Policy Research Working Paper 5911

Tax Morale, Eastern Europe and European Enlargement

Benno Torgler

The World Bank Europe and Central Asia Region Human Development Economics Unit December 2011



Policy Research Working Paper 5911

Abstract

This study tries to remedy the current lack of tax compliance research analyzing tax morale in 10 Eastern European countries that joined the European Union in 2004 or 2007. By exploring tax morale differences between 1999 and 2008, it shows that tax morale has decreased in 7 out of 10 Eastern European countries. This lack of sustainability may support the incentive

based conditionality hypothesis that the European Union only has a limited ability to influence tax morale over time. The author observes that events and processes at the country level are crucial to understanding tax morale. Factors such as perceived government quality and trust in the justice system and the government are positively correlated with tax morale in 2008.

This paper is a product of the Human Development Economics Unit, Europe and Central Asia Region. It is part of a larger effort by the World Bank to provide open access to its research and make a contribution to development policy discussions around the world. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at benno.torgler@qut.edu.au.

The Policy Research Working Paper Series disseminates the findings of work in progress to encourage the exchange of ideas about development issues. An objective of the series is to get the findings out quickly, even if the presentations are less than fully polished. The papers carry the names of the authors and should be cited accordingly. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.

Tax Morale, Eastern Europe and European Enlargement

by

Benno Torgler*

_

^{*} Benno Torgler, The School of Economics and Finance, Queensland University of Technology, GPO Box 2434, Brisbane, QLD 4001, Australia, e-mail: benno.torgler@qut.edu.au. He is also a research fellow of CREMA – Center for Research in Economics, Management and the Arts, Switzerland and associated with CESifo in Germany.

I. INTRODUCTION

More than 15 years ago, Baldwin (1995) wrote: "The gains from enlarging the EU eastward are potentially enormous. Indeed, it is easy to forget what is at stake. Until recently, millions of men and billions of dollars of equipment stood poised for combat in Europe. Communism's demise defused this situation by destroying the existing political and economic structures in the East. However, the outcome of this 'political creative destruction' is still uncertain. If all goes right, rapid Eastern growth would lock in democratic and pro-market reforms, fostering peace and stability throughout the continent. In particular, expanding the market to another 100 million consumers would be a bonanza for West European exporters. However, if all goes wrong, widespread economic failure in the East could have serious consequences for all of Europe. Even if this did not provoke a return to authoritarianism, serious political or economic turmoil in the East could lead to mass migrations and harm the confidence of investors throughout Europe. An intermediate outcome is the most likely, but these two extreme scenarios serve to illustrate an important fact. Europe is at a turning point in its history." (p. 475) In the past two decades since this statement was made, Eastern Europe has experienced substantial changes. Eight countries from that region joined the European Union (EU) on May 2004 (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, and Slovenia) and two joined the EU in 2007 (Bulgaria and Romania). A democratization and marketization process (Haughton, 2007) has taken place in these countries, and such an enlargement was the most significant since the European Community was created in 1957. It was an important historical event for the EU, termed as the "big bang" enlargement (Noutcheva & Bechev, 2008), and required the building of a suitable tax system (Bernardi, Chandler & Gandullia 2005). However, it is unclear "when, why and how the EU shaped, directed and occasionally determined change in the CEE¹" (Haughton 2007, p. 233).

¹ Central Eastern European countries

Exploring the effect of the EU on these countries' policies and governance is challenging due to causality or internal validity problems: "Based on a counterfactual understanding of causality... the statement that EU causes a particular outcome implies that if the EU were to absent that particular outcome would not occur. (...) However, establishing the causal effect of the EU is far from easy even if one takes full account of alternative explanations. One problem is that factors and mechanisms we associate with European integration often generate similar empirically observable implications rather than rival implications for domestic developments. (...) Moreover, these developments might exhibit similar temporal patterns. European integration, globalisation, neo-liberal ideas, new public management, new information and communication technologies or the individualisation of society emerged in the second half of the last century and intensified in recent decades" (Haverland 2006, pp. 135, 137).

The CEE countries wanted to replicate the political system and economic success of Western Europe or the US, independent of the desire to prepare for EU membership (Haughton 2007). Our study will not be able to solve these problems as our research will be confined to the 10 EU member states mentioned beforehand who experienced the EU integration. One may attempt to disentangle potential factors through a better understanding of the EU's transformative power by studying, e.g., the countries and their development over time. Here we focus only on one aspect, namely citizens' social norms regarding compliance with tax responsibilities. In line with the literature, we refer to this as tax morale (Torgler 2007a). We will see that institutional and governance conditions are key factors in understanding tax morale. Tax administration reforms also play a key role in promoting tax morale.

However, it is interesting to check whether the EU makes a difference. Haughton (2007), for example, points out that the EU seemed to be extremely powerful, acting as a magnet in the first post-communist years, and as a gatekeeper in the path to the European

Union. Noutcheva & Bechev (2008) stress: "EU's offer is important because it creates additional incentives to build a pluralistic democracy and pursue liberal economic reforms at home, and thus empowers political and social groups benefiting from Europeanization. On the other hand, the path of non-reform has advantages of its own for rent-seeking elites unwilling to undermine the sources of their domestic power by introducing accountability and transparency in policy making" (p. 115). Martinez-Vazquez & McNab (2000) also argue that, in countries negotiating their accession to the European Union, the intention to accede acted as a catalyst for rapid tax reform shaped along western lines. On the road to integration with the EU, changes in the tax system were carried out to bring processes in line with developed countries (Owsiak 2007). Schimmelfenning & Sedelmeier (2004, pp. 671-676) developed different models of EU external governance. The incentive model suggests that a state adopts EU rules if the benefits of EU rewards exceed the domestic adoption costs. The effectiveness of rule transfer then increases if rules are set as conditions for rewards and the more determinate they are. The effectiveness of rule transfer increases with the size and speed of the rewards. Moreover, the likelihood of rule adoption increases with the credibility of conditional threats and promises but decreases with the number of veto players incurring net adoption costs from compliance. The social learning model on the other hand suggests that a state adopts EU rules if it is persuaded of the appropriateness of EU rules. Finally, the lessondrawing model points out that a state adopts EU rule, if it expects these rules to solve domestic policy problems efficiently.

In the last decade, several Central and Eastern European countries have tried to simplify their tax systems, which may have contributed to an increase in tax compliance and reduction of the tax compliance costs (Hayoz & Hug, 2007). As Casanegra de Jantscher et al. (1992) pointed out several years ago: "A major challenge for countries in transition will be to develop tax systems that facilitate, rather than complicate compliance" (p. 140). Looking at data from the 1990s, Torgler (2003, 2007b) reports empirical evidence that tax morale was

lower in Former Soviet Union (FSU) economies compared to CEE economies. It seems that CEE countries have been more successful than FSU countries at designing tax systems, tax administrations, and government structures in which taxpayers can put their trust. The tax administration in transition countries were struggling due to legal, institutional, and managerial weaknesses (Trasberg, 2005). Such institutional improvements and observable changes may help to explain the higher willingness to cooperate in CEE countries, some of which exhibit even higher values of tax morale than certain Western European countries in 1999 (Frey & Torgler, 2007). However, the sustainability of such changes is unclear, as is the extent to which the European Union has contributed to these tax morale changes. Transition countries required a new tax system and institutions quite quickly and there was limited time and limited possibility for gradual improvement or experimentation with existing tax arrangements: "Building up a new and efficient tax administration system is not an easy task in the situation of a fast collapse of half a century's existing economic and social organization. (...) Nevertheless, while the New EU Member countries have developed modern tax policy and legislation, the institutional changes in tax administration delayed policy" (Trasberg 2005, p. 105). Mitra & Stern (2003) also stress: "The fundamental change which tax policy has undergone in transition as a result of changing bases and instruments has required the development of a tax administration capable of implementing those policies in countries where there was no such institution. While many countries now have modern tax legislation on their books, the development of the tax administration has lagged that of policy. This is due, not only to a greater focus on changes in policy rather than administration in the early years of transition, but also to the fact that demands on administration arising from changes in tax policy would usually precede development of supporting institutions" (p. 37).

Exploring only the countries that have joined the European Union shows that 7 out of 10 countries experienced a decay of tax morale between 2000 and 2008. Haughton (2007) argued that "the EU's power was limited to particular points in the accession process and

varied significantly across policy areas" (p. 235). The EU was strongest during the decision phase, while deliberating over whether or not to open accession negotiations ("powerful weapon in the EU's armoury" (p. 237). For example, at the Luxembourg European Council in 1997, the five countries Estonia, Hungary, Poland, Slovenia and the Czech Republic were invited to begin accession negotiations. On the other hand, the five others in our investigation, namely Bulgaria, Latvia, Lithuania, Romania and Slovakia were seen to have made insufficient progress and were therefore excluded. In the Copenhagen European Council in December 2002 Bulgaria and Romania were not considered to be part of the "big bang" enlargement and in November 2002, the Commission put forward roadmaps for Bulgaria and Romania (Noutcheva & Bechev, 2008). However, even during the decision phase, the EU's power was limited to some extent: "The decision to open accession negotiations with Romania and Bulgaria appears to have been driven as much by broader geo-strategic concerns as by the countries' progression meeting the criteria. (...) Both Romania and Bulgaria were rewarded for their stance in the Kosovo conflict" (Haughton 2007, p. 238). The weak state capacity and governance set these two countries apart from other countries of the EU fifth Enlargement. Furthermore, very few reforms were carried out in the first years of their membership in order to transform the political and administrative system to meet the membership requirements (Andreev, 2009). Noutcheva & Bechev (2008) stress: "On the whole, Bulgaria and Romania accelerated reform when they felt the "stick" of EU conditionality. Every time the EU penalized the two laggards, their governments would rapidly respond by presenting revised reform strategies and making pledges for additional measures" (p. 124).

