Gender and public attitudes toward corruption and tax evasion*

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Objectives. In recent years the topics of illegal activities such as corruption or tax evasion have attracted a great deal of attention. However, there is still a lack of substantial empirical evidence about the determinants of compliance. The aim of this paper is to investigate empirically whether women are more willing to be compliant than men focusing on corruption and tax evasion covering a period of almost 20 years. *Method*. Thus, this paper will use data from eight Western European countries from the World Values Survey and the European Values Survey. *Results*. The results reveal higher willingness to comply among women. The results remain robust after including variables that take into account women's opportunities and restrictions and investigating three different time periods. *Conclusions.* Our results are in line with previous studies that found strong gender differences, but are not in line with the equality and role theory that would suggest a decrease of gender differences with greater equality of status or lower opportunities differences between men and women over time.

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Illegal activities are not a new phenomenon. Already 2000 years ago, the book *Arthashastra*, written by Kautilya discussed corruption (see Tanzi, 2002). Corruption is a topic that has attracted important writers such as Dante and Shakespeare and bribery (besides treason) is one of the two explicitly mentioned crimes that could justify the impeachment of a U.S. president (see Noonan, 1984). It is also interesting to note that in Ancient Egypt, the pharaohs searched for ways to reduce corruption of their tax collectors (called *scribes*). The scribes were paid high salaries to reduce the incentives to enrich themselves by cheating taxpayers. Furthermore, scribes working in the field were controlled by a group of special scribes from the head office (see Adams, 1993).

However, still little is known about the causes of illegal activities such as corruption and tax evasion. Interestingly, studies in the area of compliance are highly interdisciplinary. Political scientists, sociologists, economists and social psychologists contributed to this area. In general, studies strongly increased since the early 1990s. The transformation of the socialist economies was one of the main reasons for this surge in interests since institutional weaknesses and illegal activities surfaced as major obstacles to market reforms (Abed and Gupta 2002). Moreover, increased interest and new datasets contributed to a rapidly growing empirical literature (see Treisman, 2000; and Lambsdorff, 1999 for reviews on corruption, Andreoni et al., 1998 for tax compliance) to which we contribute.

This empirical study analyses the World Values Survey (WVS, waves 1 (1981-1984), and 2 (1990-1991)) and the European Values Survey data (EVS, 1999-2000) to shed some light on whether gender differences matter. Compared to previous studies such as Swamy et al. (2001) or Torgler (2007), Torgler and Schneider (2007) we explore more than one compliance variable

covering a period of almost 20 years. In addition, we explore what happens if we add sequentially more variables that measure opportunities and constraints in the specification. If opportunities and constraints are key factors to understand gender differences, we would observe changes in the measured gender effect. In addition, there is not only a lack of empirical evidence in the corruption and tax compliance literature, but we also observe, contrary to the criminology literature, mixed results to what extent gender differences matter. Thus, more evidence is needed to see whether gender differences matter and whether promoting women's employment could be a strategy to improve governance, reducing the level of corruption. The results in our study indicate strong gender differences. The effect is visible in different time periods and across the countries that we are investigating. In addition, the gender effect is not intensively affected by the inclusion of opportunity/constraint variables. The marginal effects remain quite high. Thus, the results support the need to work out a unified theoretical framework to understand gender differences in corruption and tax evasion (see Steffenmeier and Allan, 1996)

Section 2 of the paper gives an overview of the existing literature and has the aim to outline our theoretical approach. The interdisciplinary phenomenon of corruption and tax evasion makes it also interesting to focus on research findings in differences social science areas. Section 3 then presents the empirical findings. Finally, Section 4 finishes with some concluding remarks.

Are Women the Fairer Sex and Can We Observe Changes in Attitudes Over Time?

