TAX MORALE IN GERMANY IN THE 90S

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INTRODUCTION

Tax morale is frequently imagined to be the equivalent of tax compliance and thus simply an opposite category to tax evasion and tax fraud. According to the seminal paper by Allingham and Sandmo (1972), tax morale is rather one of the factors explaining tax compliance. In addition to deterrence, as the main cost-related factor, and income and marginal tax rates, as the main determinants of benefits from tax evasion, tax morale is interpreted as comprising different social norms that shape individual behavior. These social norms may originate from earlier phases of taxpayers’ socialization and could thus be deemed to be exogenous from an economic point of view. Recent research indeed reveals that tax morale positively depends on religiosity which is evidence for the socialization view of tax morale (Torgler, 2006). Tax morale may, however, also be endogenous to the economic factors affecting tax compliance, that is, deterrence and tax rates (Torgler, 2005), or even to the behavior of fiscal authorities in general, for example, the provision of public goods and services, participation possibilities for citizens in political decisions or the treatment of taxpayers by tax authorities (Feld and Frey, 2002, 2007; Feld and Tyran, 2002; Frey, 1997; Frey and Feld, 2002).

In this paper, the development of tax morale in Germany is explained by relying on a comparison between inhabitants of East and West Germany after its post-reunification period, using three World Values Survey/European Values Survey waves between 1990 and 1999. German reunification constitutes a natural experiment and is thus particularly interesting for the analysis of tax morale. Many factors can be controlled because they are similar between the two parts of Germany, such as, a common language, similar education systems and a shared cultural and political history prior to the separation after World War II. As a consequence, an East-West comparison has a methodological advantage compared to cross-country studies. Our findings indicate higher tax morale in East than in West Germany. However, in only nine years after reunification, tax morale values strongly converged, especially due to a strong reduction in the level of tax morale in the East. The initial differences in tax morale between both German regions may be either explained by taxpayers’ former (tax) system experiences (e.g., deterrence strategies in the GDR and the FRG) or by the initial willingness of East German taxpayers to support and participate in the West German welfare state, while West German citizens anticipated the high costs of German reunification. The convergence in tax morale between East and West Germany to lower levels than in 1990, despite efforts of the federal government to increase deterrence, indicates however that tax morale is more strongly driven by other factors than deterrence.

DETERRENCE IN GERMANY

Deterrence in West and Reunified Germany

The legal foundation of the prosecution of tax evasion in Germany is the general fiscal code (AO). Below this level of statutory law, administrative instructions and the case law based on the decisions of the Federal Finance Court (which functions as appellate court) are of importance. According to §370 AO, possible punishments for tax evasion range from a fine to a prison sentence up to five years. In serious cases of tax evasion, in combination with the abuse of official authority or with fraud, the possible sentences increase to a minimum of 6 months up to a maximum of 10 years of imprisonment. The fines depend on the amount of taxes evaded, cooperation in the proceedings, and the individual daily net income of the tax evader. Fines range from the equivalent of 6 to 360 times the tax evader’s daily net income. Regional Tax Offices (OFD) developed sentence tables for standard cases of tax evasion. Large regional differences result from the high degree of administrative autonomy of the regional tax offices.

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The main offense within the category of tax misdemeanors could be literally translated as “tax shortening” (§378 AO Leichtfertige Steuerverkürzung). In comparison to tax evasion, tax “shortening” does not result from a deliberate act, but from gross negligence. Gross negligence is presumed if, for example, the taxpayer does not hand in a tax return, does not inform himself about his tax duties, or does not scrutinize the tax statement prepared by his tax advisor. Tax “shortening” can also be an offense by tax advisors or accountants if they do not pay the necessary professional attention. In contrast to the Anglo-American system, the situation in Germany is that tax misdemeanors can only be punished by fines. For “tax shortening,” a fine of up to €50,000 can be imposed. The statutory limitation period for prosecution of tax misdemeanors is five years (§384 AO).

The German general criminal tax code remained relatively unchanged after 1969. Apart from editorial revisions, only three changes seem to be relevant. First, in 1993, taxes and customs duties of the European Union fiscal code became taxes in the sense of the German criminal tax code. Second, in 2001, the maximum fine for evasion of withholding taxes was increased from €5,000 to €25,000. Third, in 2002 the possibility of handing in amended returns was extended to tax evasion committed by accountants or in relation to organized crime (§370a StGB). This change is intended to support whistle-blowing in criminal organizations. A person handing in an amended return can only be sentenced to half of the usual sentence. For the period 1982-2002, the developments in case law due to decisions of the Finance Courts, especially the Federal Finance Court, are listed in Bilsdorfer (2003).