Haughton (2007) also refers to the time-consuming tasks of integrating the EU law into domestic laws. This has led to fast-tracking procedures that bypassed the sustainable procedures of democratic deliberation. In addition, the administration reforms in CEE during the accession phase were on average not very fast and often done reluctantly. There were gaps

between declared and implemented policies: "Indeed, in off-the-record remarks Commission officials lamented the difficulty of maintaining pressure on accession states to continue with reforms in many policy areas, especially when almost all the negotiating chapters had been closed" (Haughton 2007, p. 240). Focusing on four countries (Czech Republic, Hungary, Slovakia and Slovenia), Falkner & Treib (2008) also note that there are considerable general obstacles to practical application and enforcement of EU law. One observes a "combination of political contestation at the transposition stage, and quite systematic non-compliance at the enforcement and application stage" (p. 308).

II. EASTERN EUROPEAN EXPERIENCES

Fiscal concerns might be a key element to understand tax compliance and it is also often argued that tax evasion is prevalent in transition countries (see, e.g., Alm & Martinez-Vazquez, 2003; Martinez-Vazquez & McNab, 2000). Alm & Martinez-Vazquez (2003) point out: "In developing and transition countries (DTCs) in particular, tax evasion is often widespread and, indeed, systematic. Thus, the problem of tax evasion tends to have far more serious consequences in DTCs than in developed economies" (p. 147). Reform process in the transition countries caused disorientation and a heavy economic burden (Kasper & Streit, 1999 and Gërxhani, 2004). The rapid collapse of institutional structures produced a vacuum in many countries that led to large social costs, especially in terms of worsening income inequality and poverty rates and bad institutional conditions based on uncertainty and high transaction costs. Campos & Coricelli (2002) argued that the results of the transition process were still mixed, 10 years after the collapse of the communist regimes. A massive fall in output had occurred, reducing the real GDP (1999) in 23 of 25 transition countries. In most cases the output fell more than 50 percent of the 1989 GDP level. Central Eastern European countries started the course of transition from different historical backgrounds, physical endowments and reform processes. Central Eastern European countries were able to quickly achieve secure property rights, because the transition process occurred earlier and more rapidly. Thus, reforms progressed much faster in Central Eastern European countries than in Former Soviet Union countries. As mentioned, evidence from the 1990s indicates that tax morale was substantially higher in Central Eastern European countries than in Former Soviet Union countries. Gërxhani (2004) points out that many transition countries had an institutional crisis after the collapse of communism which produced a gap between old institutional destruction and the establishment of new institutions.

One of the most difficult processes is the transformation of social contracts. Stiglitz (1999) points out: "If "reformers" simply destroy the old norms and constraints in order to "clean the slate" without allowing for the time-consuming processes of reconstructing new norms, then the new legislated institutions may well not take hold" (p. 9). Historical examples indicate that states "can be strong with regards to specific capacities, for instance coercion and repression, without "producing" voluntary compliance, a phenomenon to be observed in many transition countries. (...) This also means that they are weak with regard to their *political* capacity to rely on voluntary compliance" (Hayoz & Hug, 2007; p. 9). Tax reforms were highly dependent on the government's political commitment and the capability to make radical and fast changes (Trasberg, 2005).

Rose-Ackerman (2001) reports that citizens were critical regarding the transition process and state institutions and officials and that the "sense of stasis is highest for the former parts of the Soviet Union" (p. 419). We could describe transition countries as being in a similar situation to many developing countries, suffering simultaneously from "overgovernment" and "under-government" (Frey & Eichenberger, 1999; p. 89). There is a strong combination of interventionism and bureaucracy. On the other hand, property rights are not sufficiently secured and there is a high degree of uncertainty, thus reducing the incentive for investment. Powerful interest groups interfering this process, inducing further constraints on fiscal institutions and the tax administrations in particular. These institutions were created

arbitrarily rather than through a structured political process which produced even greater political interferences such as tax concessions (Profeta, 2005). Noutcheva & Bechev (2008) point out: "The weakness of state institutions and civil society created ample opportunities for state capture. Reforms enabled predatory elites, coming mostly but not exclusively from the communist *nomenklatura*, to seize directly or indirectly great chunks of state property" (p. 129).

For transition countries it was difficult to find the right equilibrium of state activity, as the collapse of communism represented the collapse of a vast state apparatus. Frequent use of the exit option in form of tax evasion or tax avoidance through entering the shadow economy negatively affected the state's tax collection. This reduced the government revenue available to provide public goods and to build trustworthy institutions. The rule of law in transition countries was not sufficiently robust so that authorities could successfully pursue tax evasion cases (Trasberg, 2005). This encouraged development of the shadow economy, as enterprises had increased incentive to evade taxes because they were able to simply pay more bribes to protect themselves (see Levin & Satarov, 2000).

The issue of low tax effort in developing and transition countries has been quite relevant (Bird, Martinez-Vazquez & Torgler, 2006, 2008). Over the last forty years, many of these countries found it difficult to achieve a sustainable policy balance given the often conflicting and frequently changing forces they have faced, from external and internal, economic and political sources. It is thus not surprising that their tax policies have changed considerably over this period—though much less in either level or structure than might have been expected. Indeed, it may be that countries tend to achieve an equilibrium position with respect to the size and nature of their fiscal systems that largely reflects the balance of political forces and institutions, and stay at this position until 'shocked' to a new equilibrium (Bird, Martinez-Vazquez & Torgler, 2008).

Experiences in Latin America may help to clarify that aspect. An interesting illustrative example is that of Mexico (see Bird et al. 2006). For instance, Martinez-Vazquez (2001) notes that one of the most striking features of the various major tax changes from the past few decades has been how very little apparent effect they have had on Mexico's tax-GDP ratio, which has remained almost constant. Tax policy and tax administration reforms over the last two decades have given Mexico a tax structure that is in many ways comparable to that in many developed countries, yet this system has continued to perform poorly in raising adequate revenues. The management of tax policy seems to have been a crucial element in this failure. The fundamentally sound structure of Mexico's tax system and its revenue performance has been undermined by numerous ad hoc policy measures. Transition countries have experienced similar problems. The position of the state and its reputation was affected because of numerous mistakes in tax practices since the beginning of the transformation process: "The state's attitude in many instances can be described as blatantly irresponsible. This usually took the form of continuously modified tax policy concepts (partially implemented). When observing the politicians' behaviour in the area of taxes, one could get the impression that they juggled with tax instruments without fully realizing that these "toys" could go off one day. This attitude is typical of almost all governments of post-communist countries where the applied fiscal tools fail to ensure financial stability but their reform is opposed by the society" (Owsiak, 2007, p. 202). This induced a higher level of tax awareness, reputation costs, and a higher sensibility towards unfair treatments: "All attempts to improve the tax system on the part of the state are treated with suspicion and highly criticized by the media" (p. 194). As Tanzi (2005) points out, "one thing that these countries had to learn was how to collect taxes from taxpayers that would rather evade paying them" (p. xvi).

Frey (2003a) stresses that it is important to have social capital in terms of mutual trust and honesty in the transition deregulation and privatization process. Citizens in planned socialist economies were not aware of directly paying taxes (Kornai, 1990). Indeed, during

the Soviet era, "taxpayers" were "large in size and small in number", and the state had many other levers of control besides taxes (Martinez-Vazquez & Wallace, 1999). However, in a shift from a centrally controlled to a market economy, the fiscal system needed to be reformed. These changes represented significant shocks to ordinary citizens. In particular, for the first time, individuals were faced with the direct payment of taxes, including being asked to file different tax returns. The transition process brought up many policy questions, among others: the tax system, the structure of tax administration, and the degree of political participation. Voluntary compliance and self-filing, two important pillars in a modern tax system, were completely absent just after the planned socialism (Martinez-Vazquez & McNab, 2000). Following the early transition, tax evasion and avoidance reached very high levels, as the new tax administration was not prepared to enforce taxes in a market-based economy with large numbers of taxpayers. Tax administration was poorly equipped (e.g., inappropriate use of modern computers and office technology) and managed. Information was used ineffectively, the collection enforcement was weak and there existed substantial corruption practices (Trasberg, 2005). Further, the connection between the payment of taxes and the provision of public goods had been largely concealed under socialism, which might have reduced the identification with the state and thus the willingness to pay taxes.

Profeta (2005) stresses: "Radical reform means that not only do the new fiscal institutions have to introduce new instruments of taxation, a transparent fiscal system, and a well-working tax administration, but also that they have to correct attitudes, incentives and relations" (p. 65). Easter (2007), e.g., reports the findings of a poll conducted by the tax administration in the Tambov region in the early years of the transition, which indicated that only one-third of the respondents argued that paying taxes to the state would provide any benefit to themselves.

In the transition process, revenue needs are an important issue. Gordon (1994) points out that in the reform process, governments in Eastern Europe are confronted with

expenditure needs such as investment demand, infrastructure improvements, and social insurances. Martinez-Vazquez & McNab (1997) argued that it is not surprising to see taxpayers' resistance movements in the reform process when they are taxed for the first time. The undeveloped tax administrations, mostly engaged in cash management, were not prepared to do their work in a modern income tax system. A key problem was the lack of skills and the tax administration's inexperience with market-oriented taxes, alongside the failure of salaries to attract quality personnel to the tax administration profession. Moreover, weaknesses in the application of tax practices have brought about substantial problems.