Theories

Two major theories can be found in the social science literature that try to explain gender differences: *self-control* and *opportunities to commit criminal or reckless acts* (see, e.g.,

Gottfredson and Hirschi, 1990; Zager, 1994). Low self-control reduces the restrictions to behave illegally, failing to consider carefully long-term negative consequences of the behavior. The opportunity argument is close to the concept of traditional economics, suggesting that males and females don't have different motivations. Steffensmeier et al. (1998, p. 405) refers to a "maximalist" versus "minimalist" approach. The first group (maximalist) stresses that gender differences are due to fundamental differences at the cognitive, emotional and behavioral level due to biological, psychological, and experiential realities which lead to different approaches to handle issues and problems. The second group (minimalist) stresses that differences are due to different external constraints and opportunities. The theory would, for example, predict that the gender gap in crime is lower in social settings where female statuses differ less from the men ones (gender equality hypothesis, see Steffenmeier and Allan, 1996). If only self-control was relevant, the gender differences would be constant from offense to offense (Zager, 1994). However, across offenses a variation among men and women is observed. Steffenmeier and Allan (1996) stress that the "gender effect seemed to be fare more stable than variant across race, age, social class, rural-urban comparisons, and in comparisons of less-developed and developed nations" (p. 468). On the other hand, Gottfredson and Hirschi (1990) criticize that crime cannot be largely a result of opportunity variables pointing out that women have similar opportunities to commit assault or homicide, as they spend much of their time in unsupervised activities (e.g., interaction with children) with a larger interaction with other people than men. In addition, women's greater freedom in public sphere may have led to an increase of offenses such as larceny or forgery, but these offenses do not reflect white collar crimes (Steffensmeier and Allan, 1996). Mears et al. (2000), influenced by the sociological theory of Sutherland (1947) who argues that delinquency is learned behavior imitating social groups, find in an empirical study

that men are more likely than women to have delinquent friends and that they appeared to be more strongly influenced by delinquent peers.

In general, Steffenmeier and Allan (1996) criticize that "No satisfactorily unified theoretical framework has yet been developed for explaining female criminality and gender differences in crime" (p. 473). They stress that the traditional gender-neutral theories help to understand gender differences in less serious forms of crime. However, such theories fail to understand the ways in which gender life differences contribute to such gender differences. Thus, to clarify the gendered nature of female and male offending patterns they have elaborated key elements of a gendered approach (see p. 475) combining the aspects of biological factors, organization of gender, context of offending, criminal opportunity and motivation for crime to understand gender differences in crime.

Evidence from Different Social Sciences

Social Psychology and Economics

Social psychological research suggests that women are more compliant and less self-reliant than men (e.g., Tittle, 1980). In the past decade, experimental research findings have shown that gender may influence various behaviors, e.g., charitable giving, bargaining, and household decision making (see Andreoni and Vesterlund, 2001; Eckel and Grossman, 2001). In public good games, the results are not clear. Some have found men to be more cooperative (see Brown-Kruse and Hummels, 1993), others have found that women are more cooperative (Nowell and Tinkler, 1994). Using dictator games, Andreoni and Vesterlund (2001) observed individuals making decisions with different budgets and interestingly found that in expensive giving-

situations, women are more generous than men and when the price of giving decreases, men start to give more than women. There is evidence from the tax compliance literature showing the tendency that men are less compliant and have a lower tax morale, defined as the willingness to pay taxes, than women (for survey studies see, e.g., Vogel, 1974; Aitken and Bonneville, 1980; Tittle, 1980; Torgler and Schneider, 2007; for experiments, Spicer and Becker, 1980; Spicer and Hero, 1985; Baldry, 1987). Evidence about gender differences can also be found in helping behavior (see, e.g., Eagly and Crowley, 1986) or ethical decision making (Ford et al., 1994; Glover et al., 1997 and Reiss and Mitra, 1998).

Less evidence is available in the area of corruption. Efforts to understand corruption and possible gender differences are highly relevant in the politico-economic process. It is a common belief that an increase in women's representation in public organizations may reduce corruption. In 1999, Mexico set up new female uniformed patrols and increased the number of women police officers to reduce corruption (see TI, Press release, March, 2000). A similar policy has been introduced in Lima, Peru (see Swamy et al., 2001). Dollar et al. (2001) is one of the first papers that investigate empirically the relationship between women's government participation in legislatures and the level of perceived corruption. They find that a higher presence of women parliamentarians had a statistically significant negative impact on corruption. Swamy et al. (2001) find gender difference regarding the involvement in bribery in Georgia and find in a macro analysis that a higher share of women's participation leads to a decrease in corruption. However, Sung (2003) report that gender differences lose significance when the effects of constitutional liberalism are controlled for and refers to the important role of the judiciary and the press. Swamy et al. (2001) also observe the tendency that gender affects the justifiability of corruption at the individual level using WVS data for the years 1981-84 and 1990-1993.