Considering the developments of the overall number of sentences and fines imposed for tax evasion in criminal proceedings in long time-series (Figure 1), that is, the number of cases that were actually prosecuted, the figures show peaks in severe punishment at the beginning of the 1980s as well as in the mid and late 1990s. The changes in the 1990s mainly result from offenses in VAT, customs duties and excise duties (Figure 2), and thus reflect the change in the law in 1993. With regard to the punishment of minor and major offenses, it seems evident that the number of cases with fines for minor tax offences decreased a lot more than the number of those with prison sentences or penalties for major tax offences.

Figures 3 and 4 indicate that these offenses have been more severely punished since the middle of the 1980s. Since the beginning of the 1970s, a steadily increasing trend can be observed for the sum of penalties imposed for tax evasion (Figure 3). For the sum of prison sentences (Figure 5), that

Figure 1: Number of Sentences and Fines in Criminal Proceedings for Tax Evasion (All Tax Types)

Figure 2: Number of Prison Sentences and Fines in Criminal Proceedings for Tax Evasion
(Excluding penalties for VAT, Excise duty and Customs duty violations)


Figure 3: Sum of Penalties Imposed for Tax Evasion
(all Tax Types, and excluding VAT, Customs and Excise Duties)

Figure 4: **Sum of Prison Sentences**  
(all Tax Types, and excluding VAT, Customs Duties and Excise Duties)


Figure 5: **Tax Auditing Personnel in German Democratic Republic (GDR)**  
1966-1988

Source: Report about Tax Audits and Tax Investigation, Ministry of Finance of the GDR, German Federal Archives (DN1 22762, 1-3).
is, in more serious cases of tax evasion, there is a decline that is first observable in the beginning of the 1980s and which became steeper during the end of the 1980s. When offenses in cases of indirect taxation are excluded, the figures show a steady increase. This could of course reflect the fact that the extent of tax evasion and black market activities has increased over time as well. But taking these figures together with those shown in Figures 1 and 2, it becomes clear that the lower number of offenses punished with prison and fines was weighed up by more severe sentences (higher fines and longer imprisonment). This leads us to state a first stylized fact:

**Fact 1: Deterrence has increased in Germany from the mid 1980s until 2001.**

**Deterrence in East Germany (GDR) before Reunification**

German reunification provides a good opportunity to analyze the long-lasting influence of tax system experience and socialization by political culture on taxpayer behavior. A crucial difference between East and West Germany lies in the definition of the tax state. The tax system in the GDR state-directed planned economy played a minor role and served other purposes than in market economies like West Germany (Schulz, 1990; Kruse, 1985). The main part of government revenues, in 1989 about 81 percent, came from “deductions for public households” in nationally owned enterprises and cooperatives. Only 4.4 percent of taxes were paid by individual taxpayers (wage tax, motor vehicle tax, municipal, and inheritance taxes). Additionally, 1.6 percent is collected from private companies (Müssener, 1990). Similar to the direct deductions in nationally owned enterprises (and to wage taxes in West Germany), wage taxes of workers and employees were withheld by the companies. In general, worker’s income tax liabilities were settled by deduction and no further declaration or assessment took place.

In the socialist GDR, institutions of tax administration were structured like the general administration. The fiscal divisions of the municipal councils functioned as local tax offices, the fiscal divisions of district councils (19 incl. Berlin) functioned as panels for taxpayers’ complaints. Tax investigation bureaus were also organized at district level and employed about 2 to 4 tax investigators, altogether about 70 investigators. The whole tax investigation procedure was planned and headed by a division in the Ministry of Finance of the GDR. It is important to note that no finance courts existed, and aside from complaints at the local level and an appeal at the district level, taxpayers could not take legal action against a tax assessment.

