtschaftssystem, August 1993, in: Ewald Nowotny und Günther Winckler (Hrsg.), *Grundzüge der Wirtschaftspolitik Österreichs*, 1994.
- 9312 SCHNEIDER, Friedrich: The Relationship between efficiency and profitability with respect to the size of firms: an empirical investigation for Austria. September 1993.
- 9313 ÖTSCH, Walter: Die mechanistische Metapher in der Theoriengeschichte der Nationalökonomie. September 1993.
- 9314 BARTEL, Rainer: Wirtschaftspolitische Kontrolle und Beratung: Grundlagen, Probleme, Erfordernisse. September 1993, erschienen als: Kontrolle und Beratung in der Wirtschaftspolitik, in: *Wirtschaftspolitische Blätter*, 41. 1994,4, S. 442-462
- 9315 BARTH, Erling and ZWEIMÜLLER, Josef: Relative wages under decentralized and under corporatist bargaining systems, in: *Scandinavian Journal of Economics*, 97. 1995,3, S. 369-384
- 9316 FALKINGER, Josef and ZWEIMÜLLER, Josef: The impact of income inequality on product diversity and economic growth. Oktober 1993.
- 9317 SCHNEIDER, Friedrich: Anreizorientierte Systeme im Gesundheitswesen unter besonderer Berücksichtigung des stationären Sektors. Oktober 1993.
- 9318 HORSTMANN, Winfried and SCHNEIDER, Friedrich: Deficits, bailout and free riders: Fiscal elements of European constitution. Oktober 1993.
- 9319 BARTEL, Rainer: Egoismus, Altruismus, Ineffizienz und Kontrolle im öffentlichen Bereich: Ein kurzer Blick auf die Argumente und ihre Implikationen. November 1993, in: *Wirtschaft und Gesellschaft*, 20. 1994,2, S. 231-246
- 9320 BURGER, Christina: Theorien der Koalitionsbildung und ihre Anwendbarkeit auf österreichische Regierungen. November 1993.
- 9321 BARTEL, Rainer: Konjunkturelle Selbststabilisierung oder kompensatorische Nachfragepolitik? Ein Leitfaden für Studenten. Dezember 1993, tw. erschienen unter: Konjunkturelle - Selbstheilung oder Staatseingriffe?, in: *WISO*, 17. 1994,4, S. 111-39, erscheint tw. unter: Lohnindexierung - Effiziente Institution zur Stabilisierung der Wirtschaft?, in: *WiSt*, 26. 1997,3, S. 154-156
- ***
- 9401 WINTER-EBMER, Rudolf, ZWEIMÜLLER, Josef: Immigration and the Earnings of Young Native Workers. Jänner 1994, in: *Oxford Economic Papers*, 48. 1996, S. 473-491
- 9402 KUNST, Robert, HAUSER, Michael: Fractionally Integrated Models With ARCH Errors. Jänner 1994.
- 9403 ZWEIMÜLLER, Josef, WINTER-EBMER, Rudolf: Internal Markets and Firm-Specific Determination of Earnings in the Presence of Immigrant Labor, in: *Economics Letters*, 48. 1995, S. 185-191
- 9404 SCHUSTER, Helmut: Energie und Umwelt. März 1994.
- 9405 PFAFFERMAYR, Michael: Testing for Ownership Advantages of Direct Investing Firms. März 1994.
- 9406 SCHNEIDER, Friedrich: Determinanten der Steuerhinterziehung und der Schwarzarbeit im internationalen Vergleich. März 1994.
- 9407 FALKINGER, Josef: Social Stability and the Equity-Efficiency Trade-off. April 1994.
- 9408 WINTER-EBMER, Rudolf, ZWEIMÜLLER, Josef: Do Immigrants Displace Native Workers? Mai 1994, erscheint in: *Journal of Population Economics*, 1998.
- 9409 FALKINGER, Josef: How to overcome free-riding: Rewarding deviations from average. Mai 1994. Revidierte Fassung: Efficient Private Provision of Public Goods by Rewarding Deviations from Average, in: *Journal of Public Economics*, 62. 1996,3, S. 413-422
- 9410 ZWEIMÜLLER, Josef: Wealth distribution, innovations, and economic growth. Mai 1994.
- 9411 GANTNER, Manfred, SCHNEIDER, Friedrich: Budgetausgliederungen - eine polit-ökonomische Analyse. Juni 1994.
- 9412 AIGINGER, Karl: The use of game theoretical models for empirical research - A survey of testing non-cooperative game theory with real world data in recent industrial organization literature. Juni 1994.
- 9413 FALKINGER, Josef: The private provision of public goods when the relative size of contribution matters. Juli 1994, in: *Finanzarchiv*, 51, 1994, S. 358 - 371.