Unstable tax policies have damaged the economic and social system in transition countries. Sloppy tax legislation and the arbitrariness of rulings on behalf of the tax administration (Owsiak 2007) have reduced the state's credibility. New procedures have only been implemented slowly (for an overview see Martinez-Vazquez & McNab, 1997). Almost 20 years ago, Casanegra de Jantscher, Silvani and Vehorn (1992) pointed out that tax collection problems arise in transition countries as, e.g., taxpayers were required to "physically make a trip to either a tax office, a post office, or a bank" (p. 125). This presupposes that these services are reliable. Furthermore, greater problems result from the fact that with an increasing amount of taxpayers it becomes much more difficult to detect tax evaders or avoiders. This requires that "new fiscal institutions have to strengthen enforcement and at the same time develop the taxpayer education and improve compliance. This means that taxpayers have to be informed about the need to pay taxes and to be assisted in paying them, through the simplification of procedures" (Profeta 2005, p. 65).

Tanzi (2005, p. xv) describes the reforms in the new EU countries as "a remarkable journey that has required enormous and difficult reforms. There was no road map for these countries to follow, because it was a journey on uncharted territory. No group of countries had ever travelled this territory before. However, there was the advantage of knowing where to go, if not how to get there. The destination was the creation of tax systems and tax

administrations not too different from those of the EU countries. In theory, one could assume that all these countries had to do was to make copies of the tax laws of some EU country and make them their own. This, however, would be missing completely what tax reform is and how tax systems must be nested in the economy of a country. They must reflect the structural characteristics of a country's economy if they are to be successful. (...) Some of these changes are still taking place. Thus, in some ways, their tax systems have been adapting themselves to moving targets. It is to be expected that this process will continue for a few more years until the economies of these countries become fully market oriented, with characteristics, structures, and institutions similar to those of the other European countries" (p. xiv). This analysis complements the previous studies that have explored tax morale in the 1990s (Torgler 2003, 2007b, Frey & Torgler 2007).

III. EMPIRICAL APPROACH

We explore the newest European Values Study (EVS) 2008 in conjunction with the data from 1999/2000. The EVS is a European-wide investigation of socio-cultural and political change. The survey collects data on the basic values and beliefs of people throughout Europe and is seen as the most comprehensive research project on human values in Europe. The EVS was first carried out from 1981 to 1983. The methodological approach is explained in detail in the EVS (1999) source book, which provides information on response rates, the stages of sampling procedures, the translation of the questionnaire, and field work, along with measures of coding consistency, reliability of data, and data checks. Country surveys are conducted by experienced professional survey organizations. Interviews were face-to-face and those interviewed were adult citizens aged 18 years and older. Clear guidelines are provided to guarantee the use of standardized information in the surveys and the national representativeness of the data. To avoid framing biases, the questions were asked in a

prescribed order. The response rates in 1999, for example, vary from country to country with an average response rate of around 60 percent. Because EVS poses an identical set of questions to individuals in various European countries, the survey provides a unique opportunity to empirically examine tax morale changes over time. EVS has been designed as a wide-ranging survey, thereby reducing the danger of framing effects when compared with many other surveys that focus entirely on a specific question. This avoids the possibility of respondents reporting what they believe are the answers required by the researchers (Torgler & García-Valiñas, 2007). We will focus on the 10 Eastern European countries that have acceded to the European Union in 2004 or 2007. The general question to assess the level of tax morale in a society is:

Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between: (...) Cheating on tax if you have the chance (% "never justified" = code 1 on a ten-point scale where 1=never and 10=always).

Table 1 presents mean tax morale values for all countries in 1999 and 2008, based on a scale from 0 to 3, were 3 is the highest tax morale (tax evasion is never justifiable) while value 0 integrates values 4 to 10. In general, extracting only a single question from the EVS also reduces problems of complexity inherent with the construction of an index, especially regarding the measurement procedure or a low correlation between the items. Even so, one should recognize that there are some good reasons to use a multi-item index instead of a single question to measure tax morale. Tax morale is likely to be a multi-dimensional concept, which may require a multi-item measurement tool, as in psychometric studies. In this context, a single-item measure like ours has some disadvantages compared to a multi-item index (Lewis, 1982; Jackson & Milliron, 1986). For example, a single-item measure may have difficulty in capturing adequately the interrelated facets of tax morale, and may also be adversely affected by random errors in measurement. Further, a multi-item index has the

advantage that errors should tend to average out, therefore producing a more reliable measure. Compared to a single-item measure, a multi-item index likely provides better score reliability by pooling together information that the items have in common; a multi-item tool also increases validity by providing a more representative sample of information about the underlying concept, and it increases precision by decreasing score variability (for a study that uses multiple-items see Torgler, Schaffner, & Macintyre, 2010).

It is first instructive to examine the aggregate tax morale scores (mean values). Evidence on the nature of these changes is presented in *Table 1*, which tests whether the different samples have the same distribution using the Wilcoxon rank-sum (Mann-Whitney) test. The results reveal whether there is a significant difference between 1999 and 2008. In general we observe that tax morale has decreased in 7 out of 10 countries (Czech Republic, Estonia, Latvia, Lithuania, Poland, Romania and Slovakia). In all these cases the decrease is statistically significant at the 1 or 5% level. In 1999 Poland, Slovakia, and Czech Republic had a tax morale value above 2. In 2008 the values are now below 2 but still substantially higher than in Estonia, Latvia, and Lithuania. Together with these three Baltic countries, Romania has also the lowest tax morale value. This is consistent with the tax morale values in the 1990s (Torgler, 2003, 2007b). Uslaner (2007, p. 36) stresses that it "may not make much sense to have much faith in the legal system where the courts and the police cannot – or will not – control corruption or where citizens cannot see that their contribution to the public wealth actually makes the public more wealthy. In this sense, Romania is not exceptional: There may be less reason for Romanians to have faith in their leaders, who have been unable to control corruption or to bring its citizens prosperity." As of 2008, Hungary has the highest tax morale value, followed by Bulgaria, Slovenia, Slovakia and Czech Republic. For Hungary and Slovenia, we report a statistically significant increase in tax morale. It seems that Baltic countries are struggling with the vertical relationship between citizens and the government: "The majority of the population in the three Baltic States expresses rather low trust in civil

service. In other words, citizens notice when the activities of civil servants differ from the standards set by the legislation and codes of ethics. Corruption, unethical conduct and maladministration are the most common realities faced by citizens. The only way to increase public trust is to provide more information on anticorruption achievements and to seek transparency, efficiency and effectiveness in delivering services to various societal groups" (Palidauskaite, Pevkur & Reinholde, 2010; p. 68).

 $\label{thm:continuous} \emph{Table 1:}$ Tax Morale Development over Time in Eastern European Countries that Joined the EU

EU Country	Tax Morale 1999	Joined	Tax Morale 2008	Prob > z	N
Bulgaria	2.316	1-Jan-07	2.391	0.397	2441
Czech Republic	2.209	1-May-04	1.923	0.000	3660
Estonia	1.563	1-May-04	1.259	0.000	2468
Hungary	2.252	1-May-04	2.536	0.000	2482
Latvia	2.113	1-May-04	1.561	0.000	2474
Lithuania	1.433	1-May-04	1.546	0.044	2370
Poland	2.228	1-May-04	1.809	0.000	2548
Romania	1.97	1-Jan-07	1.775	0.001	2514
Slovakia	2.181	1-May-04	1.925	0.000	2780
Slovenia	2.122	1-May-04	2.265	0.017	2359

Hanousek and Palda (2008) explore tax evasion using survey data (2000, 2002, 2004, and 2006) from the Czech Republic to measure its development for the years 1995 to 2006. Their results indicate that the number and percentage of evaders increased until the early millennium and started to decrease. The authors called the inverse-U shape "an evasional Kuznets curve" (p. 3) and suggested this could indicate that hysteresis "may not be a feature of evasion in a transition economy" (p. 3). However, our results on the development of the Czech Republic and Slovakia between 1999 and 2008 actually indicates a decay of tax

morale, although we do not know whether tax morale was higher in between these two time periods.

Poland experienced a constant increase in tax morale during the 1990s (see Torgler 2007b), but now we observe a decrease between 1999 and 2008. Kasper and Streit (1999) point out that Poland's strategy after the fall of the Berlin Wall was a continuous and systematic institutional transformation without the unnecessarily rapid approach favoured amongst other nations. We find evidence of strong economic growth in the years 1994 to 1997. Between 1989 and 1997 Poland had an average annual rate of GDP growth of 1.6, which was the highest among the transition countries. Thus, it is not surprising that tax morale increased during the 1990s in Poland (Torgler 2007b). Kornai (2000) stresses that the main explanations for the success of development in Poland were the successful macro stabilization, the bottom-up growth of the private sector, and the inflow of foreign capital. Furthermore, Poland was the first transition country after Hungary to reform its income tax (Martinez-Vazquez & McNab, 2000). However, results from the first decade of the 21st century provide a less positive picture. Haughton (2007, p. 243) has pointed out that states such as Poland "demonstrated a particular stubbornness, driven in part by the belief that the enlargement boat would not embark without them" (p. 243). Examining political symptoms such as populist electoral gains, political radicalization, factional behavior, misbehavior of political elites, and weak majorities for an ideologically consistent electoral coalition, Mungiu-Pippidi (2007) finds that Poland and Romania lead the group of seven countries analyzed. These countries are followed by Bulgaria, Czech Republic, Slovakia and Hungary.

