

# International Political Science Review

<http://ips.sagepub.com/>

---

## **Causes and contexts of tax morale: Rational considerations, community orientations, and communist rule**

Eva-Maria Trüdinger and Achim Hildebrandt

*International Political Science Review* 2013 34: 191 originally published online 15 October 2012

DOI: 10.1177/0192512112447117

The online version of this article can be found at:

<http://ips.sagepub.com/content/34/2/191>

---

Published by:



<http://www.sagepublications.com>

On behalf of:



International Political Science Association (IPSA)

**Additional services and information for *International Political Science Review* can be found at:**

**Email Alerts:** <http://ips.sagepub.com/cgi/alerts>

**Subscriptions:** <http://ips.sagepub.com/subscriptions>

**Reprints:** <http://www.sagepub.com/journalsReprints.nav>

**Permissions:** <http://www.sagepub.com/journalsPermissions.nav>

>> [Version of Record](#) - Feb 26, 2013

[OnlineFirst Version of Record](#) - Oct 15, 2012

[What is This?](#)



# Causes and contexts of tax morale: Rational considerations, community orientations, and communist rule

International Political Science Review

34(2) 191–209

© The Author(s) 2012

Reprints and permission:

sagepub.co.uk/journalsPermissions.nav

DOI: 10.1177/0192512112447117

ips.sagepub.com



**Eva-Maria Trüdinger and Achim Hildebrandt**

## Abstract

In political theory, the subject of tax morale is closely linked to issues of citizenship and civic duties. Research on tax morale, however, is still rather underdeveloped in political science. In this article, we systematically compare a rational considerations approach with an approach focusing on the influence of community orientations on an individual's tax morale. We expect that contexts varying with the existence and duration of communist rule have caused systematic differences in terms of the motivation for tax morale. Multilevel analyses based on data taken from the fourth wave of the World Values/European Values Survey (1999/2000) confirm our expectations that socialization under communist rule strengthens the relevance of community orientations in explaining an individual's tax morale and reduces the impact of rational considerations.

## Keywords

tax morale, Europe, post-communist countries, multilevel analyses, community, political trust

## Introduction

Tax collection is an essential task of every state since tax proceeds provide the necessary resources for political action. Enforcing universal tax compliance is impossible 'until there is a tax administrator under every bed' (Torgler and Schaltegger, 2005: 2). So governments crucially depend on their citizens' willingness to pay taxes. This article focuses on tax morale, that is, the 'intrinsic motivation to pay taxes' (Frey and Torgler, 2007: 140). Citizens will pay taxes only if they accept this obligation, even if chances are high that tax evasion might not be detected. Today, research into tax morale is mainly dominated by economists (see, for example, Alm and Torgler, 2006; Frey and Torgler, 2007; Torgler, 2007), although tax morale is also relevant for political scientists.<sup>1</sup> From the perspective of political science, the subject of tax morale is closely linked to issues of citizenship and civic duties. Observing the law and not evading taxes can be seen as one dimension of good citizenship (Denters et al., 2007: 93). Obeying taxation laws is also relevant for Putnam's social capital concept. He states that 'honesty, trust, and law-abidingness' (Putnam,

---

## Corresponding author:

Eva-Maria Trüdinger, University of Stuttgart, Institute for Social Sciences, Breitscheidstraße 2, 70174 Stuttgart, Germany  
Email: [eva-maria.truedinger@sowi.uni-stuttgart.de](mailto:eva-maria.truedinger@sowi.uni-stuttgart.de)

1993: 90) are important virtues of a civil society. Tax morale can thus be seen as a way of expressing an individual's willingness to fulfil the social norms and duties that come with living together in a community.

Previous research by economists in this domain has highlighted the relevance of factors such as conditional cooperation (that is, the citizens' willingness to pay taxes if they believe others will do so as well (Frey and Torgler, 2007)) and whether citizens trust in government (Torgler, 2003a). In other words, the motivation to pay taxes depends on rational considerations about the perceived behaviour of fellow citizens and of government officials. Furthermore, European cross-national comparative studies have focused on the influence of communist rule on the level of tax morale (Frey and Torgler, 2007; Torgler, 2003b). These have shown that tax morale is particularly low in former Soviet countries.

This article attempts to go beyond this research in two ways. First, we show that the focus on individual rational considerations should be supplemented by an alternative approach based on the idea that community feelings and a sense of duty towards society determine an individual's tax morale. Second, we demonstrate that the duration of communist rule is relevant not only for the level of tax morale, but also for the relative influence of various factors explaining tax morale. In our view, different forms of government and community in Europe, varying with the existence and duration of communist rule, have created systematic differences in terms of motivation to meet civic norms over the past few decades. Therefore, we expect community orientations to have a higher explanatory power in post-communist countries, at the expense of rational considerations. Alternatively, these differences could be due to socialization by a more collectivist system and to a loss of orientation deriving from the collapse of the communist ideology, which probably led to an increasing importance of (national) community feelings. We do not expect that rational considerations and community orientations (as motives for tax morale) are mutually exclusive. We do assume, however, that their relative importance varies in the context of differing lengths of communist rule. Not only that, but rational considerations and community orientations are not the only conceivable determinants, which is why further potential explanatory factors will be added to our causal model. Our interest lies in the effects of the duration of communist rule on the relative importance of different explanatory variables and not on the level of tax morale. The level of tax morale in post-communist and in western nations has already been discussed in other studies. This article analyses the determinants of tax morale both on the micro-level of individual orientations as well as on the macro-level comparing European countries. Against the background of this multilevel model we intend to answer the following questions. How important are rational considerations compared with community orientations for explaining tax morale at the micro-level? How do personal motivations and the duration of communist rule in a given country interact?

We will connect the micro-level and the macro-level and consider the contexts of tax morale through a multilevel analysis. In empirical research, this is a generally approved method to measure the effect of the cultural and systemic contexts as well as the influence of personal traits and resources on individuals' attitudes and behaviour. Individual-level data are taken from the fourth wave of the World Values Survey/European Values Survey (1999/2000). By now, a fifth wave of this survey is available. Unfortunately, this wave misses important indicators such as the perceived behaviour of other taxpayers. Therefore, the fourth wave has been used. As a result of this, our theoretical discussion refers mainly to developments until the period of study. Our concluding remarks highlight developments in the past decade and consider possible future developments.

Before commencing the empirical analysis, we will address theoretical approaches on the micro-level and the macro-level and formulate hypotheses concerning expected effects.

## Rational considerations

In accordance with Tyler (2011), there are two motives for compliance and cooperative orientations or behaviour: instrumental or, rather, rational considerations on the one hand and group or community orientations on the other.

According to explanations based on rational considerations, violating rules or adhering to them is a conscious decision. Leaving aside the behaviour of others, an individual's decision to pay or evade taxes is solely determined by the perceived costs and benefits of tax evasion. The costs of tax evasion depend on the likelihood of detection and the size of the penalties.<sup>2</sup> The benefits depend on the individual tax burden. Unfortunately, there are no data available to test the influence of these factors for all of the countries in our analysis. We will use income as a proxy for the benefits of tax evasion, because 'taxpayers with a higher income realize a higher dollar return by evading' (Torgler, 2003c: 514). This argument, however, holds true only for countries with a progressive income tax rate. Individual risk preferences also play a role. Therefore, 'the effects of income on tax morale are difficult to assess theoretically' (Torgler, 2003c: 514).