However, looking at the included countries separately they only observed a significant gender effect in less 39% of the cases. Mukherjee and Gokcekus (2004) indicate there is an optimal level of women participation in public organizations. In those organizations where less than one third of the employees are women, an increase in the proportion of women leads to a reduction of corruption. However, increasing the percentage of women beyond around 45% reduces the likelihood that corruption is reported and a value over 70% even raises corruption. Finally, Mocan (2004) investigates the determinants of corruption with the International Crime Victim Survey. The study uses the risk of exposure to bribery (having been asked for a bribe by a government official). The results indicate that men are more likely to be asked for a bribe than women.

Criminology Literature

The criminology literature provides one of the best sources to see possible gender differences. We will discuss the crime/deviancy literature that covers all the crime and delinquency together. Although corruption and tax evasion are not classic "white collar" crimes, they have nevertheless more in common with white collar crimes than with street crimes. Thus, it will be interesting to see whether results obtained in the criminology literature help to understand individuals' attitudes towards corruption and tax evasion. The correlation between gender and crime or delinquent behavior has been adequately investigated (see, e.g., Steffensmeier et al., 1989; Steffensmeier and Streifel, 1991; Steffensmeier and Haynie, 2000).

The theories on constraints and opportunities such as the equality or role theory would suggest that with greater equality of status between men and women there would be greater equality in their crime rates, as the opportunities to behave illegally increase for women

(Gottfredson and Hirschi, 1990). If this is the case, we would be able to observe a cohort effect. Indeed, judging by arrest records the share of criminal offences by women in the U.S. has increased over time. However, a careful interpretation of this evidence by Steffensmeier and Schwartz (2004) based on pooling data from several sources reveals that "crime is still a man's world." They find that the increase in arrests is due primarily to increasing arrest rates for females. Similar evidence is presented by Gottfredson and Hirschi (1990) who show that the differences in the crime rates persist after the labor-force participation of women in the United States increased, which suggests that the equality/role thesis cannot explain these observations. Some researchers stress that female roles and crime can be seen as complex outcomes of socioeconomic, political and historical factors that go beyond gender equality (Steffensmeier et al., 1989). Furthermore, studies report evidence that female-male differences remain for adolescents being equally supervised by their parents (Gottfredson and Hirschi, 1990). Mears et al. (2000) also report a strong cross-cultural and historical robustness that reduces the strength of a possible equality or role theory:

> "at every age, within all racial or ethnic groups examined to date, and for all but a handful of offense types that are peculiarly female… sex differences in delinquency are independently corroborated by self-report, victimization, and police data, and they appear to hold cross-culturally as well as historically" (p. 143).

Strong differences between men and women can also be observed in other circumstances. For example, there is a larger accident involvement in all kinds of motor vehicle accident rates for men than for women. But there are also differences regarding other accidents such as

accidental drowning, accidents caused by fire (see Junger, 1994). Similarly, alcohol and drug abuse are more common among men than women (Gottfredson and Hirschi, 1990).

Empirical Evidence

The data used in the present study come from the WVS and EVS. The surveys were first conducted in 1981-84, with subsequent surveys being carried out in 1990-91, 1995-97 and 1999-2001. These surveys have assessed the basic values and beliefs of people around the world and have been carried out in about 80 societies representing over 80 per cent of the world's population. The researchers who conduct and administer the WVS/EVS in their respective countries are required to follow the methodological requirements of the World Values Association. Surveys are generally based on national representative samples of at least 1000 individuals, ages 18 and over (although sometimes people under the age of 18 participate). The samples are selected using probability random methods and the questions contained within the surveys generally do not deviate far from the original official questionnaire.[1] The WVS/EVS inquires about the acceptability of various dishonest or illegal activities. The questions on the justifiability of corruption and tax evasion that are of primary interest in this paper are stated as follows:

> Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between: (...)
>
> 1. Someone accepting a bribe in the course of their duties.
> 2. Cheating on tax if you have the chance

[1] A typical World Values Survey can be viewed at www.worldvaluessurvey.org.