The stability of tax morale in Bulgaria could be puzzling, especially in light of political developments there, although one should note that economic progress of Bulgaria has been described as a success story (Andreev, 2009). Bulgaria In relative terms, Bulgaria is a positive example for a constant gradual increase in tax morale over the last 20 years (see Torgler, 2003, 2007b for the 1990s). Bogetić (1995) points out that the initial transformation

conditions in Bulgaria were more like FSU countries than CEE countries. Bulgaria experienced a steep decline in revenues in the first years after the collapse of traditional tax bases, similar to that in countries such as Albania, Moldova, Lithuania, Armenia, and Georgia. However, at the end of 1994, considerable efforts were made to liberalize the economy, and output had started to grow. Yet Bogetić and Hassan (1997) criticized the income tax development in Bulgaria in the early 1990s, as the 1993 amendments have complicated the tax system and increased the marginal tax rates from 40 to 52 %. On the other hand, Martinez-Vazquez (1995) stressed that by 1994 Bulgaria, had already established good revenue assignment systems such as local own-source revenues. Tax morale had increased from 2.240 to 2.316 in the second half of 1990s. The small increase between 1999 and 2008 to 2.391 shows a certain level of sustainability. In recent years, the country has carried out several large scale reforms in the revenue administration. The Convergence Program (2009-2012) report for Bulgaria² documents several valuable tax policy changes (see also Appendix Table A1). The country has developed an integrated information system that connects tax offices with customs and other authorities who deal with public claims. They have introduced an electronic submission process for annual businesses' reports. Before this system was implemented, companies had to submit a hardcopy of their tax reports to the tax authority as well as an electronic version (different format) to the National Statistical Office. A single merged electronic submission has reduced the tax compliance costs. Tax policy in recent years has been oriented towards increasing the tax performance and reducing the shadow economy. There has also been a trend towards transferring the tax burden to indirect taxes and there has been a gradual removal of a number of exemptions. In 2008, a flat rate for taxing the income of natural persons was introduced as a further step to simplify the tax system. A reduction of the tax burden has led to an increase in GDP. The customs border control was strengthened and the revenue administration has reinforced control and inspections to reduce

² See http://ec.europa.eu/economy finance/eu/countries/index en.htm.

illegal imports and tax fraud. Tax collection efficiency has been improved. There has been an increase of on-the-spot inspections, more frequent and detailed audits as well as more stringent rule enforcements and prosecution. The National Revenue Agency has also improved the services provided to the taxpayers (individuals and companies).

In line with other transition countries, Bulgaria also reports a trend towards higher financial autonomy. Tanzi (2005) points out that the uniform move towards fiscal decentralization in transition countries is undoubtedly a political reaction against the powerful central governments of the past: "Once the communist regimes were replaced, the citizens of these countries were anxious to have more 'voice' and more control over decisions that affected their lives" (p. xvii). This trend in Bulgaria is connected to the ability of municipalities to administrate local taxes and to exercise discretion when setting local taxes under the conditions, procedure and within the limits that are specified in the Local Taxes and Fees Act. In a fully decentralized system, there is intensive everyday interaction between taxpayers and local politicians and bureaucrats. This closeness between taxpayers, the tax administration and the local government may induce trust and thus enhance tax morale. Politicians and members of the administration are better informed about the preferences of the local population. Decentralization brings the government closer to the people. Many economists point out the relevance of giving sub-national governments the taxing power (see, e.g., Bahl, 1999). One of the strengths of a decentralized system is greater transparency regarding tax prices and the public services received. Taxes are comparable to prices in some sense, especially at the local level (Blankart, 2002). The mechanism of fiscally induced migration in federal states provides a strong incentive to provide public services in accordance with taxpayers' preferences. Moreover, federalism and local autonomy is connected to innovation. Federalism serves as a laboratory for policy inventions (Oates, 1999). There is empirical evidence that a higher level of local autonomy is correlated with

higher tax morale and a lower size of the shadow economy (Torgler, Schneider & Schaltegger, 2009).

Taking into account such results, it may make sense to take a closer look at how governance and institutional quality has changed over time. We therefore use the International Country Risk Guide (ICRG) data set that provides yearly values that are measured in a consistent manner over time. The ICRG has a special emphasis on aspects affecting private foreign investment decisions. The rating comprises 22 variables in three subcategories of risk: political, financial, and economic. We will focus on the political risk component (see Figures 1 and 2). The political risk rating provides a standard basis from which to compare political stability by using 12 different measurements that cover both political and social attributes. Five key sub-components that measure governance and institutional quality are: bureaucratic quality³, corruption⁴, democratic accountability⁵, government stability⁶, and law & order⁷. A higher number of points indicates a lower potential risk and therefore higher scores represent a higher institutional and governance quality. We are going explore data between 1985 and 2011. Figures 1 and 2 presents the results of our 10 countries. Figure 1 shows a substantial improvement of governance and institutional quality in the 1990s until 1998 for the countries Bulgaria, Czech Republic, Hungary, Poland and Romania. After that point we observe a decrease without substantial improvements in the first decade of the new century. A similar picture is found for the remaining countries in Figure 2, namely Estonia, Latvia, Lithuania, Slovenia, and Slovakia. The peak point for Latvia and Lithuania, after

³ Institutional strength and quality of the bureaucracy: "High points are given to countries where the bureaucracy has the strength and expertise to govern without drastic changes in policy or interruptions in government services. In these low-risk countries, the bureaucracy tends to be somewhat autonomous from political pressure and to have an established mechanism for recruitment and training. Countries that lack the cushioning effect of a strong bureaucracy receive low points".

⁴ Assessment of corruption within the political system. Lower scores indicate "high government officials are likely to demand special payments" and that "illegal payments are generally expected throughout lower levels of government" in the form of "bribes connected with import and export licenses, exchange controls, tax assessment, police protection, or loans. "

⁵ Measures how responsive the government is with its people.

⁶ Assessment of the government's ability to carry out its declared program(s), and its ability to stay in office. (subcomponents: government unity, legislative strength and popular support).

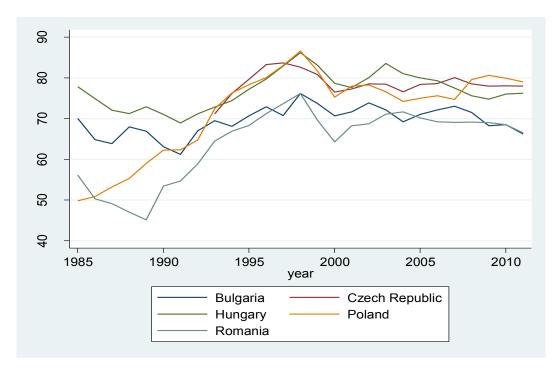
substantial improvements beforehand, is in 2003. For Latvia, Lithuania, and Estonia we observe a relatively significant decrease in political stability in the second half of the time period 2006-2011. Such results are somehow consistent with our tax morale results reported in *Table 1*. Accession to the European Union may have promoted reforms, but we do not observe a sustainable tax morale and political development. As mentioned in the introduction, it is challenging to explore the effect of the EU on these 10 countries' policies and governance due to causality problems. Possible alternative explanations that cannot be excluded (e.g., effects of globalization, new public management, new information and communication technologies or a general European integration process). *Figure 3* represents this issue in Eastern European countries that are not part of the European Union. In general we observe that governance quality is lower in these countries compared to our 10 Eastern European countries. Interestingly, the peak appears in the period 2003/2004 which is later than for the European members reported in *Figure 1*. However, such a development is consistent with observations on the Baltic countries (see *Figure 2*). After 2008 we witness the tendency towards decay in political stability.

Figure 1:

Governance Quality of the First Group of Countries Between 1985 and 2011

⁷ The 'law' sub-component measures the strength and impartiality of the legal system, while the 'order' sub-component is an assessment of popular observance of the law.

22



Notes: Yearly averages from the ICRG data set. Average of the first two months for the year 2011.

Figure 2:
Governance Quality of the First Group of Countries Between 1993 and 2011

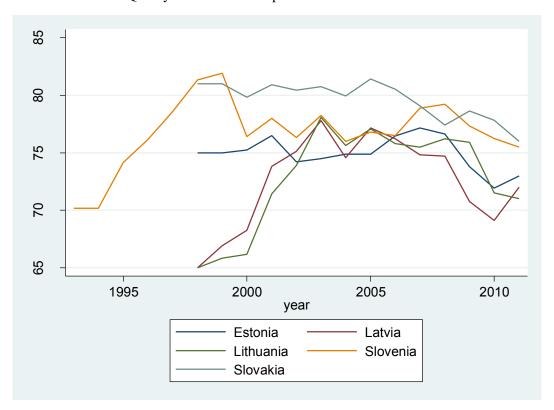
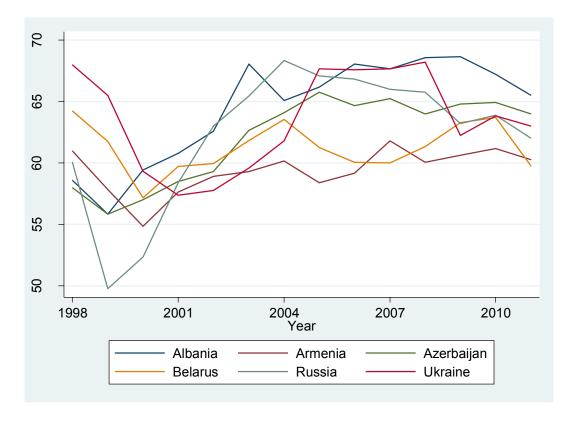