Studies considering the perception of other taxpayers' behaviour and of government action have found that individuals may be willing to pay their taxes only if they believe others will do so as well, since 'no one prefers to be a "sucker"' (Levi, 1988: 53). We will take these findings into account by introducing an indicator of the perceived tax behaviour of others.<sup>3</sup> In addition, people may be motivated to pay if they believe that tax revenue is spent in accordance with their preferences rather than squandered. These studies explicitly take into account the context of the respective societies in which the individual rational considerations take place.<sup>4</sup> There is no direct measurement for citizens' perception of the way governments spend taxes. An indicator which can be used in this analysis is trust in political institutions. It 'refers to expectations of future behaviour and is based on beliefs about the trustee's competence and sense of fiduciary responsibility' (Citrin and Luks, 2001: 12–13). This assumption (that is, that the trustee takes the interests of the trust donors into account) can be conceptualized as a heuristic device for the individual to resort to when making decisions about tax compliance (compare Scholz, 1998): if people believe that the institutions 'responsible for handling "treacherous" behaviour act in a fair, just and effective manner' (Rothstein, 2000: 492), they are more likely to comply with tax laws. Such a classification of trust in institutions covers the interest-based side of trust. But the values-based roots of political trust (compare Braithwaite, 1998; Rothstein, 2000) also need to be mentioned here. However, in order not to blur the analytical clarity of the explanatory factors, we will roughly follow the classification of political trust found in the literature on tax morale.

The measure used for this analysis here is an index of trust in political institutions encompassing attitudes towards parliament, the civil service, and the police.<sup>5</sup> Citizens perceive these 'basic state-level institutions' as policy designers or experience them as policy implementers in their daily life (Letki, 2006: 314). The following hypotheses summarize the issues of this section.

*H1:* The lower the income level, the higher citizens' tax morale.

*H2:* The higher compatriots' assumed tax compliance, the higher citizens' tax morale.

*H3:* The higher the confidence in political institutions, the higher citizens' tax morale.

## Community orientations as predictors of tax morale

An important finding of recent work on tax morale is the relevance of the social context as a factor shaping an individual's motivation to pay taxes. Analyses often focus on the impact that the

perceived behaviour of other taxpayers has (see, for example, Frey and Torgler, 2007). However, an explanation of tax morale through social contexts has to be extended to an individual's membership of a collective, including community feelings and respect for the norms and obligations within that community. Here the focus is on attitudes in relation to the social bonds of an individual, the importance of which is particularly highlighted in the discussion of the cultural aspects of social capital.<sup>6</sup>

Let us briefly present our ideas on the role of these forms of community orientation. First, tax morale can be seen as a way of supporting a collective to which the individual feels he or she belongs. According to the social psychology concept of social identity, an individual's identification with a collective is the result of processes of self-categorization that the individual undergoes (Brewer, 2001; Turner et al., 1987). If the individual identifies with a collective, that individual is most likely to do his or her best to cooperate and to obey the norms of the particular collective.

With regard to a country, taxation laws are something all citizens have to obey. These laws are designed to raise funds for the production of common or public goods. Paying taxes seems much easier for the individual if he or she feels a sense of belonging to the national community (Kuzio, 2001). Identification with the whole nation plays a major role, but has only occasionally been analysed in studies on tax morale (Martinez-Vazquez and Torgler, 2009; Torgler, 2003b; Torgler and Schneider, 2004). The more an individual identifies with a country, the higher her tax morale – in addition, because other identities and the particular interests related to these will become less important (Lieberman, 2001: 527; Taylor, 2003: 75). In our analysis, we measure this sense of community with a question about national pride.

Second, support of the national community not only has an affective component, but also involves awareness of related duties and the willingness to fulfil them.<sup>7</sup> Accordingly, the 'sense of duty to fulfil obligations for a given collective' (Scholz and Pinney, 1995: 493) or the 'civic duty to comply' (McGraw and Scholz, 1991: 471) are likely to have an important effect on the tax morale of European citizens. The more willing they are to meet their obligations to the collective, the less likely they are to evade taxes.

Admittedly, whether taxation laws are accepted also depends on the duties citizens have or are believed to have towards society. Scholz and Pinney (1995) directly measure civic duty by the degree of moral obligation that respondents feel when filling out their tax return. We can roughly measure this willingness that an indicator showing how strongly the respondent supports the statement 'Work is a duty towards society.'<sup>8</sup>

Thus, our hypothesis on the two dimensions of community orientation may be formulated as follows.

*H4:* The more strongly attached the citizens feel to their national community and the greater the personal responsibility that citizens feel towards their community, the higher their tax morale.

## **Interaction between context and personal motivation**

The explanatory power of community orientations and of rational considerations is not the same in all countries, as the underlying individual motivations are affected by their contexts. Looking at the history of the countries, we presume that the length of communist rule in a country is an important factor influencing the relevance of our two dimensions of micro-level predictors. Thus, we follow the idea that political structures and the principles embedded in institutions influence personal orientations and behaviour (see, for example, Rothstein, 1998).

From a socialization perspective, personal beliefs are acquired through experiences (early) in life. Hence, a large number of citizens in Europe were shaped, inevitably, by the experience of growing up under communist rule (Mishler and Rose, 1997: 434).<sup>9</sup> Adaptation to living conditions and indoctrination by communist rule will have left greater marks in communist regimes that lasted longer – that is, particularly in Eastern European countries such as Belarus, Russia, and Ukraine, but less so in Central Europe. A longer period of communist rule provides more opportunity for communist ideology to penetrate all parts of society. It equips the agents of political socialization such as schools, the media, and mass organizations with much better means to convey this ideology and to influence an individual's way of life.<sup>10</sup> We thus record the years of communist rule in the countries included in our analysis (Fuchs and Klingemann, 2002; Reisinger, 1999).

Before the fall of communism, Inkeles detected an important difference underlying personal motivations in communist and non-communist countries: 'the former give much more emphasis to group goals, to collective interests, and to communal rather than to individual progress' (1983: 305). Some two decades later, this pattern reappears in discussions of individualism/collectivism as a central concept describing cultural differences (Triandis, 2001). Under communist rule, 'political socialization, mobilization and community building were mainly organized in the forms of authoritarian collectivism' (Meyer, 2003: 171–2). According to communist ideology, individuals had their place within the collective, identified with the collective, and were committed to the collective. Admittedly, the specific settings in communist regimes did not always fully correspond to collectivistic ideas (Conway et al., 2006).