- 9414 WINTER-EBMER, Rudolf: Sex discrimination and competition in product and labour markets, in: *Applied Economics*, 27. 1995,9, S. 849-857
- 9415 FALKINGER, Josef, ZWEIMÜLLER, Josef: The cross-country Engel curve for product diversification, August 1994, in: *Structural Change and Economic Dynamics*, 7. 1996,1, S. 79-97
- 9416 FALKINGER, Josef: Tax evasion, consumption of public goods and fairness, August 1994, in: *Journal of Economic Psychology*, 16, 1995, S. 63 - 72.
- 9417 SCHNEIDER, Friedrich: Einige Gedanken zur Harmonisierung indirekter Steuern in der Europäischen Union, September 1994.
- 9418 WINTER-EBMER, Rudolf: Firm size, earnings and displacement risk, Oktober 1994, erscheint in: *Economic Inquiry*, 2000.
- 9419 WEISS, Christoph: Labour market adjustment in U.S. manufacturing: Does market structure matter? Oktober 1994.
- 9420 WEISS, Christoph: State dependence, symmetry and reversibility of off-farm employment, November 1994.
- 9421 SCHNEIDER, Friedrich: Is there a European public choice perspective?, Dezember 1994.
- ***
- 9501 BARTEL, Rainer: Reform des öffentlichen Sektors - Grundlagen und Grundsätze. Jänner 1995.
- 9502 RIESE, Martin: The GINI-index as a measure of the goodness of prediction, Jänner 1995, in: *Bulletin of Economic Research*, 49. 1997,2, S. 127-135.
- 9503 AIGINGER, Karl, WINTER-EBMER, Rudolf und ZWEIMÜLLER, Josef: Eastern European Trade and the Austrian

- Labour Market, in: *Weltwirtschaftliches Archiv*, 132. 1996,3, S. 476-500
- 9504 WEISS, Christoph: Size, Growth, and Survival of Upper Austrian Farms in the 1980s, Februar 1995. in: Sotte, F. and Zanoli, R.: "The Regional Dimension of Agricultural Economics and Politics", forthcoming (1995).
- 9505 BARTEL, Rainer: Umweltpolitik in den Reformländern Europas. Voraussetzungen und Erfordernisse, Februar 1995.
- 9506 PFAFFERMAYR, Michael: Foreign Outward Direct Investment and Exports in Austrian Manufacturing: Substitutes or Complements?, March 1995.
- 9507 BURGER, Christina, SCHNEIDER, Friedrich: How Valuable is the Health of the Elderly- Evaluation of the Treatment of Alzheimer's Disease; April 1995.
- 9508 BRUNNER, Johann, RIESE, Martin: Measuring the Severity of Unemployment, April 1995.
- 9509 SCHNEIDER, Friedrich: Volkswirtschaftliche Aspekte der Mitarbeiterbeteiligung, Mai 1995.
- 9510 ÖTSCH, Walter: Erwartungen und Framing. Keynes und die "Anomalien" der Erwartungsnutzentheorie, Mai 1995.
- 9511 ÖTSCH, Walter: Die Herausforderung des Konstruktivismus für die ökonomische Theorie, Mai 1995, in: Birger P. Priddat und Gerhard Wegner, Hrsg., Zwischen Evolution und Institution, Metropolis-Verl., Marburg, 1996, S. 35 - 55
- 9512 ÖTSCH, Walter: Kreativität und Logik im ökonomischen Handlungsmodell, Mai 1995.
- 9513 WEISS, Christoph: Determinants of Farm Survival and Growth, Mai 1995.
- 9514 BARTEL, Rainer: Zum Verhältnis von Ökonomie und Politik des öffentlichen Sektors. Einige kurze Anmerkungen, Juni 1995.
- 9515 KUNST, Robert M.: The Myth of Misspecification. Some Metaphors, Juni 1995.
- 9516 VAN DER BURG, Brigitte, SIEGERS, Jacques, WINTER-EBMER, Rudolf: Gender and Promotion in the Academic Labour Market. Juli 1995.
- 9517 FALKINGER, Josef, FEHR, Ernst, GÄCHTER, Simon, WINTER-EBMER, Rudolf: A simple mechanism for the efficient private provision of public goods - experimental evidence, August 1995, erscheint in: *American Economic Review*, 1999.
- 9518 SCHNEIDER, Friedrich: Some Elements of a European Federal Union: A Public Choice Approach, September 1995.
- 9519 BRUNNER, Johann, FALKINGER, Josef: Nonneutrality of taxes and subsidies for the private provision of public goods, September 1995.
