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JEL Classifications: I 38, Z 13, E 32

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Economic Crisis and Morale

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Abstract

The functioning of welfare states and tax systems is fostered by social norms to obey the rules of the system. Morale can change and react to new incentives. In particular, a deep economic crisis with increasing unemployment and reduced prospects for market income may have a norm eroding effect. This study explores the link between economic crisis and morale. Our theoretical reasoning is based on an economic approach to the evolution of norms, according to which norms are influenced by self-interest. A distinction is made between two dimensions of citizens' morale: benefit and tax morale. Our econometric evidence based on data from the World Value Survey suggests that a sharp hike in unemployment reduces the morale standards along both dimensions. The crisis impact on benefit morale is conditional on the existence of generous benefit schemes.

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1. Introduction

Social norms are increasingly acknowledged to be relevant constraints for public sector policies. A tax system's effectiveness in raising revenues is co-determined by the extent of tax morale. This type of social norm can explain why citizens tend to be more compliant with tax laws than it could be expected on the basis of the economic model of tax evasion (Allingham and Sandmo 1972; Torgler 2003). For the conduct of the welfare state, a common understanding of citizens not to cheat on benefit rules alleviates both the disincentive problem and the fiscal burden of benefit schemes (Lindbeck 1995b). Thus, benefit morale is one of the determinants of the optimum size of the welfare state and, indeed, the correlation between a high level of benefit morale and a generous welfare state regime can be established (Algan and Cahuc 2005).

In most of the literature, these social norms are taken to be stable over time though highly different across countries. However, citizens' views to comply with the rules of the tax and welfare state may change. Even small variations in individual behaviour can trigger major shifts (Young 2007). The problem of a gradual norm erosion is discussed for the welfare state, where (Lindbeck 1995a) stresses the possibility, that the build-up of the welfare state may on the long-run undermine its normative base.

This article wants to contribute to the scarce literature on the drivers of norms with respect to both the welfare state and the tax system. Contrary to studies cited above the focus is on the short-run impact of sudden changes in the economic environment and, more specifically, a deep economic crisis. Recessions bring about falling income and increasing involuntary unemployment and, hence, may affect the prevalent views on the welfare state. In a game theoretic interpretation (Young 2007), a social norm decides the outcome of games with potentially multiple equilibria. A crisis may endanger the initial equilibrium and push the system towards another one.

The importance of this contribution is threefold: First, it points to a possible cost of the ongoing global economic crisis which so far has hardly been discussed. This severe economic downturn may affect the views and norms citizens have with respect to their welfare or tax states and, hence, constitute a shock to the current equilibrium of social norms. Second, it is a distinctly economic contribution to a seemingly pure sociological issue by stressing the impact of individual incentives and self-interest on the evolution of norms. And third, it adds to the scarce literature exploring the determinants of benefit and tax morale over time and studying its evolution and determinants.

Our theoretical considerations hint towards a potentially norm eroding effect of a severe economic crisis. Such a crisis modifies the opportunity costs of sticking to a pre-existing norm. At the same time it may reduce the probability of governmental or fellow citizens' sanctions for norm violations. However, the theoretical part underlines that a country's institutions should matter for the extent of the norm eroding effect of a downturn. The effects should be more pronounced the more generous the welfare state is and, hence, the higher the opportunity costs of respecting norms. Our econometric results based on data from the World Value Survey confirm these expectations: Sharp hikes in the unemployment rate have negative effects on the morale of citizens along both dimensions of tax and benefit morale. The impact on benefit morale is conditional on the existence of generous benefit schemes. With a generous system, benefit morale reacts significantly negative to an economic shock and stronger than tax morale does. Overall the results firmly support the economic view of a self-serving norm formation. Individuals' interpretations of social norms tend to react to opportunity costs.

The paper's outline is as follows. In the next section we briefly summarize the relevant literature and develop our hypothesis that crisis could endanger existing social norms. Subsequently, the microeconometric evidence is presented. Finally, conclusions are drawn and possible further research is sketched.