Similar to West Germany, the GDR’s criminal tax code distinguished tax offenses in tax crimes and tax misdemeanors. The possible consequence for tax crimes, literally translated, “Shortening of taxes, duties, deductions to public treasury and social security contribution.” In severe cases, imprisonment of two to eight years had to be inflicted. Negligent tax evasion could be punished like a simple tax misdemeanor. Possible punishment for tax misdemeanors in GDR ranged broadly from a rebuke without any further consequence to heavy fines of 10,000 Marks (§§ 21, 22 Ordnungswidrigkeitenverordnung (OWVO) of the GDR). In the GDR’s authoritarian system, enhanced prosecution and investigation possibilities could be found in reality and in the code of law. The proceedings for tax crimes took place before court, and state attorneys were in charge of the investigation and prosecution procedure. They had extended investigation possibilities. Authorities of the Ministry of State Security (Ministerium für Staatssicherheit, abbr. MIS), the Ministry of Interior, and the GDR’s people’s police could assist their investigations (§88 StPO of the GDR). Especially, the surveillance and denunciation system of the MIS could be used according to contemporary officials. Accordingly, overall cases of sentencing for tax evasion remained approximately stable and in comparison to West Germany on a low level. Unfortunately, we could not reveal the level of sentencing in terms of penalty and years of imprisonment.

Overall, these considerations amount to a second stylized fact:

**Fact 2: Deterrence in East Germany before reunification was higher than in West Germany, while opportunities for taxpayers to evade taxes were relatively lower.**

**TAX MORALE IN REUNIFIED GERMANY**

Given these strong differences in deterrence levels and in opportunities to evade taxes, it could be expected that tax compliance significantly dropped
in Eastern Germany after reunification. Could such a development be observed with respect to tax morale as well? To assess the level of tax morale in East and West Germany we use the following question from the World Values Survey (WVS) and Inglehart et al. (2000) throughout the whole paper:

“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”.

The question leads to a ten-scale index of tax morale with the two extreme points “never justified” and “always justified.” The scale has been recoded into a four-point scale (0, 1, 2, 3), with the value 3 standing for “never justifiable.” Due to a lack of variance, 4-10 have been integrated in the value 0.

The development of tax morale in reunified Germany is presented in Figure 7, which displays the mean values for West and East Germany in each year. In the nine years after the reunification, tax morale in East and West Germany converged, until being almost identical in 1999. Hence, the third stylized fact:

**Fact 3:** Tax morale in East Germany, which was initially higher, converged to West German levels between 1990 and 1999.

Given these stylized facts, it is important to find out whether the differences in tax morale between the two parts of Germany and its development after reunification are statistically significant or could be attributed to other influences of tax morale. We explore these questions in turn.

**Wilcoxon Rank-Sum Test (Mann-Whitney)**

As a first step, we test whether our different samples have the same distribution using the Wilcoxon rank-sum test (Mann-Whitney). The results are presented in Table 1. The upper part of Table 1 presents the test results for a comparison between East and West Germany for the whole sample, while the lower part shows the results for comparison for each year within each German region. In an east-west comparison, there are significant differences in tax morale for the years 1990 and 1997, while these differences are not statistically significant for the year 1999. It seems as if tax morale within Germany had converged lending support to the third stylized fact. It is, however, important to note the differences across time for each region. In East Germany, tax morale was significantly lower in the years 1997 and 1999 than in 1990, while it increased significantly between 1997 and 1999. Such a significant increase between 1997 (1990) and 1999 could also be observed for West Germany.
Table 1
Two-Sample Wilcoxon Rank-Sum (Mann-Whitney) Test

| Hypothesis                  | z-value | Prob > |z| |
|-----------------------------|---------|--------|---|
| **East-West Comparison**    |         |        |   |
| $H_0^E$: TM West Germany 90 = TM East Germany 90 | -16.159 | 0.000 |
| $H_0^E$: TM West Germany 97 = TM East Germany 97 | -5.602 | 0.000 |
| $H_0^E$: TM West Germany 99 = TM East Germany 99 | -0.892 | 0.372 |
| **Over Time**               |         |        |   |
| **East Germany**            |         |        |   |
| $H_0^E$: TM East Germany 90 = TM East Germany 97 | 7.914 | 0.000 |
| $H_0^E$: TM East Germany 97 = TM East Germany 99 | 5.199 | 0.000 |
| $H_0^E$: TM East Germany 99 = TM East Germany 99 | -2.576 | 0.010 |
| **West Germany**            |         |        |   |
| $H_0^W$: TM West Germany 90 = TM West Germany 97 | 0.812 | 0.417 |
| $H_0^W$: TM West Germany 90 = TM West Germany 99 | -7.864 | 0.000 |
| $H_0^W$: TM West Germany 97 = TM West Germany 99 | -7.399 | 0.000 |

Figure 7: Tax Morale over Time in Germany (Means)
Multivariate Analysis: Development over Time

In order to test whether these regional differences are robust to the inclusion of other determinants of tax morale, Feld and Torgler (2007) use several multivariate regressions:

1. First, the development of tax morale across time is explained for East and West Germany separately and together.
2. Tax morale is explained in a cross-section analysis for reunified Germany in the single years 1999, 1997, and 1990. The model to test is estimated using weighted ordered probit analysis and is standard in tax morale research (see Torgler, 2007). The tax morale variable obtained from the WVS (EVS) is explained by a vector of demographic variables (age, sex, and education), marital status, employment status, income, religiosity, trust, and the time or regional dummy variables being for particular years (zero otherwise) or particular regions (East or West Germany) in these years.