Figure 3:
Governance Quality of the First Group of Countries Between 1998 and 2011

23



What are the driving forces that shape tax morale in these 10 countries? Trust in the government and the legal system could be key factors. Governments play a leading role in the transition process; institutional changes are the source of considerable uncertainty. Institutions reduce uncertainty by designing the structure for interaction, achieving greater certainty in the political process. Ensley and Munger (2001) argue that "if rules are not formalized, the players may spend too much time arguing over the rules and less time competing in productive activities" (p. 116). And Kasper and Streit (1999) stress: "Strong institutional controls and accountability are required to control deeply rooted agent opportunism. The rule of law has to be imposed on all government agents" (p. 432). Thus, stable and easily navigable institutions help create reliability. Thus, institutional conditions or governance in general seems to be a driving force for such results. Success seems to depend on designing tax systems, tax administrations, or other government structures and institutions (especially improved public service delivery) that would have helped to maintain tax morale. Violations of law and order and therefore a lack of "rule of law" does not help to achieve a sustainable institutional transformation process or improved tax morale. Corruption reduces citizens' trust

in government authority. For example, Friedman, et al. (2000) show empirically that countries with more corruption have a higher proportion of activities in the unofficial economy. The private sector depends on effective legal regulation. Torgler and Schneider (2007, 2009) show that that improving governance and institutional quality and tax morale helps lessen a possible incentive to go underground. The results are quite robust when using more than 25 proxies of governance and institutional quality, testing for endogeneity and running a broad variety of specifications. Hanousek and Palda (2004) work with survey data from the Czech and Slovak Republics, Hungary, and Poland, and find strong support for the hypothesis that there is a positive correlation between tax evasion and the perceived government services based on the taxes paid. A government based on a well-functioning democracy produces more trust than a dictatorship. A lack of public trust undermines state revenues and thus the government's ability to perform its function. Trust in public officials might tend to increase taxpayers' positive attitudes and commitment to the tax system and tax-payment, which finally exerts a positive influence upon tax compliance. Institutions that taxpayers perceive as fair and efficient might have a positive effect on tax morale, conditional on whether society views taxes as a price paid for government's positive actions. Thus, if taxpayers trust their public officials, they are more willing to be honest. If the government acts trustworthily, taxpayers might be more willing to comply with the taxes. Similar to the tax administration, the relationship between taxpayers and government can be seen as a relational contract or psychological contract, which involves strong emotional ties and loyalties. Such a psychological tax contract can be maintained by positive actions, based on trust. If the government tries to generate trust with well-functioning institutions, co-operation can be initiated or increased. Furthermore, when taxpayers are satisfied with the way they are treated, the co-operation is enhanced. If the outcome received from the government is judged to be fair in relation to the taxes paid, no distress arises. The studies of 1990s show that trust in the state influences tax morale.

Raiser, et al. (2001) analyzed transition countries and found that social capital in the form of civic participation and trust in public institutions has a significant impact on growth. Weakness of the legal system is a major problem in the transition process. Levin and Satorov (2000) stress that after the collapse of socialism, "judicial weakness left a legal vacuum that remains unfilled" (p. 120). Thus, as the transition process provides the opportunity to build new trustworthy institutions, increased attention should be given to developing credibility so that taxpayers feel comfortable with paying taxes. Our results indicate that tax administration and government are forced to drastically change their structures and their relationship with taxpayers.

The post-accession trajectory of several Eastern European countries cannot be fully understood without focusing on the problem of corruption (Andreev, 2009). Citing a Financial Times report from 2008, Andreev (2009, p. 378) concludes that the fight against corruption "is the key to everything that is going on now in Romania". Similarly, Noutcheva and Bechev (2008) argue that in Romania and Bulgaria corruption grew exponentially over time which led to the period 2000-2005 where Romania focused on the formation of institutions dealing with the prevention and prosecution of corruption. Bulgaria, on the other hand, concentrated on improving the legislation. However, Noutcheva and Bechev (2008) point out: All this does not necessarily mean that the EU can claim success. It is doubtful whether the EU-driven measures have been effective, especially in the short term. Even in Bulgaria where public perceptions of the presence of administrative corruption improved, the record is mixed (p. 138).

Corrupt bureaucracy will not award the services to the most efficient producers, but rather to the producer who offers the largest bribes. Thus, corruption reduces the efficiency of allocation and produces delays in transactions when additional payments are sought (see, e.g., Rose-Ackerman, 1997; Jain, 2001). In many former centrally planned economies, the government and the administration still maintain strong discretionary power over the

allocation of resources, implicitly enhancing corruption. Tanzi (2002, p. 28) mentions several situations in which corruption is likely to be a problem for the tax administration:

- "-the laws are difficult to understand and can be interpreted differently so that taxpayers need assistance in complying with them;
- -the payment of taxes requires frequent contacts between taxpayers and tax administrators;
- -the wages of the tax administrators are low;
- -acts of corruption on the part of the tax administrators are ignored, not easily discovered, or when discovered penalized only mildly;
- -the administrative procedures (e.g., the criteria for the selection of taxpayers for audits) lack transparency and are not closely monitored within the tax or customs administrations;
- -tax administrators have discretion over important decisions, such as those related to the provision of tax incentives, determination of tax liabilities, selection of audits, litigations, and so on"

Torgler (2007b) reports a strong negative correlation between corruption and tax morale focusing on transition countries (r=-0.610). This result is consistent with Uslaner (2007) in showing that high levels of perceived corruption are associated with high levels of tax evasion. In countries where corruption is systemic and the government budget lacks transparency it cannot be assumed that the obligation of paying taxes is an accepted social norm. Corruption generally undermines the tax morale of the citizens, causing them to become frustrated. Taxpayers will feel cheated if they believe that corruption is widespread and their tax burden is not spent well.

Based on the previous results obtained in *Table 1* and *Figures 1* and 2 it may make sense to use a multivariate analysis and to look at the factors that shape tax morale in 2008 in these 10 countries. We are particularly interested in whether perceived government quality, trust in the government or the legal system influence in tax morale.

Trust in the legal system has been measured as follows (trust in justice system): "Could you tell me how much confidence you have in the justice system: is it a great deal of

confidence, quite a lot of confidence, not very much confidence or none at all?" (4= a great deal to 1=none at all).

The effects of trust on tax morale can be analyzed on two different levels: i) at the *constitutional level* and ii) at the *current politico-economic level*. With this question we focus mostly on the constitutional level, which is how the relationship between the state and its citizens is established. On the other hand, trust in government which is more influenced by the current politico-economic level has been developed based on the following question (trust in government): "Could you tell me how much confidence you have in the government: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all?" (4= a great deal to 1=none at all.)

Furthermore, in some estimation we are also going to analyze the satisfaction with system for governing (governance quality): "People have different views about the system for governing this country. Here is a scale for rating how well things are going: 1 means very bad; 10 means very good". In addition, we are going to check whether trust in the European Union influences tax morale (trust in European Union): "Could you tell me how much confidence you have in the European Union: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all?" (4= a great deal to 1=none at all.)

Tables 2 and 3 present the results. We have used a *weighted* ordered probit estimation to correct the samples and thus to get a reflection of the national distribution. The ordered probit models are relevant in such an analysis insofar as they help analyze the ranking information of the scaled dependent variable tax morale. However, as in the ordered probit estimation, the equation has a nonlinear form, only the sign of the coefficient can be directly interpreted and not its size. Calculating the marginal effects is therefore a method to find the quantitative effect of a variable on tax morale. In *Tables 2* and 3 we present only the marginal effect for the highest value "tax evasion is never justified".

In the first specification we only report country dummies using Hungary as the reference group. We can see that all other countries have significantly lower tax morale than Hungary. In the second specification we add control variables, such as age, gender (female dummy), education⁸, political interest (discuss politics⁹ and follow politics¹⁰), marital status (married), risk preferences (risk averse¹¹ dummy), religiosity (church attendance¹²), and employment status (employed/self-employed dummy). Most of these factors are commonly used in the tax morale literature (see Torgler, 2007a). Regarding the control variables, older people and women exhibit higher tax morale. Education and following news affect tax morale positively; but political interest measured through the intensity of discussing political matters with friends affects tax morale negatively. Controlling for general interest with the variable follow politics, discussion among friends may be more frequently observable if individuals are dissatisfied which may explain the negative coefficient. Married persons have the highest tax morale. On the other hand, employed/self-employed persons have lower tax morale, while church attendance is correlated with higher tax morale which is consistent with the tax morale literature (Torgler, 2007c). In sum, the results indicate the relevance of including a broad set of control variables.

Next we include the first two trust variables, namely trust in government and trust in justice system. In *Table 4* we then explore trust in the European Union and governance quality. All four factors are statistically significant with a positive sign; however, the coefficient for trust in European Union is only statistically significant at the 10% level. The

⁸ At what age did you complete your full time education, either at school or at an institution of higher education? Please exclude apprenticeships.

⁹ Question: When you get together with your friends, would you say you discuss political matters frequently, occasionally or never? (3=frequently, 2=occasionally, 1=never).

¹⁰ How often do you follow politics in the news on television or on the radio or in the daily papers?

^{(5 –} every day, 4 – several times a week, 3 – once or twice a week, 2 – less often, 1 – never)

Here are some aspects of a job that people say are important. Please look at them and tell me which ones you personally think are important in a job? 18 items, one was: Good job security (1=mentioned, 0=not mentioned).