At the same time, it has to be stressed that this collectivistic side was to a large extent enforced from above by an authoritarian state. For example, Meyer (2003: 169–72) argues that the 'ambivalent heritage' of post-communist political cultures consists both in official authoritarian collectivism and private forms of community experience and 'we-feeling'. Moreover, objections could be raised that the inculcation of communist ideology was only partly successful because indoctrination with a collectivist image of individuals in communist countries also caused disinterest, apathy, and passive disobedience (Rose et al., 1998: 130). On the other hand, indoctrination was so massive and went on for so long that it cannot possibly have been without any effect, especially since the resources for other values were limited in these totalitarian societies and people had to adapt to their living conditions (Schwartz and Bardi, 1997). What is certain is that Eastern and Central European countries come closer to the ideal type<sup>11</sup> of a collectivist society and score higher on measures of collectivism, whereas societies in Western European countries are, on average, more individualistic.<sup>12</sup>

What conclusions can be drawn from these patterns and their relationship to tax morale with regard to attitudes? In individualistic countries people regard themselves as independent of others and give priority to personal motivations, whereas in collectivist cultures people are interdependent within groups that bind and mutually oblige their members (Triandis, 2001). In the rather individualistic societies of Western Europe, personal goals are said to be prioritized over collective goals as determinants of individual reasoning and behaviour. Consistent with this perspective, individual rational choices are thought to be more important than group norms in predicting tax morale in Western Europe. In contrast, people who have experienced communism as an authoritarian collectivist approach to government tend to be guided, rather, by group norms and group identity in their compliance attitudes or behaviour (McAuliffe et al., 2003). In other words, collectivist reasoning implies that for people who feel attached to the group and who place a high value on a collectivist group norm ('We all have duties towards our community'), these community orientations have a greater effect on tax morale than for people engaging in more individualistic reasoning (Jetten et al., 2002).

Another possible reason for the differences in the motivations for tax morale could lie in the fact that after years of authoritarian rule, political trust in post-communist countries is not very widespread (see Marien and Hooghe, 2011; Pop-Eleches and Tucker, 2011). Furthermore, political trust in post-communist countries is possibly more strongly interpreted by the citizens as a hierarchical relationship between the rulers above and the ruled below. As a result of this, it may not be as influential a factor shaping attitudes and behaviour as it is in countries with longer democratic traditions.

It might be objected that it is not the duration of communist rule, but rather the experiences of citizens in the transition period after the fall of communism that lead to differences in the relative significance of the two factors determining tax morale which we focus on.<sup>13</sup> From this perspective, community orientations are a more important motivation to comply with laws than trust in newly implemented institutions and the performance of the regime. However, the character of the transition process might be related to the length of communist rule. Therefore, the length of communist rule can also be seen as a proxy for the severity of the transition process.

Our fifth hypothesis is derived from these assumptions about the way rational and community-oriented factors shape tax morale depending on the duration of communist rule in a country:

*H5:* The longer a country has been under communist rule, the stronger the influence of community orientations on tax morale in that country and the lower the influence of rational considerations on tax morale.

## Completing the causal model: control variables

In order to test the five hypotheses and to assess the relative importance of the explanations discussed so far, we control for the effects of other potential determinants on the context level and on the individual level.

Apart from the cross-level interactions which have been presented above, a direct relationship between the duration of communist regimes and tax morale might also be expected. There are two plausible alternatives for the effects communist rule can have and the empirical results will show which of the two is actually the case. One possible argument would be that during communist rule citizens developed animosity towards the government's repressive regime and as a result did not feel overly obliged to fulfil their duties to the state. Chances are that this attitude towards paying taxes was maintained under a new regime, as experiences with the democratic regime were still new and have often been overshadowed by the harsh side-effects of economic transition. Alternatively, it seems possible that long socialization under the rule and observation of an authoritarian regime has made citizens more law abiding.

We also control for the influence of a country's quality of governance on tax morale. The quality of governance addresses cause on the macro-level, which relates to the third hypothesis: the higher the quality of governance in a country, the more citizens believe that tax proceeds are not squandered. This is assumed to have a positive effect on citizens' tax morale (Frey and Torgler, 2007). By including this variable in the model we can also indirectly measure the quality of the transition process towards a functioning democracy. The quality of governance is measured by data taken from the World Bank Governance Indicator Data Set. We use a composite index comprising three dimensions: government effectiveness, rule of law, and control of corruption.<sup>14</sup>

The degree of unity or cleavage in a society can also affect citizens' tax morale. It is very likely that economic differences between the members of a given society or differences between ethnic groups shape taxpayers' individual behaviour. We would like briefly to discuss the underlying

causes. The purpose of taxation is to provide resources for public goods and to meet the socio-political demands of distribution and redistribution (Liebig and Mau, 2005: 4). If citizens accept the way taxes are spent and find it justifiable, they will view taxation positively (Andreoni et al., 1998; Falkinger, 1995; Wenzel, 2003). There are no data available on the perceived fairness of tax systems. However, we can expand our focus and take a country's income distribution into account, as measured by the Gini coefficient for income inequality. The assumption is that if a country's wealth is concentrated in the hands of relatively few citizens, many people within this country are very likely to consider fiscal policy to be unfair and hence show a lower motivation to pay taxes. Our indicator also measures the gap between rich and poor, and thus the economic homogeneity of a country. We expect that tax morale increases, the more the citizens believe their community (the receiver of collective goods provided through taxes) to be homogeneous (Lieberman, 2001).

This argument about the homogeneity of a community can also be transferred from the economic to the cultural dimension. Particularly in some of the Eastern European countries, but also in Western European nations such as Belgium, there have been continuous conflicts between groups of different ethnic origin. If such cleavages exist, they may be aggravated by different economic conditions, so these citizens are more likely to evade taxes which provide for the common good. We control for this factor by including a measure of ethnic homogeneity, that is, the percentage of ethnic minorities in the total population of a country.

On the individual level, our model is supplemented by three control variables. This has been done to assess the relevance of the two major factors (rational considerations and community orientations) at the centre of this analysis. The supplementary factors are church attendance and an indicator for respect for authority, as we assume that both religious socialization as well as the traditional value orientations of obedience and conformity (measured by citizens' respect for authority) make people more willing to obey norms (Halman and Pettersson, 1996). We also include age as a variable in our analysis, as we assume that compliance increases with age. We expect all three control variables to have positive effects on respondents' tax morale.

## Empirical analyses and results

We will start the empirical analyses with a brief look at the distribution of tax morale in the 28 countries we analysed.<sup>15</sup> The question for our dependent variable reads: 'Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between, using this card: Cheating on taxes if you have the chance.' Scale values run from 0 ('always justifiable') to 9 ('never justified'). Table 1 displays the mean for tax morale as well as the percentages of a grouped variable: 'low tax morale' presents the proportion of respondents with scale values of 0–3, 'medium tax morale' the proportion with scale values of 4–5, and 'high tax morale' the proportion with scale values of 6–9.

The results show that the majority of respondents express high tax morale. The percentages range from 94.6 in Malta to 55.4 in Belarus. Accordingly, in 17 out of 28 countries the mean for tax morale is greater than 7.5. As a first result we can state that the variance of the dependent variable is relatively low.