The ten-scale index with the two extreme points "never justified" and "always justified" was recoded into a two-point scale (0, 1), with the value 1 standing for "never justifiable". Thus, a higher value is interpreted as lower justifiability of corruption or tax evasion. Figure 1 provides the justification of such an approach.[2] It presents a histogram with the distribution of scores for both variables. We observe a relatively high share of people stating that corruption and tax evasion is never justifiable. The relatively high number of responses that state that illegal activities are never justifiable suggests the tendency of a natural cut-off point at the value with the lowest justifiability. However, the results remain robust when changing the structure of the dependent (e.g., values between 0 and 3) and therefore also the model (ordered probit instead of probit).

[FIGURE 1 ABOUT HERE]

Both variables are not free from biases and problems. In general, the proxy can be criticized as it considers a *self-reported* and *hypothetical* choice (see Swamy et al., 2001). It is possible that an individual who has been involved in illegal activities in the past will tend to excuse such behavior declaring a low justifiability (Torgler and Schneider, 2007). Furthermore, cross-cultural comparisons should be treated with caution. In countries where corruption and tax evasion is widespread and delays in transactions are long, additional payments to "speed up" the

[2] The ten-scale index with the two extreme points "never justified" and "always justified" was recoded into a four-point scale (0, 1, 2, 3), with the value 3 standing for "never justifiable"; 4-10 were integrated in the value 0 due to a lack of variance.

process may be justifiable.[3] Nevertheless, in recent years a number of studies have investigated the effects of values, norms, and attitudes on economic behavior or institutions (see, e.g., Knack and Keefer, 1997). According to Ajzen and Fishbein (1980) and Lewis (1982) behavior can be predicted from attitudes and subjective norms. The tax compliance literature, for example, has documented a strong link between attitudes toward tax compliance and actual compliance. Weck (1983) reports a negative correlation between tax morale (attitudes toward paying taxes) and the size of the shadow economy. Compared to other variables tax morale has the most significant impact on the size of the shadow economy. In a multivariate analysis with data from the Taxpayer Opinion Survey, using tax evasion as a dependent variable, Torgler (2003a) finds that tax morale significantly reduces tax evasion and Torgler (2001) finds a strong correlation between tax morale and the size of shadow economy. Moreover, because the way we define illegal activities is less sensitive than asking whether a person has evaded taxes or is corrupt, we expect the degree of honesty to be higher. Moreover, the dataset is based on wide-ranging surveys, which reduces the probability of respondent suspicion and the framing effects (Torgler and Schneider, 2007). For our purposes here, it is also useful to note that our justifiability of corruption variable is statistically significantly correlated with well-known indexes of the actual level of corruption such as the Transparency International Corruption Perception Index (correlation coefficient is 0.358) and the Quality of Government rating (Control of Corruption) developed by Kaufmann et al. (2003) (correlation coefficient 0.380).

We will use a probit estimation to analyze the ranking information of the scaled dependent variable. A weighting variable has been applied to correct the samples and thus to get

[3] De Soto (1989) and his research team conducted an experiment, setting up a small garment factory in Lima, intending to comply with the bureaucratic procedures and thus behave in accordance with the law. They were asked for a bribe to speed up the process 10 times and twice it was the only possibility to continue the experiment.

a reflection of the national distribution.[4] The models also include country and time dummy variables. Since the equation in a probit model is nonlinear, only the signs of the coefficients can be directly interpreted and not their sizes. Calculating the marginal effects is therefore a method to find the quantitative effect of an independent variable. The marginal effect indicates the change in the share of individuals (or the probability of) belonging to the highest justifiability of corruption/tax evasion level, when the independent variable increases by one unit. If the independent variable is a dummy variable, the marginal effect is evaluated in regard to the reference group.

Empirical Results

Descriptive Analysis

Before conducting the multiple regression analysis to disentangle all the factors affecting justifiability of corruption and tax evasion, it is instructive to add a descriptive analysis. In Figure 2 we report the distribution between men and women keeping to better visualize the difference the four point scale. The results indicate large differences between the percentage of individuals with high social norm values and those with the lowest scores across gender. Women report in a stronger manner that tax evasion and corruption is *never* justifiable while men report in a stronger manner that these activities are justifiable. On the other hand, the distributions for score values 1 and 2 are quite stable.