2. Citizens' morale and the potential impact of economic crisis

The insight that social norms constitute an important restriction for economic behaviour and all sorts of economic outcomes is increasingly acknowledged in the economic literature (Guiso, Sapienza et al. 2006). Numerous applications exist, e.g., for the beneficial impact of tax morale on actual tax payments (Frey and Feld 2002; Torgler 2002). (Lindbeck 1995a) argues that social norms impact on the take up rate of social benefits, job search activities, level of reservation wages, workers' absenteeism or applications for early retirement. (Algan and Cahuc 2005) stress that moral hazard issues of unemployment insurance are more serious in countries where people tend to cheat on the rules of the system. As a consequence, labour market institutions such as the Danish model of "flexicurity" which produce good results in a country with a high benefit morale would not function equally well in countries where people accept cheating. Overall this reasoning suggests that a country's normative standards codetermine its economic success including the sustainability of public finances, the viability of welfare state institutions and labour market performance.

As a consequence, it is important to understand the determinants of social norms. A crucial question is whether social norms are primarily the result of a long-run historical development and basically stable and exogenously given. If this is not the case and norms are susceptible to short-run influences and sudden transformations, economic policy must pay attention to possible normative reversals and also ask how own policy decision may impact on norm evolution.

The existing empirical literature is relatively rich with respect to the individual determinants of morale (Torgler 2003): Socio-economic characteristics such as age, gender, education, marital status, employment situation and income help to forecast to which degree an individual adheres to high tax morale standards. Equally, attitudes such as trust in other people, national pride or religiosity are correlated with the individual level of tax morale. These characteristics differ slightly for tax and benefit morale. Income, for example, is positively correlated with benefit morale and negatively with tax morale – a fact which is explainable by a self-serving interpretation of norms (Halla and Schneider 2008). In addition to the micro-characteristics, several country characteristics have been scrutinised, among them decentralization and fiscal autonomy (Torgler and Werner 2005) and direct democracy (Pommerehne and Weck-Hannemann 1996) for tax morale or the size of the welfare state for benefit morale (Heinemann 2008; Halla, Lackner et al. 2009). The latter contributions support Assar Lindbeck's concerns that the build-up of the welfare state undermines the very norms on which the welfare state is based (Lindbeck 1995a). Lindbeck's reasoning is that generous transfer schemes will increase the individual costs of respecting a norm. This, in turn, sets in motion a slow process of citizens defecting from their initial normative convictions. When after a while a critical mass of cheating occurs, norm erosion speeds up through a process of negative reciprocity.

So far the empirical literature is silent on the short-run effects of economic crisis on morale. The possible role of economic downturns has been touched upon in a narrative way by (Lindbeck 1995b) who pointed to the potentially catalyst role of crisis for the erosion of work ethics and benefit morale. Lindbeck argues that an economic crisis which suddenly confronts many people with the welfare state may drastically speed up the otherwise more gradual erosion of welfare state morale. (Heinemann 2008) includes a test on the role of long-term increases in unemployment by relating morale also to the change in unemployment over two decades. However, these long-term changes measure rather a structural deterioration of labour market performance than an economic shock. (Sihvo and Uusitalo 1995) look at the support for the welfare state in Finland and detect that the support falls in a deep economic crisis but these authors do not pay attention to norms related to social benefits. Hence, the Lindbeck presumption about an immediate effect of a cyclical economic downturn on benefit morale is still awaiting its empirical test. With respect to tax morale, the impact of cyclical developments has even not been discussed theoretically so far.

Our reflections on the impact of economic crisis on morale are based on an economic approach to norm determination. This economic approach rests on the assumption that incentives tend to transform social norms. Strong and growing incentives to break a norm will not be without impact. (Elster 1989) argues that individual behavior is sometimes "a compromise between what the norm prescribes and what rationality dictates" (p. 102). In the course of that compromising behaviour, individuals will not only infringe on the norm, they may even tend to reinterpret and modify it. The respect for the norm not to cheat the welfare state comes at individual costs if cheating is associated with an expected additional return. The respect of tax laws is costly if the expected return from evasion is positive taking into account the probability of an audit and the expected value of a fine. The "self-serving bias" according to which people regard as fair what is useful to them is a well established psychological facet of the human mind (Babcock and Loewenstein 1997; Dahl and Ransom 1999).[1] The studies on benefit and tax morale cited above support this view: One result is that high income individuals are flexible with respect to tax morale but rather strict on benefit morale which is clearly self-serving (Halla and Schneider 2008): For high income individuals high tax rates make tax morale an expensive attitude whereas for the same individuals benefit morale is cheap given that there is hardly an opportunity for them to exploit the welfare state. The self-serving bias can also be expected to work in a dynamic way. If changing incentives recommend an alternative interpretation of the norm, the human mind may be flexible enough to do so. An economic crisis may set in motion such a reinterpretation.