- 9520 WEISS, Christoph: Product Market Power and Dynamic Labour Demand, September 1995.
- 9521 LANDESMANN, Michael, PFAFFERMAYR, Michael: Technological Competition and Trade Performance, October, 1995.
- ***
- 9601 WEISS, Christoph: Exits From a Declining Sector: Econometric Evidence From a Panel of Upper-Austrian Farms 1980-90., Jänner 1996.
- 9602 BÖS, Dieter und SCHNEIDER, Friedrich: Private-public partnership: Gemeinschaftsunternehmen zwischen Privaten und der öffentlichen Hand, Februar 1996.
- 9603 GÄCHTER, Simon, FEHR, Ernst, KMENT, Christiane: Does Social Exchange Increase Voluntary Cooperation?, Februar 1996.
- 9604 ZWEIMÜLLER, Josef, BRUNNER, Johann: Heterogeneous consumers, vertical product differentiation and the rate of innovation, März 1996.
- 9605 SCHNEIDER, Friedrich: The Contributions of Werner W. Pommerehne to Public Choice, März 1996.
- 9606 SEDJAV, Tsagaan-Uvgun: Wissenschaftlich-technologische Entwicklungsfragen der Mongolei, April 1996, Wissenschaftlicher Betreuer: o.Univ.-Prof. Dr. Helmut Schuster, B.Com.
- 9607 KEUSCHNIGG, Christian u. KOHLER Wilhelm: Innovation, Capital Accumulation and Economic Transition, revised version April 1996.
- 9608 AIGINGER, Karl: Beyond Trade Balances: the competitive race between the US, Japan and Europe, Juni 1996.
- 9609 POMMEREHNE, Werner W., HART, Albert und SCHNEIDER, Friedrich: Tragic Choices and Collective Decision-Making: An Empirical Study of Voter Preferences for Alternative Collective Decision-Making Mechanisms, Juli 1996.
- 9610 BARTEL, Rainer, POINTNER, Johannes, SCHNEIDER, Friedrich: Österreich im internationalen Wirtschaftssystem, Juli 1996, erschienen in: E.Nowotny und G. Winckler (Hg.), Grundzüge der Wirtschaftspolitik Österreichs, 2. Aufl., Manz-Verlag, Wien 1997, S. 49-98.
- 9611 SCHNEIDER, Friedrich, VOLKERT, Jürgen: Die Realisierung ökologisch-orientierter Wirtschaftspolitik - eine Unmöglichkeit? Überlegungen aus Sicht der Neuen Politischen Ökonomie, Juli 1996.
- 9612 AIGINGER, Karl, WEISS, Christoph R.: Does it Pay to be Flexible? Empirical Evidence on the Relationship between Labour Demand Flexibility and Profit Margins, Juli 1996.
- 9613 WEISS, Christoph R.: Beneficial Concentration in a Menu Cost Model: A Note, August 1996.
- 9614 GUSENLEITNER, Markus, WINTER-EBMER, Rudolf, ZWEIMÜLLER, Josef: The Distribution of Earnings in Austria, 1972-1991, *Allgemeines Statistisches Archiv*, 3/98.
- 9615 WINTER-EBMER, Rudolf: Benefit Duration and Unemployment Entry: Quasi-Experimental Evidence for Austria, Oktober 1996.
- 9616 WINTER-EBMER, Rudolf: Potential Unemployment Benefit Duration and Spell Length: Lessons from a Quasi-Experiment in Austria, in: *Oxford Bulletin of Economics and Statistics*, 60. 1998,1, S. 33-45
- 9617 SCHNEIDER, Friedrich, FREY, Bruno S.: Warum wird die Umweltökonomik kaum angewendet?, November 1996.
- 9618 SCHNEIDER, Friedrich: Aktuelle Ergebnisse über die Schattenwirtschaft (Pfusch) in Österreich, November 1996.
- 9619 KOHLER, Wilhelm: Die langfristige Entwicklung der Transformationsländer Osteuropas: Welche Rolle spielt die Integration der Märkte?, Dezember 1996.
- 9620 BRUNNER, Johann K., PRINZ, Christopher, WIRTH, Friedrich: Die Zukunft der gesetzlichen Pensionsversicherung, Dezember 1996.
- 9621 SCHNEIDER, Friedrich, GAWEL, Erik: Umsetzungsprobleme ökologisch orientierter Steuerpolitik: Eine polit-ökonomische Analyse, Dezember 1996.
- ***
- 9701 SCHNEIDER, Friedrich: Hält der EURO, was er verspricht? Ökonomische Überlegungen zur Stabilität und zur Einführung des EURO, Jänner 1997.