Further evidence on the nature of gender differences is presented in Table 1, which tests whether the different samples have the same distribution using the Wilcoxon rank-sum (Mann-

[4] The WVS/EVS provides the weighting variable.

Whitney) test[5]. First we investigate whether the observed gender differences are statistically significant. In a next step we explore whether the results hold for all three time periods and all 8 countries. In all 12 cases, the results indicate that there is a significant difference between women and men, reporting very high z-values.

[FIGURE 2 ABOUT HERE]

[TABLE 1 ABOUT HERE]

Multivariate analysis

The natural question now arises whether the observed gender differences remain valid when controlling for further factors in a multivariate analysis.[6] The descriptive analysis only gave us information about the *raw effects* and not the *partial effects*. The observed gender differences might be explained in terms of a number of factors than can be controlled in a multivariate regression analysis.

Table 2 and 3 present the first results. EQ1 and 5 includes our gender dummy (WOMEN=1), the control variables age and marital status and time and country fixed effects. We find a strong gender effect. Being a woman increases the probability of stating that corruption or tax evasion is never justifiable by 5.6 or 7.1 percentage points. These are strong quantitative effects. In a next step we investigate what happens if we add variables in the specification that can be identified as opportunity/restriction proxies. Therefore we add education (EQ 2 and 6), employment status (EQ3 and 7) and economic situation (EQ4 and 8). Table 2

[5] Also here we use the four point scale.
[6] Table A1 and A2 provide a description and summary statistics of the variables.

focusing on corruption indicates that the quantitative effects don't change substantially. We still observe after including education and the employment status in the specification marginal effects at the 5.6 percentage point level. Adding income reduces it slightly to 5.4 percentage points. A stronger decrease is observable in Table 3 when investigating the justifiability of tax evasion. The marginal effects decrease from 7.1 to 6.1 percentage points with a constant decrease of around 0.3 percentage between EQ5 and 8. Thus, also here the quantitative effects remain substantially high after including several opportunity factors.

Looking at the control variables we find a statistically significant age effect. Greater age is correlated with a lower justifiability of corruption and tax evasion. We find a statistically significant effect of EDUCATION on the JUSTIFIABILITY OF CORRUPTION, but not on the JUSTIFIABILITY OF TAX EVASION. In both cases, married people have also a higher social norm regarding illegal activities (lower justifiability) than individuals with another marital status. Being married increases the share of persons indicating that accepting a bribe is never justifiable by more than 3 percentage points and increases the probability of stating that tax evasion is never justifiable by more than 4 percentage points. Thus, we observe similar quantitative effects. On the other hand, we do not find a statistically significant effect of the employment status on individuals' justifiability of corruption, but a certain effect regarding the justifiability of evading taxes. Being self-employed increases the justifiability of evading taxes quite substantially (marginal effects around 6 percentage points). Including the economic situation variable (UPPER CLASS) reduces the number of observations due to higher missing values. The effect of economic class is similar to that of education, i.e. the highest economic class has the lowest justifiability of corruption with a marginal effect of 1.8 percentage points. On the other hand, the coefficient is not statistically significant focusing on the justifiability of tax evasion.

[TABLE 2 AND 3 ABOUT HERE]

Next, Table 4 reports several robustness checks for the gender effect summarizing the results of 22 regressions (see EQ9 to 30). The first result column focuses on the justifiability of corruption, the second on the justifiability of tax evasion (tax morale). For simplicity, only the coefficient for the variable WOMAN is reported. First, Table 4 reports estimations using each of the years in our sample (1981, 1990 and 1999) separately (EQ9 to 14). The role theory would suggest that a greater equality of status between men and women over time would lead to decreasing gender differences. However, such an argument is not supported by our results. Gender differences remain statistically significant in all three time periods and we cannot observe a decay in the marginal effects over time. The justifiability of tax evasion variable even indicates an increase of the marginal effects 4.2 to 7.6 percentage points. In a next step we also investigate every single country in our data set (EQ15 to 30). Gender differences might be less obvious in countries where women have established greater equality (e.g., stronger labor force participation or stronger involvement in the political process etc.). The results in Table 4, however, indicate a relatively robust gender effect among all the countries. Regional differences can only be localized when focusing on the quantitative effects. Looking at corruption all coefficients are statistically significant with marginal effects between 4.1 (Spain) and 8.8 (The Netherlands). Similar results are observable for tax evasion. The marginal effects vary between 0.4 (Italy) and 13.6 percentage points (Denmark). Overall, social democratic states such as Denmark and The Netherlands show high marginal effects. Only in one case the coefficient was not statistically significant. Surprisingly, it was Italy a country from the south with a certain