An economic downturn with falling income and increasing involuntary unemployment constitutes a shock which potentially affects benefit and tax morale in numerous ways if one applies the incentive based view of norm evolution.

[1] Note that in this view deeds and normative convictions are highly correlated: Norms are adjusted to legitimize a changing behaviour. This is important in interpreting our empirical findings below which are based on normative judgements and not on observable behaviour.

First, if the consumption of morality – i.e. the respect of a norm in spite of individual costs – has the properties of a normal consumption good (i.e. it is characterised by positive income elasticity) the falling income will lead to less morale and increasing readiness to cheat both on taxes and benefits.[2]

Second, decreasing market activity and increasing involuntary unemployment reduces the available options to invest effort in earning market income. Hence, effort in earning welfare state income becomes less expensive in terms of opportunity costs. This argument is related to benefit morale, but not to tax morale since falling market income makes tax evasion less profitable.

Third, the probability of legal fines for benefit cheating is falling in a recession. With limited control capacity it becomes harder for welfare state authorities to monitor recipients. If the unemployment rate rises, shirkers can effectively hide behind the honest recipients e.g. of unemployment benefits. This effect is relevant for benefit morale, not for tax morale.

Fourth, social sanctions for welfare state dependence will alleviate in a crisis. Norms are stabilized both by legal and by social sanctions such as criticism from relatives, friends or neighbours (Elster 1989). In a crisis, for citizens as for authorities it becomes harder to distinguish the truly needy benefit recipients from the exploiters and free riders. Whereas under full employment, an unemployed neighbour arouses suspicion to exploit the system, this suspicion is less likely in a situation of mass unemployment. More generally, an increasing number of involuntary layoffs will shatter the view that everybody is individually responsible for his or her own labour market success which alleviates possible social sanctions.[3] Again, this is an argument backing the expectation of a link between crisis and benefit morale, not tax morale.

Fifth, a deep economic crisis may be perceived as failure of politicians and shatter trust in institutions. Reciprocity considerations would then let expect that people are less willing to respect the written and unwritten rules of the system. This arguments hold both with respect to the tax system and the welfare state.

[2] In an evolutionary interpretation norms survive which help the survival of the group or family (Axelrod 1986). Conversely, norms are abandoned if changing circumstances render them detrimental to survival.

[3] The belief, whether own responsibility or exogenous factors are essential for labour market success and individual economic prosperity, has identified to be an essential explanation for the support for the welfare state with large cross-country differences e.g. between the US and European countries (Alesina and Angeletos 2005; Alesina and Giuliano 2009).

These diverse considerations unambiguously back the expectation that a deep economic crisis should affect benefit and tax morale negatively. However, the case is even more compelling for benefit morale. For tax morale, only the first and fifth arguments are relevant.

One extension of this theory refers to the extent of the welfare state. Increasing incentives to deviate from strict benefit morale in a crisis are a function of the system's generosity. Even with exploding unemployment the respect of benefit morale remains cheap if there are hardly any supporting benefit schemes. Hence, we would expect that the detrimental effect of crisis on benefit morale are more pronounced in countries with generous support schemes.

These considerations can be summarised in the following hypotheses:

Hypothesis 1: An economic crisis with a short-run increase of the unemployment rate should have a negative impact on both benefit and tax morale.

Hypothesis 2: The impact should be more pronounced for benefit than for tax morale.

Hypothesis 3: The impact of crisis on benefit morale should interact with the generosity of a country's welfare state.

These hypotheses are now submitted to econometric testing.