- 9702 SCHNEIDER, Friedrich: Welche Chancen hat Österreich als Wirtschaftsstandort im EU- und Globalisierungskontext derzeit und in Zukunft?, Jänner 1997.
- 9703 BRUNNER, Johann K.: Ökonomische Analyse des umlagefinanzierten Pensionsversicherungssystems, Jänner 1997.
- 9704 PFAFFERMAYR, Michael, WEISS, Christoph R.: On Market Power and Investment Behaviour, January 1997.
- 9705 LANDESMANN, Michael A., STEHRER, Robert: Industrial Specialisation, Catching-up and Labour Market Dynamics, January 1997.
- 9706 BARTEL, Rainer: Taking even introductory textbooks seriously. A note on the importance of a usual neglect, February 1997.
- 9707 KUNST, Robert M.: Decision bounds for data-admissible seasonal models, March 1997.
- 9708 WINTER-EBMER, Rudolf, ZWEIMÜLLER, Josef: Intra-firm Wage Dispersion and Firm Performance, *Kyklos*, 1999.
- 9709 PRITZL, F. J. Rupert und SCHNEIDER, Friedrich: Korruption, März 1997.
- 9710 SCHNEIDER, Friedrich: Empirical Results for the Size of the Shadow Economy of Western European Countries Over Time, März 1997.

- 9711 SCHNEIDER, Friedrich und VOLKERT, Jürgen: No Chance for Incentive-orientated Environmental Policies in Representative Democracies? A Public Choice Approach, März 1997.
- 9712 FALKINGER, Josef: Wachstum, Verteilung und Beschäftigung, März 1997.
- 9713 PRITZL, F. J. Rupert und SCHNEIDER, Friedrich: Zur Politischen Ökonomie autokratischer politischer Systeme - Ein theoretischer und empirischer Ansatz, April 1997.
- 9714 SCHUSTER, Helmut: Das Phänomen der strukturellen Arbeitslosigkeit und Maßnahmen zu seiner Bekämpfung,, Mai 1997.
- 9715 BARTEL, Rainer: Paradigmatik versus Pragmatik in der (Umwelt-)Ökonomie. Eine epistemologische Sicht, Mai 1997.
- 9716 BERGER, Helge und SCHNEIDER, Friedrich: Does the Bundesbank Yield in Conflicts? Frey and Schneider Revisited, Juni 1997.
- 9717 RIESE, Martin und BRUNNER, Johann K.: Interpreting risk with demographic statistics, Juni 1997.
- 9718 KUNST, Robert M.: Asymptotics for Unit-Root Processes with Underspecified Deterministic Structures, Juni 1997.
- 9719 GAWEL, Erik und SCHNEIDER, Friedrich: Implementation Problems of Eco-Taxation: A Political-Economy Analysis, Juli 1997
- 9720 PRITZL, Rupert und SCHNEIDER, Friedrich: Political Economy of Autocratic Political Regimes: A Theoretical and Empirical Approach, Juli 1997
- 9721 WINTER-EBMER, Rudolf: Unknown Wage Offer Distribution and Job Search Duration, *Economics Letters*, 1998.
- 9722 BRUNNER, Johann K.: Optimal Taxation of Income and Bequests, August 1997
- 9723 KEUSCHNIGG, Christian und KOHLER, Wilhelm: Eastern Enlargement of the EU: How Much is it Worth for Austria?, November 1997
- 9724 HOFER, Helmut, KEUSCHNIGG, Christian und Wilhelm KOHLER, A Dynamic Applied General Equilibrium Model for the Austrian Economy With Special Emphasis on the Eastern EU Enlargement, November 1997.
- ***
- 9801 WINTER-EBMER, Rudolf und Klaus F. ZIMMERMANN: East-West Trade and Migration: The Austro-German Case, Jänner 1998, erscheint in: Jaime de Melo, Riccardo Faini und Klaus F. Zimmermann (eds.): *Trade and Factor Mobility*, Cambridge (CUP).
- 9802 ICHINO, Andrea und Rudolf WINTER-EBMER: The Long-Run Educational Cost of World War 2: An Application of Local Average Treatment Effect Estimation, Jänner 1998.
- 9803 SCHNEIDER, Friedrich: Deregulierung und Privatisierung als Allheilmittel gegen ineffiziente Produktion von öffentlichen Unternehmen? Ein Erklärungsversuch mit Hilfe der ökonomischen Theorie der Politik, Jänner 1998.
- 9804 SCHNEIDER, Friedrich: Märkte, Moral und Umwelt: Was sagt die Ökonomie dazu?, Jänner 1998.