history of patronage. Overall, we cannot observe that greater equality is connected with lower gender differences.

In sum, our results reported in the empirical part are in line with previous studies that found strong gender differences, but are not in line with the equality and role theory that would suggest a decrease of gender differences with greater equality of status or lower opportunities differences between men and women over time.

[TABLE 4 ABOUT HERE]

Concluding Remarks

This empirical study uses the World Values Survey and the European Values Survey data covering eight Western European countries spanning the period from 1981 to 1999 to shed some light on the extent to which citizens perceive corruption and tax evasion as a justifiable phenomenon. The major goals of the paper are to investigate whether gender matters and whether a decrease of gender differences with greater equality of status and better opportunities and restrictions to conduct white collar crimes such as corruption and tax evasion is observable. Interestingly, not many previous studies investigate corruption and tax evasion simultaneously over a period of 20 years. We find evidence for strong gender differences. Women are significantly less likely to agree that corruption and cheating on taxes can be justified. The results remain robust after investigating different time periods and extending the specification with several opportunity factors such as education, employment status or income.

The results have some interesting political implications. Increasing the number of women in the government or the public administration may help to reduce the level of corruption, which

would benefit society. However, such a recommendation or policy implication should be treated with caution. Although we tested the robustness in detail, it is still possible that other factors are causing the differences. Moreover, the limited number of studies in the area of corruption provides a somewhat mixed picture and more evidence is required to provide a solid policy recommendation.

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Figure 1 The Distribution of Aggregate Tax Morale and Corruption