3. Empirical Analysis

In line with the major part of the empirical literature on tax and benefit morale the empirical analysis employs survey data from the World Value Survey. Specifically, the integrated World Value Survey data file combining four waves of internationally coordinated surveys between 1981 and 2003 is used (European Values Study Foundation and World Values Survey Association 2006).[4]

In this survey the following questions serve to assess an individual's benefit and tax morale:

"Please tell me whether you think it can always be justified, never be justified, or something in between

- claiming government benefits to which you are not entitled

- cheating on taxes if you have a chance."

Answers are given on a ten-point scale from 1 ('never justifiable') to 10 ('always justifiable').

[4] Note that the World Value Survey is no panel. The regressions in this paper are based on observations from the period between 1981 and 2000.

Survey data of this kind are open to several types of criticism. Translations can lead to different connotations in different languages. Respondents may have an incentive to disguise their true attitudes. Compared to experimental approaches with pecuniary incentives a survey response may simply be "cheap talk" where participants paint an ideal picture of themselves without any real consequences. Although this criticism has to be taken serious there are important counterarguments. The above questions' phrasing does not refer to actual behaviour so that individuals are not asked to reveal whether they have actually infringed on legal or social norms. Apart from that, the wide spectre of the World Value questionnaire clearly signals to the respondent that this survey is no focussed control measure of any fiscal authority (Torgler and Werner 2005). Furthermore, the meaningfulness of large surveys has recently been recognized by experimental economists in numerous contexts (Dohmen, Falk et al. 2006; Dohmen, Falk et al. 2009): Not incentivized survey answers can predict actual risk taking in a subsequent field experiment; survey responses on trust in other people predict actual trusting behaviour in an incentive compatible lottery experiment; and survey answers on an individual's positive reciprocity are correlated with these individual's labour market performance in a way the literature on labour market experiments predict. And finally the problem of different language versions of the questionnaire can be taken account of by appropriate empirical strategies (e.g. including country dummies in estimation). Overall we can thus be reasonably confident that our indicators for individual morale derived from the World Value Survey are meaningful proxies.

Our testing strategy is based on the following empirical models:

(1)

$$M_{i,c,t} = \alpha_0 + \sum_{c=2}^{C} CD_c + \sum_{t=2}^{4} WD_t + CRISIS_{c,t} + \mathrm{A}\ INDCTL_{i,c,t} + \varepsilon_{i,c,t}$$

(2)

$$M_{i,c,t} = \alpha_0 + \sum_{c=2}^{C} CD_c + \sum_{t=2}^{4} WD_t + CRISIS_{c,t} + \alpha_1 GEN_{c,t} + \alpha_2 GEN_{c,t} \text{ x } CRISIS_{c,t} + \mathrm{A}\ INDCTL_{i,c,t} + \varepsilon_{i,c,t}$$

In model specification (1), benefit and tax morale, respectively, of an individual i in country c in the survey wave t depend on individual, time and country factors. Unobservable time and country factors are taken account of by country dummies (*CD*) and wave dummies (*WD*). A crisis dummy (*CRISIS*) indicates the occurrence of a deep labour market slump and serves to test hypotheses (1) and (2). A vector of individual control variables (*INDCTL*) allows for the inclusion of socio-economic or attitudinal characteristics of respondents. Specification (2) adds to (1) an index for welfare state generosity (*GEN*) and its interaction with the crisis dummy in order to allow for the testing of hypothesis (3).

CRISIS is constructed to indicate severe and rare short-run jumps in the unemployment rate (data source: OECD Economic Outlook database). This is made operational by classifying only the top 5 per cent increases of unemployment out of all country-year-combinations as a critical case. With this algorithm, the minimum increase of annual unemployment is 1.7 percentage points to classify as a crisis with the mean increase at 2.7 percentage points. The dummy *CRISIS* equals one whenever such an event has occurred in one of the past three years.

Among the list of individual characteristics we include variables which have become standard in microeconometric regression models for tax and benefit morale: age, year of birth, gender, marital and employment status, as well as attitudinal variables (religiosity, confidence in parliament and patriotism). All these individual characteristics are covered by the World Value Survey (for details of the variables see appendix).