In Table 1, countries are classified into four groups. The Western European countries form a distinct group, whereas the Eastern European countries are divided into three separate groups. The first group consists of Central European and South-Eastern European satellite states of the Soviet Union, which were all under communist rule after World War II (for 41–43 years in total). Croatia is an exception here. The countries which succeeded the Soviet Union were divided into two further groups. One comprises the Baltic States, which joined the European Union (EU) in 2004. The



**TABLE I.** Tax Morale in 28 Countries (%)

Countries	Mean	Low tax morale (%)	Medium tax morale (%)	High tax morale (%)
Western European countries				
Belgium (-)	6.34	20.0	17.4	62.6
Denmark (-)	7.99	3.4	8.3	88.3
Finland (-)	7.54	8.8	6.9	84.3
France (-)	6.94	13.3	15.7	71.0
West Germany (-)	7.64	5.1	8.7	86.1
Great Britain (-)	7.58	7.1	10.4	82.5
Greece (-)	6.84	12.6	14.6	72.8
Iceland (-)	7.77	5.5	7.8	86.7
Ireland (-)	7.65	6.2	10.6	83.2
Italy (-)	7.61	6.8	9.8	83.4
Malta (-)	8.46	2.4	3.0	94.6
Netherlands (-)	7.25	9.3	10.9	79.8
Spain (-)	7.75	5.0	9.5	85.5
Sweden (-)	7.59	5.9	10.9	83.2
Central and South-Eastern European countries				
Bulgaria (43)	7.99	4.7	7.1	88.2
Croatia (18)	7.47	9.6	12.1	78.3
Czech Republic (41)	7.92	4.0	7.3	88.8
East Germany (41)	7.63	7.2	8.6	84.2
Hungary (43)	7.88	5.3	7.3	87.4
Poland (43)	7.77	6.4	7.5	86.1
Romania (43)	7.21	13.2	9.3	77.5
Slovakia (41)	7.85	5.0	8.7	86.3
Baltic countries				
Estonia (50)	6.85	12.5	15.6	71.8
Latvia (50)	7.64	8.6	8.0	83.4
Lithuania (50)	6.23	20.6	18.3	61.2
Eastern European countries				
Belarus (74)	5.78	24.0	20.6	55.4
Russia (74)	6.91	13.5	14.4	72.1
Ukraine (74)	6.55	17.5	15.2	67.3

Notes: Figures in brackets are years of communist rule.

Sources: See Appendix for data sources.

other one is made up of Eastern European countries (Belarus, Russia, and Ukraine), which were under communist rule for more than 70 years.

In line with the results reported by Frey and Torgler (2007), Table 1 shows great differences between the countries which succeeded the USSR and the other 22 countries. In these states, significantly lower levels of tax morale are reported than in other post-communist nations. The three Eastern European countries also show lower levels of tax morale than the Baltic countries. The other post-communist countries hardly differ from the Western European countries, and in some of them tax morale is even higher.

Two features worth noting are the varying levels of tax morale within the post-communist countries and the comparatively high tax morale in the Central and South-Eastern European countries.

These results do not completely conform to the two competing theoretical assumptions about the influence of communist rule on law-abidingness. The assumptions postulate differences between post-communist and western countries, but not within the group of post-communist countries themselves. The results are even more surprising considering the common institutional past of the communist countries: up until the fall of communism, most communist countries oriented their tax system towards that of the Soviet Union. In this system, a large part of tax revenue was procured through profit, turnover, and payroll taxes levied on state-owned enterprises. Because most of the taxes were imposed upon state-owned companies, tax administration under communist rule was only weakly developed.<sup>16</sup> Compared with this, individual income taxation was negligible. As a result, directly following the transition, citizens were unaware of the tax burden and were not used to paying taxes (Gehlbach, 2008; Martinez-Vazquez and McNab, 2000).

If it is the case that institutional and policy factors have an influence on tax morale, the differences within the group of post-communist countries can possibly be traced back to the different routes taken since the beginning of their reforms after the transition. Reforms referred to a lesser extent to the modernization of the tax administration than to the structure of taxation (Martinez-Vazquez and McNab, 2000). In the Central and South-Eastern European countries and in the Baltic States, new sources of income were incorporated, such as the direct taxation of individuals, while the other successor countries of the Soviet Union relied more heavily on hitherto existing sources of income, such as corporate taxation (Gehlbach, 2008).<sup>17</sup> One reason for the low tax morale in Belarus, Russia, and Ukraine compared with Central and South-Eastern Europe and the Baltic countries could lie in the fact that citizens in Central and South Eastern Europe and the Baltic countries were able to gain more experience with taxation following the transition and, therefore, were better accustomed to being taxed. The low tax morale in South-Estonia and Lithuania, however, contradicts this interpretation. Another reason for the differences between the post-communist countries could lie in the course of the transition process, which in Central and Eastern European countries was considerably less hampered by economic problems compared with the successor states of the Soviet Union (Campos and Coricelli, 2002).

In our analysis, we control for the influence of the duration of communist rule on the level of individual tax morale. But our study focuses on the effects of the duration of a communist regime on an individual's motivations to pay taxes. We examine these effects through multilevel analysis.

This method allows for a simultaneous estimation of contextual as well as individual parameters and enables us to measure the effect of contextual factors on the strength of individual attitudes and characteristics (cross-level interactions) (Snijders and Bosker, 1999). In our case, multilevel analysis is the tool used to examine whether and to what extent the variance in individual tax morale depends on differences among individuals, differences among our 28 countries, and most importantly, cross-national differences in the impact of rational considerations and community orientations.

Table 2 presents the results of three different models. The empty model (I) without any parameters serves as a benchmark model for comparison and can give first insights into the hierarchical structure of the data. The results of this model confirm our observations in Table 1 by showing that, on average, tax morale across all countries is high (7.7 on a scale from 0 to 9). Using the variance components of the empty model as a basis for the intra-class correlation coefficient, we can determine the parts of the variance that can be explained by country differences and by individual differences. Roughly 93 per cent of the variation of the dependent variable is located on the individual level, whereas about 7 per cent can be explained by country-level factors.<sup>18</sup> This result is compatible with the assumption that tax morale (an individual attitude itself) is explained by individual motivations and situations in particular. However, it also allows for possible interaction effects between the levels of analysis and reflects some cross-national differences in average tax morale shown in Table 1.

**TABLE 2.** Explaining Tax Morale: A Multilevel Model

	Empty model (I)		Level 1 + Level 2 (II)		Level 1 + Level 2 and cross-level interaction (III)	
	b	t	b	t	b	t
General intercept	7.739***	64.079	7.335***	61.794	7.335***	73.695
Individual-level factors						
Tax behaviour others			0.523***	8.691	0.513***	10.582
Confidence institutions			0.078***	5.483	0.075***	6.253
Income (fixed effects)			n.s.		–	
National pride			0.124**	3.583	0.126***	4.191
Duty society			0.830***	7.337	0.816***	9.253
Church attendance			0.045***	4.884	0.042***	4.520
Respect for authority			0.206**	3.522	0.228***	4.313
Age			0.867***	10.208	0.882***	10.107
Contextual factors						
Years of communist rule			–0.012*	–2.293	n.s.	
Quality of governance			n.s.		–	
Income inequality (Gini coefficient)			–7.183**	–3.651	–7.538***	–4.519
Ethnic heterogeneity			n.s.		–	
Interaction effects tested						
Tax behaviour others*communist rule					–0.004*	–2.660
Confidence institutions*communist rule					–0.002***	–5.114
National pride*communist rule					0.004***	4.411
Duty society*communist rule					0.008**	2.964
Variance components						
Individual level ( $\sigma^2$ )	5.261		4.692		4.673	
Context level ( $\tau$ )	0.378		0.421		0.289	
Variance explained (Maddala R <sup>2</sup> )					0.097	
N individual level		22672		22672		25710
N context level		28		28		28

Notes: RML estimation. \*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ . Not significant (n.s.). All independent variables entered grand-mean centred. Unstandardized coefficients with robust standard errors. For the calculation of Maddala R<sup>2</sup>, see Langer (2004). Authors' calculations with HLM.