- 9805 LENK, Thomas, FUGE, Heidi und SCHNEIDER, Friedrich: Zurück zu mehr Föderalismus: Ein Vorschlag zur Neugestaltung des Finanzausgleichs in der BRD unter besonderer Berücksichtigung der ökonomischen Theorie der Politik, Jänner 1998.
- 9806 SCHNEIDER, Friedrich: Stellt das starke Anwachsen der Schwarzarbeit eine wirtschaftspolitische Herausforderung dar? Einige Gedanken aus volkswirtschaftlicher Sicht, Jänner 1998.
- 9807 SCHNEIDER, Friedrich: Einige grundlegende Elemente einer europäisch-föderalen Verfassung unter Zuhilfenahme der konstitutionellen ökonomischen Theorie, Jänner 1998.
- 9808 LANDESMANN, Michael: Vertical product differentiation and international trade: an econometric analysis, März 1998.
- 9808a BARTEL, Rainer: Öffentliche Finanzen, Finanzkontrolle und gesellschaftliche Wohlfahrt. Volkswirtschaftliche Thesen, Antithesen und mögliche Synthesen, März 1998. Erschienen in überarbeiteter Version in: F. Klug (Hrsg.), *Wesen und staatspolitische Funktion der öffentlichen Finanzkontrolle*, Schriftenreihe des Instituts für Kommunalwissenschaften an der Universität Linz, Bd. 107, S. 85-127.
- 9809 AIGINGER, Karl und PFAFFERMAYR, Michael: Product quality, cost asymmetry and the welfare loss of oligopoly, Februar 1998.
- 9810 KOHLER, Wilhelm: Die Ost-Erweiterung der EU: Eine österreichische Perspektive, April 1998.
- 9811 BERGER, Mathias und SCHNEIDER, Friedrich: Schattenwirtschaft und Steuerhinterziehung: Ökonomische und psychologische Aspekte, April 1998.
- 9812 SCHNEIDER, Friedrich und STIEGLER, Harald: Controlling als effizienzsteigerndes Instrument der Universitätsführung – Zauber- oder Leerformel?, April 1998.
- 9813 KUNST, Robert M.: Some aspects of modeling seasonality in economic time series, Juni 1998.
- 9814 KOHLER, Wilhelm: Fifty Years Later: A New Marshall Plan for Eastern Europe?, Juli 1998.
- 9815 RAPHAEL, Steven und WINTER-EBMER, Rudolf: Identifying the Effect of Unemployment on Crime, September 1998.
- 9816 ICHINO, Andrea und WINTER-EBMER, Rudolf: Lower and Upper Bounds of Returns to Schooling: An Exercise in IV Estimation with Different Instruments, September 1998, erscheint in: *European Economic Review*, 1999.
- 9817 PÖLL, Günther und SCHNEIDER, Friedrich: Schattenwirtschaft, Juli 1998.
- 9818 BRUNNER, Johann K.: Kapitaldeckungsverfahren versus Umlageverfahren: Grundsätzliches zur Systemdiskussion, August 1998.
- 9819 SCHNEIDER, Friedrich und ENSTE, Dominik: Increasing Shadow Economies all over the world - Fiction or Reality? A Survey of the Global Evidence of its Size and of its Impact from 1970 to 1995, November 1998.
- 9820 LENK, Thomas und SCHNEIDER, Friedrich: Zurück zu mehr Föderalismus: Ein Vorschlag zur Neugestaltung des Finanzausgleichs in der Bundesrepublik Deutschland unter besonderer Berücksichtigung der neuen Bundesländer, November 1998.
- 9821 KOHLER, Wilhelm: Die Bedeutung der EU-Osterweiterung für verschiedene Sektoren der österreichischen Wirtschaft, November 1998.
- 9822 KOHLER, Wilhelm: Die pan-europäische Integration: Herausforderungen für die Wirtschaftswissenschaft, November 1998.
- 9823 ATKINSON, Anthony B.: The Changing Distribution of Income: Evidence and Explanations (I. K.W. Rothschild Vorlesung), November 1998.
- 9824 PECH, Susanne und PFAFFERMAYR, Michael: Strategic Environmental Taxation in the Presence of Involuntary Unemployment and Endogenous Location Choice, November 1998.
- 9825 BARTEL, Rainer: Reform und Öffnung Osteuropas, November 1998.
- 9826 ÖTSCH, Walter: Zur Geschichte und Zukunft von Grundkategorien des ökonomischen Denkens: Raum, Zeit, Objekt und Ich, November 1998.
- 9827 ÖTSCH, Walter: „Äußere“ und „Innere“ Glücksmodelle in der Theoriegeschichte der Ökonomie, November 1998, erscheint in: Zinn, Bellebaum und Schaaß: *Ökonomie und Glück*, Frühjahr 1999.