Figures 4 and 5 shown previously suggest, however, that the time dummies have a particular deterrence connotation. While deterrence slowly increased between 1990 and 1997, the slopes of the deterrence curves became steeper in the following years and declined afterwards. According to the standard model, we should thus observe an increase in tax morale in 1999 compared to the two other years. The regional dummy variables could either be interpreted as capturing cultural differences between East and West Germany, but given path dependencies, they could, however, also reflect the differences in deterrence experiences and exposition to state coercion in the two parts of Germany. It could thus be conjectured that tax morale in East Germany is higher than in West Germany, at least in 1990.

The estimation results for East German tax morale indicate that the dummy variables for East Germany in 1997 and in 1999 are significantly negative. Tax morale in East Germany in these two years is significantly lower than in the year 1990. The estimated marginal effects indicate that the decline of East German tax morale from 1990 to 1997 is slightly more pronounced than that from 1990 to 1999.

The time pattern of tax morale is however rather different in West Germany. While tax morale in 1997 does – ceteris paribus – not differ significantly from that in 1990, tax morale in 1999 is significantly higher. This corresponds to the deterrence efforts of the federal government that have intensified during the late 1990s. When controlling for trust in the legal system, the difference in tax morale between 1990 and 1997, as captured by the respective dummy variables, is significantly positive, and the variable has a highly significant positive effect. This result also corresponds to the slow but steady increase of deterrence between 1990 and 1997.

The results for the whole German sample support the results obtained for each part of Germany. Age, marital status, sex, and education have the expected effects, but they are more pronounced than before. Income and employment status are more or less insignificant. Religiosity and trust in the legal system raise tax morale significantly.

The most interesting effects are observed for the regional and time dummies. The estimation results strongly support the descriptive evidence and the results from the Mann-Whitney test. Tax morale is, on average, significantly lower in West Germany than in East Germany. However, East and West Germany appear to converge in their tax morale levels. The estimated differences between East and West decrease over time as can be seen when focusing on the marginal effects. Such a convergence can, however, only be identified more exactly when we turn to the single cross sections.

Summarizing cross-section results in different years, there is significantly lower tax morale in West Germany as compared to East Germany for the whole sample of individuals and the years 1990, 1997, and 1999. However, East German tax morale converges to the West German one in 1999 such that no significant differences between both countries remain any more. These differences are robust to the inclusion of standard socio-demographic and economic characteristics of the respondents, but also to variables like religiosity, trust in government and the legal system, and perceived tax evasion or corruption that shape social norms and thus tax morale. It turns out that perceived tax evasion has a significantly negative effect on tax morale.

CONCLUSION

In this paper, we have explored the differences in tax morale between East and West Germany and their convergence across time. While tax morale was significantly higher in East Germany than in
West Germany in 1990, both regions did not differ significantly in their tax morale levels in 1999. This result holds whether the descriptive analysis, nonparametric tests or a differentiated multivariate analysis is conducted. Though these regional and time differences appear to be of transitory nature, religiosity and trust in the legal system or in justice of the system are secular determinants of tax morale. This result is also corroborated when the WVS data of 1981 are additionally considered.

We suggest that these differences between both parts of Germany result from the perception of the exchange relationship between the state and its citizens. While East German citizens may have embraced the Western economic model initially and expected to gain from its introduction into East Germany, the West German citizens anticipated the high costs of German reunification (and subsequent) tax increases and capitalized them in lower tax morale. The latter result is suggested by a comparison between West German tax morale in 1981 and 1990. According to these results, it appears that reunification was a real tax morale shock to West Germans.

Although these results cast doubts on the importance of deterrence for the level of tax morale, the increase of tax morale in West Germany during the 1990s suggests that deterrence may at least affect the changes in tax morale. The deterrence policy of the German federal government steadily, but modestly increased between 1990 and 1997, and intensified thereafter. Our results provide some indirect suggestive evidence that this policy has not been totally worthless.

Note

1 See Nerré and Pallas (2005) for a historical overview of the tax systems in East and West Germany.

References