Before coming to the complex model that includes cross-level interactions, we will discuss model II and the effects of individual and contextual factors on citizens' tax morale.

As a first and meaningful result we note that the variables indicating community orientations and rational considerations (except income) have highly significant effects that follow the direction suggested by theory. People who strongly identify with the national community and are more willing to engage in the affairs of the collective have more positive attitudes towards paying taxes. Simultaneously, tax morale can also result from believing compatriots to be honest in tax matters and from trusting in the work of political institutions. This finding agrees with the assumptions made in the rational considerations approach and with previous findings (see, for example, Uslaner, 2007). As we expected, rising income leads to a decrease in tax morale, but this effect is not significant. Thus, the empirical results deviate from the expectations of Hypothesis 1, whereas Hypotheses

2–4 find empirical support. The conclusion we can draw from these results is that the rational considerations approach, which is predominant in this field of research, is indeed important, but community orientations should play an equal role in analyses of tax morale. This conforms to analyses which point to correlations between the various components of social capital (such as social trust, social norms, and networks) and also between political trust and these components (see, for example, Denters et al., 2007; Newton and Norris, 2000).

Evidence for the significance of these factors was provided by controlling for the influence of other potential determinants. Our expectations with regard to the effects of these control variables at the individual level have also been confirmed. The more people practise their religion and the more they respect authority, the more willing they are to pay taxes. In particular, the positive effect of age is important independently of the value priorities included in our analyses; it actually has its own significant effect.

Looking at the control variables at the context level, the results indicate that income inequality has a considerable negative influence on tax morale. This is an important result because it emphasizes the fact that individual motivation to provide funds for the state by paying taxes depends on how economically homogeneous the society is. A minor significant effect can also be detected for the duration of communist rule, such that a longer duration, measured in years, has a slightly negative effect on tax morale.

Our expectations with regard to the quality of governance and ethnic diversity could not be confirmed by this analysis. The non-effect of ethnic diversity is probably caused by the inherent problems of this indicator. Due to the lack of further data, we can only measure how many different ethnic groups live in a country, but not the extent to which their ethnic structures are politicized. However, this seems to be a necessary condition for creating awareness of ethnic differences among citizens. The insignificant effect of the quality of governance might be due to the fact that the objective measurement of a government's performance on the country level is less relevant for tax morale than the subjective evaluation of a government's trustworthiness by its citizens (Hypothesis 3).

In the last step of our empirical analysis we add cross-level interactions in model III in order to test Hypothesis 5 concerning the impact of socialization under communist rule on personal motivations for paying taxes. To keep the explanation short, we leave out those variables which did not show a significant effect in the preceding model II. In doing so, the number of cases on the individual level rises moderately. By integrating cross-level interactions, the context-level coefficient of the duration of communist rule becomes insignificant. All other factors still show significant coefficients in the same direction, supporting the stability of our model.

The interactions between the duration of communist rule in a country and the individual-level effects of community orientations and rational considerations are significant and correspond to our expectations. The size of the effect of the four determinants at the micro-level (Hypotheses 2–4) is affected by the political history of a given country. Socialization under communist rule strengthens the relevance of community orientations in explaining an individual's tax morale. Identification with the national community and willingness to engage in community matters have an increasingly positive effect on citizens' tax morale the longer the country had been shaped by communist rule. For example, in Western European countries a unit increase in the variable 'work is a duty towards society' (scale values from 0 to 1) increases the dependent variable (scale values from 0 to 9) by .816.<sup>19</sup> In countries with 43 years of communist rule, this effect amounts to an increase in the dependent variable of 1.16 points, while after 74 years of communist rule the estimated increase is 1.41.

We find a reverse effect when looking at the factors related to rational considerations. The influence of a respondent's belief in other people's honesty concerning tax matters and of his or her confidence in central political institutions on his or her tax morale decreases the longer the respective society was under communist rule.<sup>20</sup> In other words, these kinds of individualistic and strategic considerations were of less importance the longer a collective philosophy of life had dominated a society. This result is consistent with and goes beyond the observations of Frey and Torgler (2007: 152). They found differences in the 'conditional cooperative effect' (the impact of the perceived behaviour of other taxpayers) between Eastern and Western European countries when they tested the robustness of their results in separate analyses for each country included in their analysis.

We will conclude our empirical analysis by reviewing the explanatory power of our final model. The value of the Maddala  $R^2$  shows that 10 per cent of variance can be explained.<sup>21</sup> This is an acceptable result, given that the contribution of this analysis to the research on tax morale primarily consists in testing hypotheses in terms of different approaches and their relevance in various contexts.

## Concluding remarks

With respect to the initially formulated question it can be stated that both strategic considerations and community orientations play a significant role in explaining tax morale. In particular, the empirical evidence presented in this article underpins the role of community feelings and respect for the concerns of a community in promoting positive attitudes towards rules and regulations that imply costs for individuals.

The relative strength of the two factors we have focused on (that is, rational considerations and community orientations) varies according to the duration of communist rule in a country, for socialization under communist rule strengthens the relevance of community orientations in explaining an individual's tax morale. Vice versa, individualistic rational considerations are of decreasing importance for explaining individuals' tax morale the longer a collective philosophy of life dominated a given society.

A key point of this article is to emphasize that the significance of the explanations examined here depends on the context. Even though it is a widely held belief, in political science, that political systems influence public opinion, evidence on what the differences in underlying opinion-formation processes could look like is relatively scarce. However, we were able to show that contextual conditions determine which individual opinions and characteristics are relevant for individual positions on tax norms.

In particular, our findings provide important information for post-communist states and probably also for other countries in the process of democratic consolidation: according to our analyses, trust has positive effects on the willingness to pay taxes and, it follows, on support for the political system. However, this influence is weaker in the post-communist countries. This puts a damper on the expectation that political trust acts as a catalyst for a successful transition.<sup>22</sup>

On the contrary, national identity and support for community concerns may support democratic consolidation by helping citizens who still have ambivalent views of their democratic regimes to accept government policies. Here, the results raise one question for the future. How long will the differences in the motivation to pay taxes between post-communist countries and western countries last? Due to a lack of current data, we had to rely on a survey from the years 1999 and 2000 in our analysis. Possible changes in the motivation to pay taxes, which may have cropped up since then, unfortunately cannot be studied. Instead, one can only formulate expectations, with the help of

analysing recent developments in the post-communist states. During the past decade differences have grown between the post-communist countries that entered the EU and those that did not, especially the successors of the Soviet Union, with the exception of the three Baltic countries. The new member states of the EU are more democratic (Bunce et al., 2010; Puddington, 2010), have better control of corruption, and enjoy a greater degree of government effectiveness. Moreover, the rule of law has been realized more comprehensively (Holmes, 2010; Kaufmann et al., 2010).<sup>23</sup> It can be suggested that these differing contextual situations have an influence on citizens' opinions – especially because as more and more time elapses, those experiences following the transition are becoming more important than the inheritance of communism. If this is true, then we can first and foremost expect increasing differences between the opinions of EU citizens and the citizens of the rest of the post-communist countries.