- 9828 ÖTSCH, Walter: Konstruktivismus und ökonomische Theorie, November 1999, erscheint in: Lehmann und Pillath: *Handbuch der Evolutorischen Ökonomik*, Springer Verlag, 1999.
- ***
- 9901 WINTER-EBMER, Rudolf und ZWEIMÜLLER, Josef: Firm Size Wage Differentials in Switzerland: Evidence from Job Changers, Jänner 1999, erscheint in: *American Economic Review, Papers & Proceedings*, 1999.
- 9902 BRANDSTÄTTER, Eduard, KÜHBERGER, Anton und SCHNEIDER, Friedrich: "Surprise in Decision making under Uncertainty, Jänner 1999.

- 9903 SCHNEIDER, Friedrich und WAGNER, Alexander: "The Role of International Monetary Institutions after the EMU and after the Asian Crises: Some Preliminary Ideas Using Constitutional Economics", Februar 1999
- 9904 BRUNNER, Johann K.: Transfers zwischen den Generationen, Februar 1999.
- 9905 LACKÓ, Mária: Hidden Economy – An Unknown Quantity? Comparative Analysis of Hidden Economies in Transition Countries in 1989-1995, Februar 1999
- 9906 KOHLER, Wilhelm: Trade and Wages: What Can Factor Contents Tell Us? Februar 1999.
- 9907 LANDESMANN, Michael und STEHRER Robert: The European Unemployment Problem: A Structural Approach, März 1999.
- 9908 SCHNEIDER, Friedrich: Das Verhältnis von Innovation und Beschäftigung aus wirtschaftlicher Sicht – Jobkiller oder Jobwunder?, Mai 1999.
- 9909 SCHNEIDER, Friedrich und LENK, Thomas: Zurück zum Trennsystem als Königsweg zu mehr Föderalismus in Zeiten des „Aufbau Ost“, Juni 1999.
- 9910 SCHNEIDER, Friedrich: Die Entwicklung der Sozialpolitik in repräsentativen und in direkten Demokratien: Königsweg oder Sackgasse? Einige Bemerkungen aus der „Public Choice“-Perspektive, Juni 1999.
- 9911 SCHNEIDER, Friedrich: Ist Schwarzarbeit ein Volkssport geworden? Ein internationaler Vergleich des Ausmaßes der Schwarzarbeit von 1970 bis 1997, Juni 1999.
- 9912 FELBERMAYR, Gabriel, und KOHLER, Wilhelm: Zur ökonomischen Logik spekulativer Attacken, Juli 1999.
- 9913 FERSTERER, Josef und WINTER-EBMER, Rudolf: Returns to Education - Evidence for Austria, August 1999.
- 9914 BARTEL, Rainer: Social economic issues in sexual orientation – Where do we stand?, September 1999.
- 9915 SCHNEIDER, Friedrich und ENSTE, Dominik: Shadow Economies: Sizes, Causes, and Consequences, September 1999.
- 9916 BARTEL, Rainer: Ökonomische Rationalität im System der öffentlichen Finanzkontrolle. Die Funktionalität des neuen Oö. Landesrechnungshofs, September 1999.
- 9917 FERSTERER, Josef und Rudolf WINTER-EBMER: Are Austrian Returns to Education Falling Over Time?, Oktober 1999.
- 9918 SCHNEIDER, Friedrich und WINNER, Hannes: Ein Vorschlag zur Reform der österreichischen Unternehmensbesteuerung, November 1999.
- 9919 SCHNEIDER, Friedrich: Induzieren ökologische Steuerreformen einen Lenkungseffekt oder nur volle Staatskassen? Einige volkswirtschaftliche Überlegungen, November 1999.
- 9920 KOHLER, Wilhelm: Wer gewinnt, wer verliert durch die Osterweiterung der EU?, November 1999.
- 9921 DRÈZE, Jacques: On the Macroeconomics of Uncertainty and Incomplete Markets, November 1999.
- 9922 STIGLBAUER, Alfred M. und WEISS, Christoph R.: Family and Non-Family Succession in the Upper-Austrian Farm Sector, Dezember 1999.
- 9923 HOLZLEITNER, Christian: Linear Profit-Sharing in Regulatory Contracts, Dezember 1999.
- 9924 ÖTSCH, Walter: Objekt, Subjekt und Wert. Zur Kulturgeschichte in Georg Simmels "Philosophie des Geldes", Dezember 1999.
- ***
- 0001 KOHLER, Wilhelm: Die Osterweiterung der EU aus der Sicht bestehender Mitgliedsländer: Was lehrt uns die Theorie der ökonomischen Integration?, Jänner 2000.