With respect to the proxy for a welfare's state generosity we go beyond the existing literature on benefit morale (Heinemann 2008; Halla, Lackner et al. 2009) which employs highly aggregate indicators measuring the quantity of social spending relative to GDP. For our analytical purpose, this indicator is dissatisfying since it determined by welfare state benefit schemes, economic performance and benefit morale at the same time. Even with stable benefit rules this measure would indicate higher generosity in an economic downturn because transfers and its ratio to GDP increase. Instead, we employ the benefit replacement rate, specifically the first year of unemployment benefit replacement rate averaged over three family situations and two earning levels (Nickell 2006).

The estimation is confined to 20 OECD countries.[5] OECD member countries such as Poland, Czech and Slovak Republic but also less developed members such as Mexico or Turkey are excluded. This focus is determined both by the availability of our welfare state proxy and the motivation to limit the analysis to a relatively homogenous group of countries not affected by transition and its potential complex impact on norms.

[5] Countries included are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom and United States.

Whereas the survey provides an answer on a ten point scale for our dependent variable we estimate a probit model. The answer “can never be justified” (1) is contrasted to all other cases (0). This reduction allows focusing on the essential position towards the social norm: Only the position that an infringement on tax or welfare state rules “can never be justified” can classify as strict norm adherence whereas all other positions already include some type of norm relativization. That this distinction marks the essential borderline is also backed by the distribution of responses: For the OECD countries included in our testing, almost two thirds (65.5 per cent) of responses opt for “can never be justified” with respect to cheating on benefits and 56.1 per cent with respect to tax evasion.

Table 1 includes the baseline regression with explanatory variables confined to individual characteristics and attitudes in addition to time and country dummies. The baseline reconfirms recent findings of the literature such as (Halla and Schneider 2008): Whereas the same set of socio-economic and attitudinal individual characteristic determine morale, some signs are different for benefit and tax morale. Compared to the unemployed, respondents in employment tend to have strict benefit morale and lax tax morale, the same holds for high income individuals compared to low income individuals. This contrast fully corresponds to the economic view of self-serving norm formation: With employed high income individuals having hardly any opportunities to exploit the welfare state but numerous possibilities to evade taxes (and vice versa for the low income individuals not earning market income) the relative morality of both groups mirrors these asymmetric incentives. For the other controls the usual pattern appears with female, married, older[6], patriotic and religious respondents showing higher standards of morale.

In the next step, the crisis dummy constructed for the occurrence of substantial labour market deteriorations is included (Table 2). In line with our expectations, the sign is negative both for benefit and tax morale. However, whereas the coefficient is highly significant for tax morale it misses significance for benefit morale (p-value of 0.14). Note that the size of the marginal effect of a crisis on tax morale is substantial: With the occurrence of a crisis the probability that a respondent rejects any tax cheating as not justifiable drops by almost ten per cent. This marginal effect is larger than e.g. the gender impact.

Whereas these results appear to be in contradiction to Hypothesis 2 they are based on a regression which does not yet take into account that the crisis impact on benefit morale should

[6] Due to collinearity the age effect (older people have higher morale) cannot be separated neatly from a cohort effect (earlier cohorts have higher morale). See (Heinemann 2008; Halla, Lackner et al. 2009) for the debate on the relevance of a cohort effect with respect to welfare state morale.

be a function of the welfare state's generosity (Hypothesis 3). To account for this, the next estimation allows for the interaction between the welfare state generosity and benefit morale (Table 3). This interaction is highly significant for both dimensions of morale but has more than twice the size for benefit morale than for tax morale. In line with hypothesis 3, a high generosity of the welfare state increases the crisis sensitivity of benefit morale.

Approximative calculations[7] for the size of overall effects help to illustrate the importance of this interaction. For countries with a benefit replacement rate at 70 per cent (Denmark, Netherland, Portugal, Spain, Sweden, Switzerland are in a range between 65 and 75) the overall effect of a crisis on benefit morale is around -0.47 (=0.3875 - 70 x 0.0123). The effect of crisis on tax morale would be much smaller at -0.14 (=0.2523 – 70 x 0.0056).

These differentiated findings back hypothesis 2 even though the direct crisis impact on benefit morale (Table 2) has failed to reach significance. According to these results, the crisis sensitivity of benefit morale is conditional. It depends on the existence of generous welfare state regimes. Where regimes are generous, benefit morale reacts stronger than tax morale to the occurrence of crisis.