## **Appendix: sources and definitions of variables**

### *Dependent variable*

'Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between, using this card: Cheating on taxes if you have the chance.' Scale values run from 0 ('always justifiable') to 9 ('never justified').

### *Tax behaviour of others*

'According to you, how many of your compatriots do the following? Cheating on taxes if they have the chance.' Scale values run from 0 ('almost all') to 3 ('almost none').

### *Confidence in political institutions*

'Please look at this card and tell me, for each item listed, how much confidence you have in them, is it a great deal, quite a lot, not very much or none at all? Parliament, civil services, police.' Scale values run from 0 ('none at all') to 9 ('a great deal').

### *Income*

'Here is a scale of incomes and we would like to know in what group your household is, counting all wages, salaries, pensions and other incomes that come in.' Scale values run from 0 ('lowest income') to 9 ('highest income').

### *National pride*

'How proud are you to be a [nationality] citizen?' Scale values run from 0 ('not at all proud') to 3 ('very proud').

### *Duty towards society*

'Do you agree or disagree with the following statement? Work is a duty towards society.' Values run from 'disagree strongly' (0.00), 'disagree' (0.25), 'neither agree nor disagree' (0.50), and 'agree' (0.75) to 'agree strongly' (1.00).

### *Church attendance*

'Apart from weddings, funerals and christenings, about how often do you attend religious services these days?' Scale values run from 0 ('never, practically never') to 7 ('more than once a week').

### *Respect for authority*

'Here is a list of various changes our way of life that might take place in the near future. Please tell me for each one, if it were to happen, whether you think it would be a good thing, a bad thing, or don't you mind? Greater respect for authority.' Values run from 'bad' (0.0) and 'don't mind' (0.5) to 'good' (1.0).

### *Age*

'Can you tell me your year of birth, please?' Grouped age variable: 15–24 (0.0), 25–34 (0.2), 35–44 (0.4), 45–54 (0.6), 55–64 (0.8), and 65–98 (1.0).

### *Years of communist rule*

The source for Croatia and East Germany is Fuchs and Klingemann (2002) and for all other countries, Reisinger (1999).

### *Quality of governance*

This is measured using a composite index comprising three dimensions: 'government effectiveness', 'rule of law', and 'control of corruption'. Data were taken from the World Bank Governance Indicators Data Set and refer to 1999 (for further information, see Kaufmann et al., 2008).

### *Income inequality (Gini coefficient)*

Source data are from World Bank (2006: 280–1). Missing data for Iceland and Malta were replaced by the mean value for the 26 other countries. All data refer to years around 2000.

### *Ethnic heterogeneity*

This is measured by the percentage of ethnic minorities in the total population. Data were taken from Ludwig (1993), Nowak (1994), <http://ec.europa.eu/education/policies/lang/languages/langmin/euromosaic>, and the CIA's *The World Factbook*. Data sources were chosen according to availability and plausibility against background information. Many thanks to Christian Henkes (Social Science Research Centre, Berlin) for providing the data.

### **Notes**

The authors are grateful to the anonymous reviewers for their helpful comments.

1. In political science, tax morale has occasionally been analysed in studies dealing with legal permissiveness or law-abidingness. Usually, these studies use a composite measure of law-abiding attitudes, of which attitudes towards tax fraud are only one part (see Dalton, 2004; Marien and Hooghe, 2011).
2. For deterrence theory, compare Allingham and Sandmo (1972).

3. See the Appendix for the definition and sources of variables.
4. In this way, governments can raise their citizens' tax morale when they behave in a trustworthy, transparent, and honest fashion (Levi, 1997). An administrative apparatus that succeeds in consistently and effectively levying taxes reinforces the awareness in the individual citizen that the others are paying taxes as well.
5. Items measuring confidence in these institutions form one dimension in a principal component analysis with a Cronbach's alpha of .73.
6. For an overview, see, for example, Putnam (2000) and Van Deth (2008).
7. Deutsch et al. (1957) clearly describe this with their concept of the 'sense of community'.
8. Of course, this item can also be seen as a measure of conformity and obedience. Indeed, the chosen measure also correlates positively with support for obedience as an educational goal and negatively with post-materialist values. But these correlations are moderate and weaker when compared with the relationship between our indicator of collective duty and national pride. Therefore, these two constructs cover community orientations in our analysis.
9. For different ways in which these countries' pasts may have influenced political attitudes, see Pop-Eleches and Tucker (2011).
10. Howard (2003: 20 ff.) and Bunce (1999) provide detailed analyses of the effects communist rule had on people's everyday life.
11. Individualism and collectivism should be seen as cultural ideal types. In reality, the two forms of cultural orientation coexist both in individualistic and in collectivist societies (Triandis, 2001).
12. See, for example, Hofstede (2001) and Schwartz and Bardi (1997). For measures and subtypes, see Oyserman et al. (2002).
13. Some researchers presume that the collapse of Marxist ideology has led to a kind of vacuum and a loss of world view, which has enabled a stronger communal spirit to develop (Hillmann, 2003: 254). Yet, there is no empirical evidence proving that identification with the nation as a community is significantly higher in post-communist nations than in Western Europe (regarding national pride, see Smith and Kim, 2006). It seems plausible, though, that community orientation has a stronger referential function than other orientations.
14. For more information, see Kaufmann et al. (2008: 7–8).
15. The countries were selected according to a broad definition of the European continent. In a second step, countries for which there were no data available were excluded.
16. Gehlbach (2008: 21) explains this in clear terms: under communist rule 'all financial transactions were funneled through the state "monobank", so "taxation" of an enterprise amounted to debiting the enterprise's account and crediting some other account at the bank'.
17. One reason for the variance in development is that the post-communist tax reforms in Central and Eastern Europe were influenced by EU law and by the perspective of European integration (Appel, 2006, 2011). Not only that, but the tax systems in the post-communist countries were also influenced by the industrial structure inherited from communism. Countries whose industrial structures are characterized by large manufacturing enterprises tend to rely more on company taxation, as was already the case under communism (Gehlbach, 2008).
18. That is, the variance components at the context level are divided by the sum of the variance components at the individual and context levels:  $0.378 / (5.261 + 0.378) = .067$ .
19. This conditional effect can be calculated in the following way:  $\beta_{\text{duty society}} + \beta_{\text{duty societ}} * \text{communist rule} * \text{years of communist rule}$  (see Kam and Franzese, 2007: 22).
20. In Western European countries, a unit increase in the variable 'Tax behaviour others' (scale values from 0 to 3) raises the dependent variable by .513. After 43 years of communist rule the increase is only .341, and after 74 years, only an effect of .217 remains. The effect of confidence in institutions on tax morale is positive in western countries (.075), but turns out to be negative for countries that experienced communist rule for more than 37 years. This specific result is not in line with our theoretical argument. In former communist countries, we expected a small positive effect or a non-effect from confidence in institutions.