- 0002 FERSTERER, Josef und WINTER-EBMER, Rudolf: Smoking, Discount Rates, and Returns to Education, Jänner 2000.
- 0003 BARTEL, Rainer: Quo vadimus. Grundgedanken zum Verhältnis von Wirtschaft, Staat und Gesellschaft, Februar 2000.
- 0004 SCHNEIDER, Friedrich und FREY, Bruno S.: Informal and Underground Economy, Februar 2000.
- 0005 SCHNEIDER, Friedrich und FELD, Lars P.: State and Local Taxation, Februar 2000.
- 0006 ZWEIMÜLLER, Josef und WINTER-EBMER, Rudolf: Firm-specific Training - Consequences for Job Mobility, März 2000.
- 0007 SCHNEIDER, Friedrich: Schattenwirtschaft – Tatbestand, Ursachen, Auswirkungen, April 2000
- 0008 SCHNEIDER, Friedrich: The Increase of the Size of the Shadow Economy of 18 OECD Countries: Some Preliminary Explanations, April 2000.
- 0009 SCHNEIDER, Friedrich und AHLHEIM, Michael: Allowing for Household Preferences in Emission Trading – A Contribution to the Climate Policy Debate, Mai 2000
- 0010 SCHNEIDER, Friedrich: Illegal Activities, but still value added ones (?): Size, Causes, and Measurement of the Shadow Economies all over the World, Mai 2000.
- 0011 WEICHSELBAUMER, Doris: Is it Sex or Personality? The Impact of Sex-Stereotypes on Discrimination in Applicant Selection, Mai 2000.
- 0012 FELBERMAYR, Gabriel, und KOHLER, Wilhelm: Effizienz- und Verteilungswirkungen der Handelsliberalisierung, Juni 2000.
- 0013 EGGER, Peter und PFAFFERMAYR, Michael: Trade, Multinational Sales, and FDI in a Three-Factors Model, Juni 2000.
- 0014 LANDESMANN, Michael und STEHRER, Robert: Potential Switchovers in Comparative Advantage: Patterns of Industrial Convergence, Juni 2000.
- 0015 SCHNEIDER, Friedrich und WAGNER, Alexander: Korporatismus im europäischen Vergleich: Förderung makroökonomischer Rahmenbedingungen?, Juli 2000.
- 0016 SCHNEIDER, Friedrich und LENK, Thomas: Grundzüge der föderalen Finanzverfassung aus ökonomischer Perspektive: Trennsystem vs. Verbundsystem, Juli 2000.
- 0017 HOLZLEITNER, Christian: Efficient Cost Passthrough, August 2000.
- 0018 HOLZLEITNER, Christian: Evolution of Regulatory Contracts in the Real World - A Change for Good?, August 2000.
- 0019 KOHLER, Wilhelm: International Fragmentation: A Policy Perspective, August 2000.
- 0020 KOHLER, Wilhelm: A Specific-Factors View on Outsourcing, August 2000.
- 0021 WEICHSELBAUMER, Doris: Sexual Orientation Discrimination in Hiring, September 2000.
- 0022 KOHLER, Wilhelm: Internationale Migration: Anmerkungen aus der Sicht der Außenwirtschaftstheorie, Oktober 2000.
- 0023 AIGINGER, Karl und DAVIES, S.W.: Industrial Specialisation and geographic Concentration: Two sides of the same coin? Not for the European Union, Oktober 2000.
- 0024 EGGER, Hartmut und EGGER, Peter: Outsourcing and Skill-Specific Employment in a Small Economy: Austria and the Fall of the Iron Curtain, Oktober 2000.
- 0025 KOHLER, Wilhelm: An Incumbent Country View on Eastern Enlargement of the EU - Part I: A General Treatment, November 2000.
- 0026 KOHLER, Wilhelm: An Incumbent Country View on Eastern Enlargement of the EU - Part II: The Austrian Case, November 2000.
- 0027 FREY, Bruno S.: What are the sources of happiness?, November 2000
- 0028 RIESE, Martin: Weakening the SALANT-condition for the Comparison of mean durations, Dezember 2000
- 0029 WINTER-EBMER, Rudolf: Long-term consequences of an innovative redundancy-retraining project: The Austrian Steel Foundation, Dezember 2000.

- 0030 BRUNNER, Johann K. und PECH, Susanne: Adverse Selection in the annuity market when payoffs vary over the time of retirement, Dezember 2000.
- ***
- 0101 KOHLER, Wilhelm: Osterweiterung der EU: Die Mitgliedschaft wird teurer – Wird sie auch wertvoller?, Jänner 2001.