¹² Apart from weddings, funerals and christenings, about how often do you attend religious services these days? (7 – more than once week, 6 – once a week, 5 – once a month, 4 – only on specific holy days, 3 – once a year, 2 – less often, 1 – never, practically never.

quantitative effects are quite similar (around 1.5 percentage points for a unit increase in a four-point scale (three trust variables) and 0.7 percentage points for unit increase in the tenpoint scale variable governance quality). These results demonstrate the relevance of institutions that enhance governance quality. Such institutions have beneficial effects on social capital and the political outcome in these Eastern European countries.

Table 2: Determinants of Tax Morale in 10 Eastern European Countries

Order probit	Coefficient	z-statistic	Marginal effect	Coefficient	z-statistic	Marginal effect	Coefficient	z-statistic	Marginal effect	Coefficient	z-statistic	Marginal effect
		(1)	effect		(2)	effect		(3)	effect		(4)	effect
Independent variables		(1)			(2)			(5)			(.)	
Demographic factors												
AGE				0.010***	13.61	0.004	0.010***	13.30	0.004	0.01***	13.18	0.004
FEMALE				0.192***	8.54	0.076	0.191***	8.35	0.076	0.184***	8.01	0.073
EDUCATION				0.007***	2.75	0.003	0.006***	2.38	0.002	0.007***	2.66	0.003
Political concern/interest												
DISCUSS POLITICS				-0.087***	-4.42	-0.035	-0.087***	-4.32	-0.034	-0.078***	-3.87	-0.031
FOLLOW POLITICS				0.080***	8.22	0.032	0.082***	8.24	0.033	0.082***	8.22	0.033
TOLLOW TOLLTIES				0.000	0.22	0.032	0.002	0.24	0.033	0.002	0.22	0.033
Maritial status												
MARRIED				0.076***	3.35	0.030	0.079***	3.40	0.031	0.073***	3.13	0.029
Risk preference												
RISK AVERSE				0.043*	1.70	0.017	0.039	1.51	0.015	0.04	1.56	0.016
Religiosity												
CHURCH ATTENDANCE				0.050***	7.51	0.020	0.050***	7.40	0.020	0.047***	6.91	0.019
Employment status												
EMPLOYED/				-0.069***	-2.87	-0.027	-0.076***	-3.10	-0.030	-0.065***	-2.64	-0.026
SELF-EMPLOYED												
Trust												
TRUST IN GOVERNMENT							0.034***	2.35	0.014			
TRUST IN JUSTICE										0.045***	3.19	0.018
SYSTEM												
Country												
HUNGARY	Ref. group			Ref. group			Ref. group			Ref. group		
BULGARIA	-0.289***	-6.01	-0.115	-0.346***	-6.72	-0.137	-0.331***	-6.34	-0.131	-0.324***	-6.12	-0.129
CZECH REPUBLIC	-0.758***	-17.03	-0.289	-0.720***	-14.86	-0.276	-0.716***	-14.56	-0.275	-0.727***	-14.88	-0.279
LATVIA	-1.084***	-22.81	-0.390	-1.133***	-22.52	-0.406	-1.122***	-21.99	-0.403	-1.154***	-22.50	-0.411
LITHUANIA	-1.079***	-22.91	-0.388	-1.221***	-24.38	-0.428	-1.211***	-23.58	-0.425	-1.213***	-23.65	-0.425
POLAND	-0.815***	-17.53	-0.307	-0.988***	-18.84	-0.363	-0.975***	-18.37	-0.359	-0.977***	-18.44	-0.359
ROMANIA	-0.887***	-17.77	-0.330	-0.992***	-18.05	-0.364	-0.993***	-17.86	-0.365	-0.983***	-17.66	-0.361
SLOVAK REPUBLIC	-0.778***	-15.51	-0.295	-0.888***	-16.56	-0.333	-0.920***	-16.63	-0.343	-0.895***	-16.42	-0.335
SLOVENIA	-0.416***	-8.71	-0.164	-0.452***	-9.07	-0.178	-0.463***	-9.04	-0.182	-0.464***	-9.21	-0.183
Number of observations	14,832			13,315			12,855			12,734		
Pro>chi2	0.000			0.000			0.000			0.000		
Pseudo R2	0.000			0.000			0.000			0.056		

Notes: Coefficients in bold, z-statistics in parentheses, and marginal effects in italics. The symbols *, **, *** represent statistical significance at the 10%, 5% and 1% levels, respectively. As can been seen, HUNGARY is the reference group for the countries. We report the marginal effects of the highest tax morale score (3).

Table 3: Determinants of Tax Morale in 10 Eastern European Countries

Order probit	Coefficient	z-statistic	Marginal effect	Coefficient	z-statistic	Marginal effect	Coefficient	z-statistic	Marginal effect
		(5)			(6)			(7)	
Independent variables									
Demographic factors									
AGE	0.009***	12.64	0.004	0.010***	13.66	0.004	0.010***	12.26	0.004
FEMALE	0.188***	8.05	0.074	0.185***	8.09	0.073	0.176***	7.35	0.070
EDUCATION	0.006**	2.20	0.002	0.006***	2.48	0.002	0.006**	2.17	0.002
Political concern/interest									
DISCUSS POLITICS	-0.087***	-4.23	-0.034	-0.090***	-4.50	-0.036	-0.085***	-4.03	-0.034
FOLLOW POLITICS	0.083***	8.15	0.033	0.082***	8.17	0.032	0.085***	8.03	0.034
Maitial status									
MARRIED	0.081***	3.42	0.032	0.074***	3.19	0.029	0.074***	3.05	0.029
Risk preference									
RISK AVERSE	0.036	1.39	0.014	0.048*	1.90	0.019	0.040	1.49	0.016
Religiosity									
CHURCH ATTENDANCE	0.050***	7.17	0.02	0.048***	7.08	0.019	0.048***	6.69	0.019
Employment status									
EMPLOYED/ SELF-EMPLOYED	-0.079***	-3.18	-0.031	-0.068***	-2.79	-0.027	-0.075***	-2.92	-0.030
Trust and Perceived Government Quality									
TRUST IN JUSTICE SYSTEM							0.028*	1.76	0.011
TRUST IN THE EUROPEAN UNION	0.029*	1.95	0.012				0.015	0.88	0.006
GOVERNANCE QUALITY				0.017***	2.99	0.007	0.015**	2.31	0.006
Country									
HUNGARY	Ref. group			Ref. group			Ref. group		
BULGARIA	-0.357***	-6.72	-0.141	-0.345***	-6.62	-0.137	-0.333***	-6.06	-0.132
CZECH REPUBLIC	-0.717***	-14.47	-0.275	-0.747***	-15.01	-0.286	-0.738***	-14.47	-0.282
LATVIA	-1.126***	-21.82	-0.403	-1.152***	-22.34	-0.411	-1.168***	-21.86	-0.414
LITHUANIA	-1.235***	-23.55	-0.429	-1.221***	-23.92	-0.428	-1.248***	-23.01	-0.430
POLAND	-0.953***	-17.76	-0.352	-0.994***	-18.59	-0.365	-0.962***	-17.49	-0.354
ROMANIA	-0.996***	-17.69	-0.365	-1.034***	-18.22	-0.376	-1.014***	-17.36	-0.369
SLOVAK REPUBLIC	-0.922***	-16.55	-0.343	-0.920***	-16.37	-0.343	-0.951***	-16.11	-0.351
SLOVENIA	-0.451***	-8.84	-0.178	-0.473***	-9.30	-0.186	-0.468***	-8.99	-0.184
Number of observations	12,299			12,808			11,605		
Pro>chi2	0.000			0.000			0.000		
Pseudo R2	0.056			0.057			0.058		

Notes: Coefficients in bold, z-statistics in parentheses, and marginal effects in italics. The symbols *, **, *** represent statistical significance at the 10%, 5% and 1% levels, respectively. As can been seen, HUNGARY is the reference group for the countries. We report the marginal effects of the highest tax morale score (3).

IV. CONCLUSIONS

Campos and Coricelli (2002) report that during the first years of the transition process output fell, labor moved away and the physical capital stock shrank. The rapid collapse of institutional structures produced a vacuum in many countries, followed by large social costs, especially in terms of worsening income inequality and poverty rates. In shifting from a centrally controlled to a market economy, the fiscal system had to be reformed (e.g., income taxation). As the population was largely unaware of taxes or had no perception of the tax burden during planned socialism, it follows that reforms might have repercussions on tax morale and tax compliance. Several authors had pointed out that the EU worked as a magnet and a catalyst for rapid tax and institutional reforms for Eastern European member countries. The European Union "is widely credited with having brought about an alignment of the ten post-communist countries' systems of governance economies and legal structures with the West European member states and the EU's acquis communautaire" (Epstein and Sedelmeier 2008, p. 796). However, Mungiu-Pippidi (2007) stresses: "At the end of day, we seem to see confirmed once again the liberal principle that incentives, as opposed to planning, can deliver the goods. The incentive of EU accession led countries to the remarkable scores that they achieved in the early 1990s, when great progress was made in just a few years. The EU's coaching and assistance (through the Commission and twinning programs with member countries during negotiations) did not deliver much. Enlargement is nearly miraculous as an incentive, but quite sluggish and ineffective as an assistance process" (p. 15).