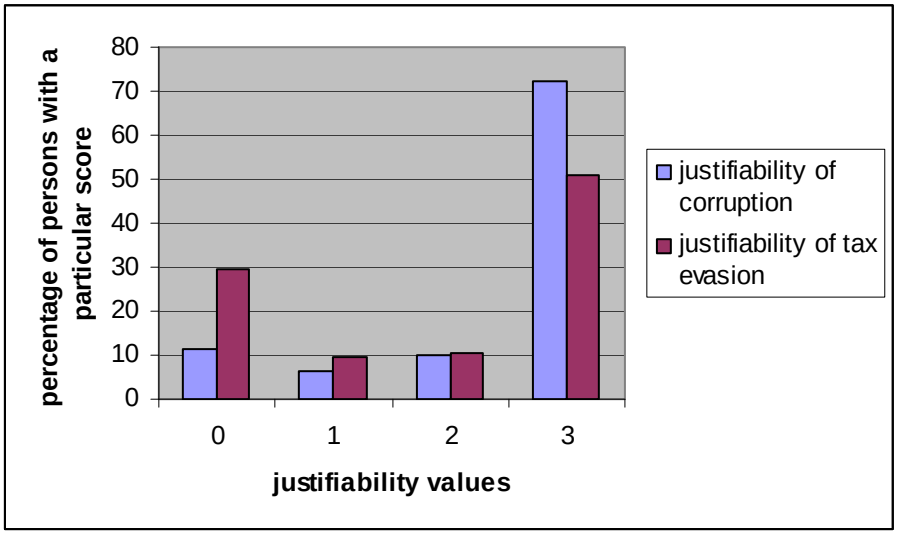

Figure 1 The Distribution Between Women and Men

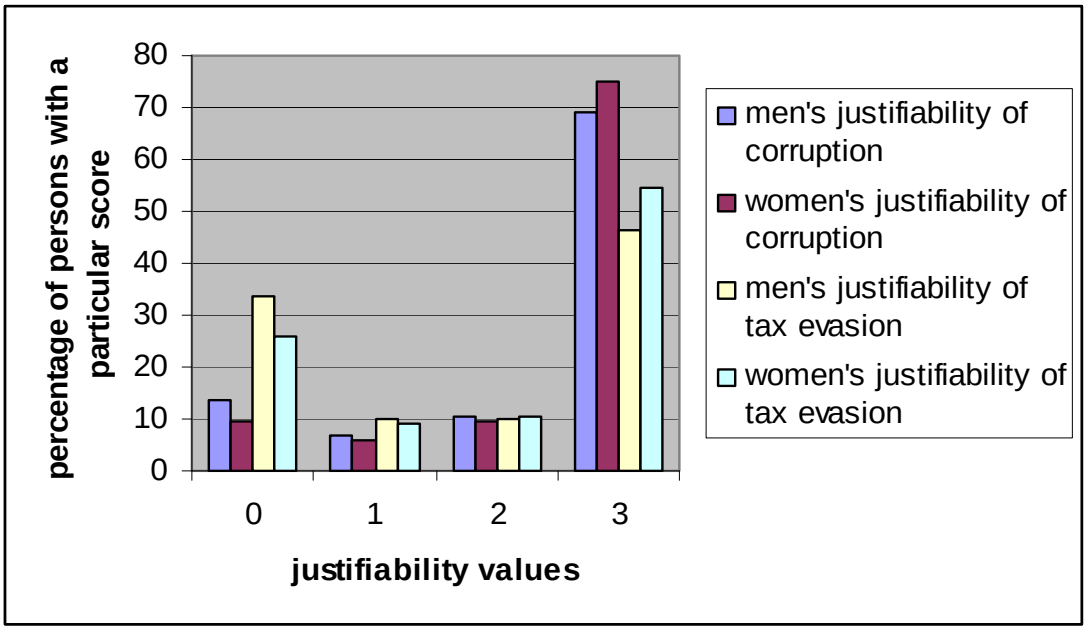

Table 1: Two-sample Wilcoxon Rank-sum (Mann-Whitney) Tests

	Justifiability of Corruption		**Justifiability of Tax Evasion**	
Hypothesis	**z-value**	**Prob > |z|**	**z-value**	**Prob > |z|**
H_0: Men = Women	-14.098	0.000	-18.121	0.000
H_0: Men = Women (1981)	-8.425	0.000	-9.661	0.000
H_0: Men = Women (1990)	-8.464	0.000	-12.141	0.000
H_0: Men = Women (1999)	-7.533	0.000	-9.376	0.000
H_0: Men = Women (FRANCE)	-4.800	0.000	-4.760	0.000
H_0: Men = Women (GREAT BRITAIN)	-3.333	0.000	-6.517	0.000
H_0: Men = Women (ITALY)	-3.196	0.000	-2.346	0.000
H_0: Men = Women (THE NETHER LANDS)	-6.202	0.000	-4.776	0.000
H_0: Men = Women (DENMARK)	-6.626	0.000	-8.269	0.000
H_0: Men = Women (BELGIUM)	-5.477	0.000	-7.903	0.000
H_0: Men = Women (IRELAND)	-3.467	0.000	-6.335	0.000
H_0: Men = Women (SPAIN)	-5.277	0.000	-7.586	0.000