21. Maddala  $R^2$  was computed by comparing the final model with an empty model which refers to the same number of respondents on the individual level ( $N = 25,710$ ). Therefore, the empty model was computed again after excluding the income variable from the data set. The results of this empty model are not shown here.
22. Compare also the positions of Raiser et al. (2001) and of Rothstein (2000).
23. A positive development can also be seen in EU candidate countries such as Croatia. These countries must make immense efforts to fulfil the entry criteria. The comparison of former-communist member states of the EU and other post-communist countries covers, however, only a general tendency, from which there are also exceptions, for example the high level of corruption in Bulgaria and Romania (Vachudova, 2009).

## References

- Allingham M and Sandmo A (1972) Income tax evasion: A theoretical analysis. *Journal of Public Economics* 1(3–4): 323–38.
- Alm J and Torgler B (2006) Culture differences and tax morale in the United States and in Europe. *Journal of Economic Psychology* 27(2): 224–46.
- Andreoni J, Erard B and Feinstein J (1998) Tax compliance. *Journal of Economic Literature* 36(2): 818–60.
- Appel H (2006) International imperatives and tax reform: Lessons from postcommunist Europe. *Comparative Politics* 39(1): 43–62.
- Appel H (2011) *Tax Politics in Eastern Europe: Globalization, Regional Integration, and the Democratic Compromise*. Ann Arbor: University of Michigan Press.
- Braithwaite V (1998) Communal and exchange trust norms: Their value base and relevance to institutional trust. In: Braithwaite V and Levi M (eds) *Trust and Governance*. New York: Russell Sage, pp. 46–74.
- Brewer MB (2001) The many faces of social identity: Implications for political psychology. *Political Psychology* 22(1): 115–25.
- Bunce V (1999) *Subversive Institutions: The Design and Destruction of Socialism and the State*. Cambridge: Cambridge University Press.
- Bunce V, McFaul M and Stoner-Weiss K (eds) (2010) *Democracy and Authoritarianism in the Postcommunist World*. Cambridge: Cambridge University Press.
- Campos N and Coricelli F (2002) Growth in transition: What we know, what we don't and what we should. *Journal of Economic Literature* 40(3): 793–836.
- Citrin J and Luks S (2001) Political trust revisited. Déjà vu all over again? In: Hibbing J and Theiss-Morse E (eds) *What is it about Government that Americans Dislike?* Cambridge: Cambridge University Press, pp. 30–55.
- Conway LG, Clements SM and Tweed RG (2006) Collectivism and governmentally initiated restrictions: A cross-sectional and longitudinal analysis across nations and within a nation. *Journal of Cross-Cultural Psychology* 37(1): 20–41.
- Dalton R (2004) *Democratic Challenges, Democratic Choices: The Erosion of Political Support in Advanced Industrial Democracies*. Oxford: Oxford University Press.
- Denters B, Gabriel OW and Torcal M (2007) Norms of good citizenship. In: Van Deth JW, Montero JR and Westhol A (eds) *Citizenship and Involvement in European Democracies: A Comparative Analysis*. London and New York: Routledge, pp. 88–108.
- Deutsch KW, Burrell SA and Kann RA (1957) *Political Community and the North Atlantic Area*. New York: Greenwood Press.
- Falkinger J (1995) Tax evasion, consumption of public goods and fairness. *Journal of Economic Psychology* 16(1): 63–72.
- Frey BS and Torgler B (2007) Tax morale and conditional cooperation. *Journal of Comparative Economics* 35(1): 136–59.
- Fuchs D and Klingemann HD (2002) Eastward enlargement and the identity of Europe. *West European Politics* 25(2): 19–54.

- Gehlbach S (2008) *Representation through Taxation: Revenue, Politics, and Development in Postcommunist States*. Cambridge: Cambridge University Press.
- Halman L and Pettersson T (1996) The shifting sources of morality: From religion to post-materialism? In: Halman L and Neil N (eds) *Political Value Change in Western Democracies*. Tilburg: Tilburg University Press, pp. 261–84.
- Hillmann KH (2003) *Wertwandel: Ursachen, Tendenzen, Folgen [Value Change: Causes, Tendencies, Consequences]*. Würzburg: Carolus.
- Hofstede G (2001) *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations across Nations*. Thousand Oaks, CA: Sage Publications.
- Holmes LT (2010) International anti-corruption regimes and corruption levels in European and Eurasian post-communist states. In: Wolf S and Schmidt-Pfister D (eds) *International Anti-Corruption Regimes in Europe: Between Corruption, Integration, and Culture*. Baden-Baden: Nomos, pp. 25–47.
- Howard M (2003) *The Weakness of Civil Society in Post-Communist Europe*. Cambridge: Cambridge University Press.
- Inkeles A (1983) *Exploring Individual Modernity*. New York: Columbia University Press.
- Jetten J, Postmes T and McAuliffe B (2002) 'We're all individuals': Group norms of individualism and collectivism, levels of identification and identity threat. *European Journal of Social Psychology* 32(2): 189–207.
- Kam CD and Franzese R Jr (2007) *Modeling and Interpreting Interactive Hypotheses in Regression Analysis*. Ann Arbor: University of Michigan Press.
- Kaufmann D, Kraay A and Mastruzzi M (2008) *Governance matters VII: Aggregate and individual governance indicators 1996–2007*. World Bank Policy Research Working Paper 4654. Washington, DC: World Bank.
- Kaufmann D, Kraay A and Mastruzzi M (2010) *The worldwide governance indicators: A summary of methodology, data and analytical issues*. World Bank Policy Research Working Paper 5430. Washington, DC: World Bank.
- Kuzio T (2001) Transition in post-communist states: Triple or quadruple? *Politics* 21(3): 168–77.
- Langer W (2004) *Mehrebenenanalyse: Eine Einführung für Forschung und Praxis [Multilevel Analysis: An Introduction for Research and Practice]*. Wiesbaden: VS-Verlag für Sozialwissenschaften.
- Letki N (2006) Investigating the roots of civic morality: Trust, social capital and institutional performance. *Political Behavior* 28(4): 305–25.
- Levi M (1988) *Of Rule and Revenue*. Berkeley: University of California Press.
- Levi M (1997) *Consent, Dissent, and Patriotism*. Cambridge: Cambridge University Press.
- Lieberman ES (2001) National political community and the politics of income taxation in Brazil and South Africa in the twentieth century. *Politics and Society* 29(4): 515–55.
- Liebig S and Mau S (2005) Wann ist ein Steuersystem gerecht? Einstellungen zu allgemeinen Prinzipien der Besteuerung und zur Gerechtigkeit der eigenen Steuerlast [When is a tax system just? Attitudes towards general principles of taxation and the justice of one's tax burden]. *Duisburger Beiträge zur soziologischen Forschung* 1/2005. Available at: [http://soziologie.uni-duisburg.de/forschung/DuBei\\_0105.pdf](http://soziologie.uni-duisburg.de/forschung/DuBei_0105.pdf).
- Ludwig K (1993) *Europa zerfällt: Völker ohne Staaten und der neue Nationalismus [Europe Resolves: Peoples Without States and the New Nationalism]*. Hamburg: Rowohlt.
- McAuliffe BJ, Jetten J, Hornsey M et al. (2003) Individualist and collectivist norms: When it's ok to go your own way. *European Journal of Social Psychology* 33(1): 57–70.
- McGraw KM and Scholz JT (1991) Appeals to civic virtue versus attention to self-interest: Effects on tax compliance. *Law and Society Review* 25(3): 471–98.
- Marien S and Hooghe M (2011) Does political trust matter? An empirical investigation into the relation between political trust and support for law compliance. *European Journal of Political Research* 50(2): 267–91.
- Martinez-Vazquez J and McNab R (2000) The tax reform experiment in transitional countries. *National Tax Journal* 53(2): 273–98.