Table 1: Probit regressions, dependent variable benefit and tax morale, baseline

	(1) Government benefits		(2) Cheating on taxes	
	Coefficient	Marginal effect	Coefficient	Marginal effect
Constant	5.5626		3.7819	
Age	0.0125**	0.0045	0.0097*	0.0038
Year of birth	-0.0027	-0.0010	-0.0018	-0.0007
Female	0.1097***	0.0398	0.1907***	0.0749
Married	0.1298***	0.0475	0.0807***	0.0318
Employed	0.0633***	0.0230	-0.0319**	-0.0125
Religious	0.0120***	0.0044	0.0303***	0.0119
Confidence in Parliament	-0.0015	-0.0006	0.0638***	0.0251
Patriotism	0.1153***	0.0418	0.1260***	0.0496
Income	0.0123***	0.0045	-0.0251***	-0.0099
Wave dummies included	Yes		Yes	
Country dummies included	Yes		Yes	
Pseudo R^2	0.0746		0.0762	
Prob > χ^2	0.0000		0.0000	
Number of observations	59,440		59,639	

Dependent variable is 1/0: "claiming government benefits to which you are not entitled/cheating on taxes never justifiable" (1) versus other answers (0).

[7] The calculations are approximative because the marginal effects refer to infinitesimal changes of the independent variable.

Table 2: Probit regressions, dependent variable benefit and tax morale, crisis dummy included

	(1) Government benefits		(2) Cheating on taxes	
	Coefficient	Marginal effect	Coefficient	Marginal effect
Constant	6.5225		9.2953	
Age	0.0120**	0.0044	0.0069	0.0027
Year of birth	-0.0032	-0.0012	-0.0046	-0.0018
Female	0.1096***	0.0398	0.1899***	0.0746
Married	0.1299***	0.0475	0.0814***	0.0321
Employed	0.0636***	0.0231	-0.0302**	-0.0119
Religious	0.0121***	0.0044	0.0310***	0.0122
Confidence in Parliament	-0.0014	-0.0005	0.0649***	0.0255
Patriotism	0.1156***	0.0420	0.1281***	0.0504
Income	0.0121***	0.0044	-0.0263***	-0.0103
Crisis dummy	-0.0429	0.0157	-0.2450***	-0.0973
Wave dummies included	Yes		Yes	
Country dummies included	Yes		Yes	
Pseudo R^2	0.0746		0.0771	
Prob > χ^2	0.0000		0.0000	
Number of observations	59,440		59,639	

Table: Table 2: Probit regressions, dependent variable benefit and tax morale, crisis dummy, benefit replacement rate, and interaction included

	(1) Government benefits		(2) Cheating on taxes	
	Coefficient	Marginal effect	Coefficient	Marginal effect
Constant	-3.918		6.2424	
Age	0.0174***	0.0063	0.0085	0.0034
Year of birth	0.0021	0.0008	-0.0030	-0.0012
Female	0.1098***	0.0399	0.1899***	0.0746
Married	0.1299***	0.0475	0.0814***	0.0321
Employed	0.0630***	0.0229	-0.0305**	-0.0120
Religious	0.0123***	0.0045	0.0313***	0.0123
Confidence in Parliament	-0.0004	-0.0002	0.0658***	0.0259
Patriotism	0.1172***	0.0425	0.1286***	0.0506
Income	0.0142***	0.0052	-0.0252***	-0.0099
Crisis dummy	2.2478***	0.3875	0.7206***	0.2523
Benefit replacement rate	-0.0033***	-0.0012	-0.0042***	-0.0017
Crisis x benefit replacement rate	-0.0340***	-0.0123	-0.0144***	-0.0056
Wave dummies included	Yes		Yes	
Country dummies included	Yes		Yes	
Pseudo R^2	0.0766		0.0779	
Prob > χ^2	0.0000		0.0000	
Number of observations	59,440		59,639	

4. Conclusion

The current global economic crisis confronts numerous industrial countries with a record drop of GDP and, as a consequence, a fast and substantial rise in unemployment rates. That this crisis is a challenge for the sustainability of public finances and the financing of the welfare state is obvious. Our analysis, however, points to a neglected aspect which may even aggravate this critical development. The sudden deterioration of the economic situation puts the stability of existing social norms at risks which tend to stabilize the financing of the public sector in good or at least "normal" *times*. In a crisis, citizens face diverse incentives to reconsider their normative position towards honestly paying taxes or claiming welfare benefits. These incentives are related to the limited control capacity of the government, changing opportunity costs or a simple income effect that less morality is "affordable" in times of falling income.