- 0102 STEHRER, Robert: Industrial specialisation, trade, and labour market dynamics in a multisectoral model of technological progress, Jänner 2001.
- 0103 SCHNEIDER, Friedrich; SALHOFER, Klaus; SCHMID, Erwin, und STREICHER, Gerhard: Was the Austrian Agricultural Policy Least Cost Efficient?, März 2001.
- 0104 SCHNEIDER, Friedrich; KIRCHLER, Erich und MACIEJOVSKY, Boris: Social Representations on Tax Avoidance, Tax Evasion, and Tax Flight: Do Legal Differences Matter?, März 2001.
- 0105 SCHNEIDER, Friedrich; PITLIK, Hans, und STROTSMANN, Harald: On the Politicization of Intergovernmental Fiscal Relations in Germany after Unification, März 2001.
- 0106 SCHNEIDER, Friedrich: Privatisierung und Deregulierung in Österreich in den 90er Jahren: Einige Anmerkungen aus Sicht der Neuen Politischen Ökonomie, März 2001.
- 0107 SCHNEIDER, Friedrich; BRAITHWAITE, Valerie, and REINHART, Monika: Individual Behavior in the Cash / Shadow Economy in Australia: Facts, Empirical Findings and some Mysteries, März 2001.
- 0108 BRUNELLO, Giorgio; LUCIFORA, Claudio, und WINTER-EBMER, Rudolf: The Wage Expectations of European College Students, März 2001.
- 0109 BRUNNER, Johann K. und PECH, Susanne: Die Dritte Säule der Altersvorsorge - Sparen und Versichern?, Juni 2001.
- 0110 STÖGER, Klaus und WINTER-EBMER, Rudolf: Lehrlingsausbildung in Österreich: Welche Betriebe bilden Lehrlinge aus? Juli 2001.
- 0111 HEIJDRÄ, Ben J.; KEUSCHNIGG, Christian, und KOHLER, Wilhelm: Eastern Enlargement of the EU: Jobs, Investment and Welfare in Present Member Countries, Oktober 2001
- 0112 BRUNNER, Johann und BUCHEGGER, Reiner: Gesundheitsgüter und Gesundheitsdienstleistungen in Österreich, Dezember 2001.
- 0113 MALINVAUD, Edmond: On methodology in macroeconomics – with application to the demand for unskilled labour, November 2001.
- ***
- 0201 KOHLER, Wilhelm: The Distributional Effects of International Fragmentation, April 2002.
- 0202 WINTER-EBMER, Rudolf and WIRZ, Anieli: Public Funding and Enrolment into Higher Education in Europe, April 2002.
- 0203 KOHLER, Wilhelm: Issues of US-EU Trade Policy, May 2002.
- 0204 BRUNNER, Johann K. und PECH, Susanne: Adverse selection in the annuity market with sequential and simultaneous insurance demand, May 2002.
- 0205 Stiglbauer, Alfred, Stahl, Florian, Winter-Ebmer, Rudolf and Josef Zweimüller: Job Creation and Job Destruction in a Regulated Labor Market: The Case of Austria, July 2002.
- 0206 René Böheim and Mark P Taylor: Job search methods, intensity and success in Britain in the 1990s, July 2002.
- 0207 BURGSTALLER, Johann: Are stock returns a leading indicator for real macroeconomic developments?, July 2002.
- 0208 KOHLER, Wilhelm: Aspects of International Fragmentation, August 2002.
- 0209 PECH Susanne: Tax incentives for private life annuities and the social security reform: effects on consumption and on adverse selection, August 2002.
- 0210 BRUNELLO, Giorgio and WINTER-EBMER, Rudolf: Why Do Students Expect to Stay Longer in College? Evidence from Europe, August 2002.
- 0211 RIESE, Martin: A New Class of Ageing Distributions, December 2002.
- 0212 BRUNNER, Johann K.: Welfare Effects of Pension Finance Reform, December 2002.
- ***
- 0301 SCHNEIDER, Friedrich and BAJADA, Christopher: The Size and Development of the Shadow Economies in the Asia-Pacific, April 2003.
- 0302 SCHNEIDER, Friedrich, CHAUDHURI, Kausik and CHATTERJEE, Sumana: The Size and Development of the Indian Shadow Economy and a Comparison with other 18 Asian Countries: An Empirical Investigation, April 2003.
- 0303 SCHNEIDER, Friedrich, WAGNER, Alexander F. and DUFOUR, Mathias: Satisfaction not guaranteed - Institutions and satisfaction with democracy in Western Europe, April 2003.
- 0304 SCHNEIDER, Friedrich and WAGNER, Alexander, F.: Tradeable permits - Ten key design issues, April 2003.