The conditionality hypothesis suggest that after the accession, the membership reward is no longer conditional for the EU's new member states which leads to behavioral and attitudinal changes: "As the incentive structure for the new members changes, post-accession compliance with costly pre-accession demands of international institutions should deteriorate. After all, if it had only been the external incentive of membership that drove

compliance, then – having won the ultimate reward – why would the newest EU members not be tempted to roll back reforms that had been the most costly to implement?" (Epstein and Sedelmeier, 2008; p. 797). Similarly, Mungiu-Pippidi (2007) points out: "As for the day after accession, when conditionality has faded, the influence of the EU vanishes like a short-term anesthetic. The political problems in these countries, especially the political elite's hectic behavior and the voters' distrust of parties, are completely unrelated to EU accession. They were there to start with, though they were hidden or pushed aside because of the collective concentration on reaching the accession target. Political parties needed to behave during accession in order to reach this highly popular objective, but once freed from these constraints, they returned to their usual ways" (p. 16). Our results agree with this hypothesis, and indicate that the level of tax morale has not been sustainable. In 7 out of the 10 Eastern European countries that joined the EU in 2004 or 2007 there was significant decrease in tax morale between 1999 and 2008. Győrffy (2009) discusses the persistent lack of government's trustworthiness: "Unrealistic expectations of the new system can similarly contribute to the general disillusionment. Transformation was originally perceived as a way to close the gap in living standards with the advanced West. As this did not materialize, disappointment was coded into the system. In spite of the considerable increase in living standards as measured by the availability of various consumer goods (...), nostalgia for the previous regime has remained widespread" (p. 154).

There is still a need to improve not only governmental quality, but also tax administrations, or government structures in which taxpayers place their trust. Poorer governance outcomes can facilitate corruption. Low government legitimacy leads to higher incentives to try to avoid taxes (Rose-Ackerman, 2004). Our empirical findings indicate that increasing individuals' trust in the government, the justice system and the governance quality has a significant positive influence on tax morale. Thus, for these 10 European Union members, further opportunities to build new trustworthy institutions should be evaluated and

attention should be given to developing credibility so that taxpayers feel comfortable with paying taxes. Our results indicate that tax administrations and governments are forced to drastically change their structures and their relationship with taxpayers. It seems that transition countries have to work on that goal, as new institutional conditions are not created in a few years. The rapid increase in governance quality before joining the European Union is followed by governance quality stagnation. The local role of the state is a key determinant in the development of tax morale. Thus, more reforms are needed concerning the political institutions and the quality of the tax administration. More direct democratic participation might be a key instrument for increasing tax morale. It raises trust and honesty, improves social outcomes (Frey, 2002) and reduces corruption (Levin & Satarov, 2000). Institutional arrangements which increase tax morale are necessary to stabilize individuals' tax compliance behavior. If the taxpayers are not actively integrated in the political process, tax morale might decrease. A decrease of tax morale can initiate a negative spiral. The more a taxpayer believes that others have low tax morale, the lower his/her moral costs will be to behave dishonestly (Frey & Torgler, 2007). Thus, tax morale erodes. In sum, the analysis of tax morale development over time indicates that the EU enlargement cannot be seen as the ticket to sustainable tax morale. Local activities at the country level exert a significant influence over tax morale, and therefore one hopes that in the future efficient rules of the game also emerge spontaneously within the countries.

REFERENCES

- Alm, J. and J. Martinez-Vazquez (2003). Institutions, Paradigms, and Tax Evasion in Developing and Transition Countries, in: J. Martinez-Vazquez and J. Alm (eds.), *Public Finance in Developing and Transitional Countries Essays in Honor of Richard Bird*. Cheltenham, UK: Edward Elgar: 146-178
- Andreev, S. A. (2009). The Unbearable Lightness of Membership: Bulgaria and Romania after the 2007 EU Accession, *Communist and Post-Communist Studies*. 42: 375-393.
- Bahl, R. (1999). Implementation Rules For Fiscal Decentralization. Working Paper, International Studies Program, School of Policy Studies. Atlanta: Georgia State University.
- Baldwin, R. E. (1995). The Eastern Enlargement of the European Union, *European Economic Review*. 39: 474-481.
- Bernardi, L., M. W. S. Chandler, and L. Gandullia (2005). *Tax Systems and Tax Reforms in New EU Members*. London: Routledge.
- Bird, R., J. Martinez-Vazquez and B. Torgler (2006). Societal Institutions and Tax Effort in Developing Countries, in: J. Alm, J. Martinez-Vazquez and M. Rider (eds.), *The Challenges of Tax Reform in the Global Economy*. New York: Springer, pp. 283-338.
- Bird, R. M., J. Martinez-Vazquez, and B. Torgler (2008). Tax Effort in Developing Countries and High Income Countries: The Impact of Corruption, Voice and Accountability, *Economic Analysis & Policy*. 38: 55-71.
- Blankart, C.B. (2002). Steuern als Preise, *Schweizerische Zeitschrift für Volkswirtschaft und Statistik*. 138: 19-38.
- Bogetić, Ž (1995). Bulgaria in Transition: An Overview, in: Ž. Bogetić, and A. L. Hillman (eds.), *Financing Government in the Transition: Bulgaria.* Washington: The World Bank: 9-29.
- Bogetić, Ž. and F. M. A. Hassan (1997). Personal Income Tax Reform and Revenue Potential in Transition Economies: Bulgaria, *Journal for Institutional Innovation, Development and Transition*. 1: 24-36.
- Campos N. F. and F. Coricelli (2002). Growth in Transition: What We Know, What We Don't, and What We Should, *Journal of Economic Literature*. XL: 793-836.
- Casanegra de Jantscher, M., C. Silvani, C. L. Vehorn (1992). Modernizing Tax Administration, in: V. Tanzi (eds.), *Fiscal Policies in Economies in Transition*. Washington: International Monetary Fund: 120-141.
- Easter, G. M. (2007). Taxation and State Re-Formulation in Russia: Policy, Capacity, Compliance, in:N. Hayoz and S. Hug (eds.) (2007), *Tax Evasion, Trust, and State Capacities*. How Good IsTax Morale in Central and Eastern Europe? Bern: Peter Lang: 227: 267.

- Ensley, M. and M. C. Munger (2001). Ideological Competition and Institutions: Why "Cultural" Explanations of Development Patterns Are Not Nonsense, in: Mudambi, Navarra and Sobbrio (eds.), *Rules and Reason*. Perspectives on Constitutional Political Economy. Cambridge: Cambridge University Press.
- Epstein, Rachel A. and Ulrich Sedelmeier (2008). Beyond Conditionality: International Institutions in Postcommunist Europe after Enlargement, *Journal of European Public Policy*. 15: 795-805.
- Falkner, G. and O. Treib (2008). Three Worlds of Compliance of Four? The EU-15 Compared to New Member States, *Journal of Common Market Studies*. 46: 293-313.
- Frey, B. S. and R. Eichenberger (1999). *The New Democratic Federalism for Europe*. Cheltenham, UK: Edward Elgar.
- Frey, B. S. (2002). Direct Democracy for Transition Economies, paper for the Collegium Budapest, Institute for Advanced Study.
- Frey, B. S., (2003a). Direct democracy for transition countries. Institute for Empirical Research in Economics Working Paper Series, No. 165, July, Zurich.
- Frey, B. S. and B. Torgler (2007). Tax Morale and Conditional Cooperation, *Journal of Comparative Economics*, 35: 136-159.
- Friedman, E., S. Johnson, D. Kaufmann, D., and P. Zoido-Lobaton (2000). Dodging the Grabbing Hand: The Determinants of Unofficial Activity in 69 Countries, *Journal of Public Economics*.76: 459-493.
- Gërxhani, K. (2004). Tax Evasion in Transition: Outcome of an Institutional Clash? Testing Feige's Conjecture in Albania, *European Economic Review*. 48: 729-745.
- Gordon, R. H. (1994). Fiscal Policy during the Transition in Eastern Europe, in. O. J. Blanchard, K. A. Froot and J. D. Sachs (eds.), *The Transition in Eastern Europe*. Chicago/London: The University of Chicago Press: 37-70.
- Győrffy, D. (2009). Structural Change Without Trust: Reform Cycles in Hungary and Slovakia, *Acta Oeconomica*. 59: 147-177.
- Hanousek, J. and F. Palda (2004). Quality of Government Services and the Civic Duty to Pay Taxes in the Czech and Slovak Republics, and other Transition Countries, *Kyklos*. 2: 237-252.
- Hanousek, J. and F. Palda (2008). Tax Evasion Dynamics in the Czech Republic: First Evidence of an Evasional Kuznets Curve, CERGE-EI Working Paper Series 360, Prague.
- Haughton, T. (2007). When Does the EU Make a Difference? Conditionality and the Accession Process in Central and Eastern Europe, *Political Studies Review*. 5: 233-246.
- Haverland, M. (2006). Does the EU Cause Domestic Developments? Improving Case Selection in Europeanisation Research, *West European Politics*. 29: 134-146.
- Hayoz, N. and S. Hug (eds.) (2007). *Tax Evasion, Trust, and State Capacities*. How Good Is Tax Morale in Central and Eastern Europe? Bern: Peter Lang.