The study's empirical insights suggest that this additional risk of a crisis is not simply a theoretical possibility but that it is backed by past data even though these data tend to cover only crises of a much milder nature compared to the global downturn starting in the year 2008.[8] The normative deterioration affects both the government's revenue side, through deteriorating tax morale, and the expenditure side, through a drop of benefit morale. The benefit morale channel, however, is more pronounced in countries that employ generous unemployment schemes.

Further research is necessary. One of the important next steps should comprise the closer scrutiny of the dynamics of these effects. So far it is unclear whether the significant short run effects of crisis are of a transitory nature or whether Lindbeck's concern about a lasting norm erosion as a consequence of a transitory crisis is justified. If the normative consequences of a crisis turn out to be permanent this would also add to our understanding of labour market hysteresis phenomena: While the usual explanation for permanent unemployment as a consequence of a transitory economic shock is based on losses in human capital, the effect of unemployment on work norms may be part of a full picture.

[8] Note that the World Economic Crisis of the 1930s was different insofar the modern welfare state was still largely absent. So even if data on social norms from this period were available (which is not the case) the comparability would not be given.

Appendix

Data Sources

Variable	Definition	Source
Benefit morale dummy	=1 if claiming benefits without entitlement is „never justifiable“, =0 otherwise	World Value Survey, Variable f114
Tax morale dummy	=1 if cheating on taxes is „never justifiable“, =0 otherwise	World Value Survey, Variable f116
Age	In year	World Value Survey, Variable x003
Year of birth	In years	World Value Survey, Variable x002
Female	Female=1/male=0	World Value Survey, Variable x001
Married	=1 if married or “living together as married”, =0 otherwise	World Value Survey, Variable x007
Employed	= 1 if full time, part time or self-employment, =0 if retired, housewife, student, unemployed or other	World Value Survey, Variable x028
Religious	Frequency of attending religious services from -8 (never) to more than once a week (-1)	World Value Survey, Variable f028
Confidence in parliament	Confidence in parliament from “none at all” (-4) to “a great deal” (-1)	World Value Survey, Variable e975
Patriotism	“proud of nationality” from “not at all” (-4) to “very proud” (-1)	World Value Survey, Variable g006
Income	Scale from 1 (lowest scale) to 11 (11^{th} scale)	World Value Survey, Variable x047
Wave1 – Wave4	Wave dummies for wave 1 (1981-84), wave 2 (1989-93), wave 3 (1994-95), wave 4 (1999-2004)	World Value Survey, Variable S002
Benefit replacement rate	Data refer to the first year of unemployment benefits, averaged over three family situations and two earnings levels. In per cent of average earnings before tax.	(Nickell 2006)
Crisis dummy	An increase in unemployment in one of the past three years, which is among the 5 per cent worst increases in annual unemployment of all country-year-combinations.	Unemployment rate from OECD Economic Outlook Database

World Value Survey data from (European Values Study Foundation and World Values Survey Association 2006)

Descriptive Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
Benefit morale dummy	82750	0.65	0.48	0	1
Tax morale dummy	83159	0.56	0.50	0	1
Age	85552	44.02	17.44	15	100
Year of birth	85552	1947.47	18.04	1881	1984
Female	85730	0.53	0.50	0	1
Married	85434	0.63	0.48	0	1
Employed	83820	0.57	0.50	0	1
Religious	83509	-5.16	2.51	-8	-1
Confidence in parliament	80576	-2.66	0.79	-4	-1
Patriotism	80093	-1.72	0.80	-4	-1
Income	69591	5.27	2.64	1	11
Benefit replacement rate	86633	48.02	19.49	0	88.8
Crisis dummy	86466	0.06	0.25	0	1

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