- Martinez-Vazquez J and Torgler B (2009) The evolution of tax morale in modern Spain. *Journal of Economic Issues* 43(1): 1–28.
- Meyer G (2003) Values, small life worlds and communitarian orientations: Ambivalent legacies and democratic potentials in post-communist political cultures. In: Pollack D, Jacobs J, Müller O et al. (eds) *Political Culture in Post-Communist Europe: Attitudes in New Democracies*. Aldershot: Ashgate, pp. 169–80.
- Mishler W and Rose R (1997) Trust, distrust and skepticism: Popular evaluations of civil and political institutions in post-communist societies. *Journal of Politics* 59(2): 418–51.
- Newton K and Norris P (2000) Confidence in public institutions: Faith, culture or performance. In: Pharr SJJ and Putnam RD (eds) *Disaffected Democracies: What's Troubling the Trilateral Countries?* Princeton, NJ: Princeton University Press, pp. 52–73.
- Nowak J (1994) *Europas Krisenherde: Nationalitätenkonflikte vom Atlantik bis zum Ural – Ein Handbuch [Europe's Trouble Spots: Ethnic Conflicts from the Atlantic to the Urals – A Handbook]*. Hamburg: Rowohlt.
- Oyserman D, Coon HM and Kimmelmeier M (2002) Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin* 128(1): 3–72.
- Pop-Eleches G and Tucker G (2011) Communism's shadow: Postcommunist legacies, values, and behavior. *Comparative Politics* 43(4): 379–99.
- Puddington A (2010) Democracy under duress. *Journal of Democracy* 22(2): 17–31.
- Putnam RD (1993) *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, NJ: Princeton University Press.
- Putnam RD (2000) *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon and Schuster.
- Raiser M, Haerpfer C, Nowotny T et al. (2001) *Social capital in transition: A first look at the evidence*. EBRD Working Paper 61.
- Reisinger WM (1999) Reassessing theories of transition away from authoritarian regimes: Regional patterns among postcommunist countries. Paper presented at the annual meeting of the Midwest Political Science Association, Chicago, IL.
- Rose R, Mishler W and Haerpfer C (1998) *Democracy and its Alternatives: Understanding Post-Communist Societies*. Cambridge: Polity Press.
- Rothstein B (1998) *Just Institutions Matter: The Moral and Political Logic of the Universal Welfare State*. Cambridge: Cambridge University Press.
- Rothstein B (2000) Trust, social dilemmas and collective memories. *Journal of Theoretical Politics* 12(4): 477–501.
- Scholz JT (1998) Trust, taxes, and compliance. In: Braithwaite V and Levi M (eds) *Trust and Governance*. New York: Russell Sage Foundation, pp. 135–66.
- Scholz JT and Pinney N (1995) Duty, fear, and tax compliance: The heuristic basis of citizenship behavior. *American Journal of Political Science* 39(2): 490–512.
- Schwartz SH and Bardi A (1997) Influences of adaptation to communist rule on value priorities in Eastern Europe. *Political Psychology* 18(2): 385–410.
- Smith TW and Kim S (2006) National pride in comparative perspective: 1995/96 and 2003/04. *International Journal of Public Opinion Research* 18(1): 127–36.
- Snijders TAB and Bosker RJ (1999) *Multilevel Analysis: An Introduction to Basic and Advanced Multilevel Modeling*. London: Sage.
- Taylor N (2003) Understanding taxpayer attitudes through understanding taxpayer identities. In: Braithwaite V (ed.) *Taxing Democracy: Understanding Tax Avoidance and Evasion*. Burlington: Ashgate, pp. 71–92.
- Torgler B (2003a) Tax morale, rule-governed behaviour and trust. *Constitutional Political Economy* 13(2): 119–40.
- Torgler B (2003b) Tax morale in transition countries. *Post-Communist Economies* 15(3): 357–81.
- Torgler B (2003c) Does culture matter? Tax morale in an East-West-German comparison. *FinanzArchiv* 59(4): 504–28.

- Torgler B (2007) *Tax Compliance and Tax Morale*. Cheltenham: Edward Elgar.
- Torgler B and Schaltegger CA (2005) *Tax morale and fiscal policy*. CREMA Working Paper 30. Basel: Centre for Research in Economics, Management and the Arts.
- Torgler B and Schneider F (2004) *Does culture influence tax morale? Evidence from different European countries*. CREMA Working Paper 2004-17.
- Triandis HC (2001) Individualism-collectivism and personality. *Journal of Personality* 69(6): 907–24.
- Turner JC, Hogg M, Oakes P et al. (1987) *Rediscovering the Social Group: A Self-Categorization Theory*. Oxford: Blackwell.
- Tyler TR (2011) *Why People Cooperate: The Role of Social Motivations*. Princeton, NJ: Princeton University Press.
- Uslaner EM (2007) Tax evasion, trust, and the strong arm of the law. In: Hayoz N and Hug S (eds) *Tax Evasion, Trust, and State Capacities: How Good is Tax Morale in Central and Eastern Europe?* Bern: Lang, pp. 17–50.
- Vachudova MA (2009) Corruption and compliance in the EU's post-communist members and candidates. *Journal of Common Market Studies* 47(1): 43–62.
- Van Deth J (2008) Measuring social capital. In: Castiglione D, Van Deth J and Wolleb G (eds) *The Handbook of Social Capital*. Oxford: Oxford University Press, pp. 150–76.
- Wenzel M (2003) Tax compliance and the psychology of justice: Mapping the field. In: Braithwaite V (ed.) *Taxing Democracy: Understanding Tax Avoidance and Evasion*. Burlington: Ashgate, pp. 41–69.
- World Bank (2006) *World Development Report 2006*. Washington, DC: World Bank.

### Biographical notes

Eva-Maria Trüdinger is a Post-Doctoral Researcher at the Institute for Social Sciences, University of Stuttgart. Her research focuses on public opinion about policies, the welfare state, and questions of political psychology.

Achim Hildebrandt is a Senior Fellow at the Institute for Social Sciences, University of Stuttgart. His research focuses on comparative public policy, especially morality policies.