- Jackson, B. R., and V. C. Milliron (1986). Tax compliance research: Findings, problems, and prospects. *Journal of Accounting Literature*, *5*, 125-166.
- Jain, A. (2001). Corruption: A Review. Journal of Economic Surveys 15: 71-120.
- Kasper, W. and M. E. Streit (1999). *Institutional Economics*. Social Order and Public Policy. Cheltenham, UK: Edward Elgar.
- Kornai, J. (1990). The Affinity Between Ownership Forms and Coordination Mechanism: The Common Experience of Reform in Socialistic Countries, Journal of Economic Perspectives. 4: 131–147.
- Kornai, J. (2000). Ten Years After 'The Road to a Free Economy': The Author's Self-Evaluation, paper prepared for the Annual Bank Conference on Development Economies, Washington, April 18-20
- Levin, M. and G. Satarov (2000). Corruption and Institutions in Russia, *European Journal of Political Economy*. 16: 113-132.
- Lewis, A. (1982). The Psychology of Taxation. Oxford: Martin Robertson.
- Martinez-Vazquez J. (1995). Intergovernmental Fiscal Relations in Bulgaria, in: M. Bird, R. D. Ebel and C. I. Wallich (eds.), *Decentralization of the Socialist State*. Washington: The World Bank: 183-222.
- Martinez-Vazquez, J. (2001) Mexico: An Evaluation of the Main Features of the Tax System. International Studies Program Working Paper 01-12. Atlanta, Georgia: Andrew Young School of Policy Studies, November.
- Martinez-Vazquez J. and R. M. McNab (1997). Tax Systems in Transition Economies, Working Paper 97-1, Georgia State University, Atlanta.
- Martinez-Vazquez J. and R. M. McNab (2000). The Tax Reform Experiment in Transition Countries, *National Tax Journal.* 53: 273-298.
- Martinez-Vazquez, J. and S. Wallace (1999). The Ups and Downs of Comprehensive Tax Reform in Russia. *Tax Notes International*, Special Reports, December 13, 2261-2273.
- Mitra, P. and N. Stern (2003). Tax System in Transition, World Bank Policy Research Working Paper 2947, January 2003.
- Mungiu-Pippidi, A. (2007). Is East-Central Europe Backsliding? EU Accession Is No End of History, *Journal of Democracy*. 18: 8-146.
- Noutcheva, G. and D. Bechev (2008). The Successful Laggards: Bulgaria and Romania's Accession to the EU, *East European Politics and Societies*. 22: 114-144.
- Oates, W. E. (1999). An essay on fiscal federalism. *Journal of Economic Literature*, 37, 1120–1149.
- Owsiak, S. (2007). Taxes in Post-Communist Countries Old and New Challenges, in: N. Hayoz and S. Hug (eds.) (2007), *Tax Evasion, Trust, and State Capacities*. How Good Is Tax Morale in Central and Eastern Europe? Bern: Peter Lang: 187: 225.

- Palidauskaite, J., A. Pevkur, and I. Reinholde (2010). A Comparative Approach to Civil Service Ethics in Estonia, Latvia and Lithuania, *Journal of Baltic Studies*. 41: 45 71.
- Profeta, P. (2005). The Political Economy of Taxation and Tax Reforms, in: Bernardi, L., M. W. S. Chandler, and L. Gandullia (2005). *Tax Systems and Tax Reforms in New EU Members*. London: Routledge: 60-71.
- Raiser, M., C. Haerpfer, T. Nowotny and C. Wallace (2001). Social Capital in Transition: A First Look at the Evidence, EBRD working paper 61.
- Rose-Ackerman, S. (1997). The Political Economy of Corruption, in. K. A. Elliott (ed.)., *Corruption and the Global Economy*. Washington DC: Institute for International Economics: 31-66.
- Rose-Ackerman, S. (2001). Trust and Honesty in Post-Socialist Societies, KYKLOS. 54: 415-444.
- Rose-Ackerman, S. (2004). Governance and Corruption, in B. Lomborg (ed.), *Global Crises*, *Global Solutions*. Cambridge: Cambridge University Press: 301-344.
- Schimmelfenning, F. And U. Sedelmeier (2004). Governance by Conditionality: EU Rule Transfer to the Candidate Countries of Central and Eastern Europe, *Journal of European Public Policy*. 11: 669-687.
- Stiglitz, J. E. (1999). Whither Reform? Ten Years of the Transition, paper prepared for the Annual Annual Bank Conference on Development Economics, Washington, D.C., April 28-30.
- Tanzi, V. (2002). Corruption Around the World: Causes, Consequences, Scope, and Cures, in: G. T. Abed and S. Gupta (eds.), Governance, Corruption and Economic Performance. Washington: International Monetary Fund: 19-58.
- Tanzi, V. (2005). Foreword. Tax Systems and Tax Reforms in Transition Economies, in: Bernardi, L.,
 M. W. S. Chandler, and L. Gandullia (2005). Tax Systems and Tax Reforms in New EU
 Members. London: Routledge: xv-xix.
- Torgler, B. (2003). Tax Morale in Transition Countries, *Post-Communist Economies*. 15: 357-381.
- Torgler, B. (2007a). *Tax Compliance and Tax Morale: A Theoretical and Empirical Analysis*, Cheltenham, UK: Edward Elgar.
- Torgler, B. (2007b). Tax Morale in Central and Eastern European Countries, in: Nicolas Hayoz and Simon Hug (eds.), *Tax Evasion, Trust and State Capacities*. How Good Is Tax Morale in Central and Eastern Europe? Bern: Peter Lang: 155-186.
- Torgler, Benno and Maria A. Garcia-Valiñas (2007). The Determinants of Individuals' Attitudes Towards Preventing Environmental Damage, *Ecological Economics*. 63: 536-552.
- Torgler, B. and F. Schneider (2007). Shadow Economy, Tax Morale, Governance and Institutional Quality: A Panel Analysis, IZA Discussion Papers 2563, Institute for the Study of Labor (IZA).
- Torgler, B. and F. Schneider (2009). The Impact of Tax Morale and Institutional Quality on the Shadow Economy, *Journal of Economic Psychology*. 30: 228-245.

- Torgler, B., F. Schneider and C. A. Schaltegger (2009). The Impact of a Bottom-Up Approach on Tax Morale and the Shadow Economy, *Public Choice*. 144: 293-321.
- Torgler, B., M. Schaffner, and A. Macintyre (2010). Tax Compliance, Tax Morale, adn Governance Quality, in: Alm, J., J. Martinez-Vazquez, and B. Torgler (eds.) (2010). *Developing Alternative Frameworks for Explaining Tax Compliance*. London: Routledge: 56-73.
- Trasberg, V. (2005). Tax Administration and the Shadow Economy, in: Bernardi, L., M. W. S. Chandler, and L. Gandullia (2005). *Tax Systems and Tax Reforms in New EU Members*. London: Routledge: 31-59.
- Uslaner, E. (2007). Tax Evasion, Trust, and the Strong Arm of the Law, in: N. Hayoz and S. Hug (eds.) (2007), *Tax Evasion, Trust, and State Capacities*. How Good Is Tax Morale in Central and Eastern Europe? Bern: Peter Lang: 187: 225.

APPENDIX

Table A1: Tax Policies in Bulgaria

The National Revenue Agency has improved the services provided to the citizens and companies, strengthened the control and the compulsory collection mechanisms as a tool for protecting revenues from violations and fraud by:

- improving the maintenance, integration and unification of the electronic services provided to the National Revenue Agency clients, as well as developing new electronic services;
- -developing new and improving the existing methodologies for revisions and inspections in specific areas (by types of taxes, branches, groups of liable persons) and enhancing the quality of the selection made (through an automated annual risk assessment of all liable persons);
- -using the information from the VAT information exchange system and other information received through the administrative co-operation with EU Member States for making selections in the course of exercising tax control in connection with intra-community supplies and acquisitions;
- -introducing electronic revisions and strengthening the role of current control;
- -improving the interaction and co-ordination of activities between the revenue authorities in the National Revenue Agency and the law enforcement authorities the Interior Ministry and the Prosecutors Office, for the purpose of speeding up the trials against the perpetrators of tax and social security fraud.

A restructuring of the National Revenue Agency was already launched. It consists of the following:

- -In 5 of the currently existing territorial directorates the functions of control and collection will be focused. These will be the new Regional Directorates Sofia, Plovdiv, Varna, Burgas and Veliko Turnovo. In addition a "Large Taxpayers and Insurers" Directorate with national coverage will be elaborated. The remaining 23 current territorial directorates will retain the functions of providing services to clients.
- Within the five large territorial directorates special units will be set up for the so called "medium-size taxpayers and insurers" companies which form a large share of the revenues in the region. Part of the reform constitutes also the updating of the criteria for large taxpayers and insurers. As a result the large and medium-size taxpayers in Bulgaria about 6 500 companies, will provide about 70% of the revenue administered by the National Revenue Agency.
- At the same time a total of 638 people (8%) of the staff at the tax authority will be laid off in all territorial directorates of the National Revenue Agency, including 90 positions in the Central Division in Sofia.

The well targeted reforms will bring significant benefit to taxpayers, business and state:

- -Increase in the collection rate as a result of the stronger control. Updating the criteria for medium-size taxpayers and insurers and large taxpayers and insurers for the purpose of increasing their share in the overall budget revenue.
- -Increase in the efficiency of the tax and insurance control, since in the new regional

directorates the selection will cover the persons and entities in the whole region, which in turn will lead to selecting only the cases of regional significance.

-Flexibility in the allocation of the resources available among the offices of one regional directorate of the National Revenue Agency, and increase in the functional specialisation of the expert staff both in the general and in the specialised administration.

For the clients:

- faster recovery of VAT as a result of the optimised process of selection;
- the possibility for filling documents and getting services in all currently existing offices of the National Revenue Agency is kept;
- services of higher quality for a larger number of large taxpayers and insurers and mediumsize taxpayers and insurers;
- improved implementation of the uniform standards in the control activity, the provision of services to clients and receivables collection.

Notes: Document of the Convergence Program 2009-2012, pp. 56-57.