Table 2: Gender Effect and Justifiability of Corruption

	DEPENDENT VARIABLE: JUSTIFIABILITY OF CORRUPTION											
WEIGHTED PROBIT	*Coeff.*	*z-Stat.*	*Marg. Effects*	*Coeff.*	*z-Stat.*	*Marg. Effects*	*Coeff.*	*z-Stat.*	*Marg. Effects*	*Coeff.*	*z-Stat.*	*Marg. Effects*
INDEPENDENT VARIABLES	*EQ1*			*EQ2*			*EQ3*			*EQ4*		
Gender												
WOMEN	**0.172*** **	**8.85**	**0.056**	**0.176*** **	**8.89**	**0.057**	**0.173*** **	**8.66**	**0.056**	**0.163*** **	**7.64**	**0.054**
Control Variables												
AGE	0.013***	21.40	0.004	0.014***	20.86	0.004	0.014***	20.74	0.004	0.014***	19.48	0.005
MARRIED	0.132***	6.46	0.043	0.137***	6.56	0.045	0.138***	6.59	0.045	0.133***	5.92	0.045
Opportunity Factors												
EDUCATION				0.010***	3.36	0.003	0.010***	3.42	0.003	0.009***	2.62	0.003
EMPLOYMENT (1=SELFEMPLOYED)							-0.026	-0.68	-0.009	-0.039	-0.94	-0.013
ECONOMIC CLASS (1= UPPER CLASS)										0.054**	2.24	0.018
Time												
1981 (REFERENCE GROUP)												
1990	0.086***	3.51	0.028	0.086***	3.45	0.028	0.087***	3.46	0.028	0.082***	3.19	0.027
1999	0.070***	3.06	0.023	0.058**	2.45	0.019	0.060**	2.51	0.019	0.066**	2.34	0.022
Country Fixed Effects	YES			YES			YES			YES		
Number of observations	34894			33752			33525			28872		
Prob > chi2	0.000			0.000			0.000			0.000		
Pseudo R2	0.055			0.054			0.054			0.046		

Notes: Robust standard errors. Other reference groups: MALE, OTHER MARRIED STATUS, OTHER EMPLOYMENT STATUS. Significance levels: * 0.05 < p < 0.10, ** 0.01< p < 0.05, *** p < 0.01. Marginal effect = highest score (=13). JUSTIFIABILITY OF CORRUPTION: the higher the value the lower the justifiability.

Table 3: Gender Effect and Justifiability of Tax Evasion

	DEPENDENT VARIABLE: JUSTIFIABILITY OF TAX EVASION											
WEIGHTED PROBIT	*Coeff.*	*z-Stat.*	*Marg. Effects*	*Coeff.*	*z-Stat.*	*Marg. Effects*	*Coeff.*	*z-Stat.*	*Marg. Effects*	*Coeff.*	*z-Stat.*	*Marg. Effects*
INDEPENDENT VARIABLES	*EQ5*			*EQ6*			*EQ7*			*EQ8*		
Gender												
WOMEN	0.178***	10.01	0.071	0.173***	9.51	0.068	0.162***	8.83	0.064	0.154***	7.72	0.061
Control Variables												
AGE	0.014***	26.59	0.006	0.014***	24.42	0.006	0.014***	24.28	0.006	0.014***	22.63	0.006
MARRIED	0.100***	5.33	0.040	0.099***	5.2	0.039	0.102***	5.35	0.041	0.096***	4.6	0.038
Opportunity Factors												
EDUCATION				-0.002	-0.9	-0.001	-0.002	-0.75	-0.001	-0.001	-0.33	-0.0004
EMPLOYMENT (1=SELFEMPLOYED)							-0.147***	-4.16	-0.059	-0.164***	-4.24	-0.065
ECONOMIC CLASS (1= UPPER CLASS)										0.001	0.04	0.0004
Time												
1981 (REFERENCE GROUP)												
1990	-0.105***	-4.58	-0.042	-0.110***	-4.74	-0.044	-0.114***	-4.89	-0.045	-0.119***	-4.93	-0.047
1999	-0.109***	-5.18	-0.043	-0.109***	-4.99	-0.043	-0.112***	-5.1	-0.044	-0.168***	-6.37	-0.067
Country Fixed Effects	YES			YES			YES			YES		
Number of observations	34999			33852			33624			28975		
Prob > chi2												
Pseudo R2	0.0517			0.0509			0.0514			0.0533		

Notes: Robust standard errors. Other reference groups: MALE, OTHER MARRIED STATUS, OTHER EMPLOYMENT STATUS. Significance levels: * 0.05 < p < 0.10, ** 0.01< p < 0.05, *** p < 0.01. Marginal effect = highest score (=13). JUSTIFIABILITY OF TAX EVASION: the higher the value the lower the justifiability.

Table 4: Robustness Check

DEPENDENT VARIABLE	*JUSTIFIABILITY OF CORRUPTION*			*JUSTIFIABILITY OF TAX EVASION*		
ROBUSTNESS CHECK EQ9 – EQ30	*Coeff.*	*z-Stat.*	*Marg. Effects*	*Coeff.*	*z-Stat.*	*Marg. Effects*
INDEPENDENT V. (ALL OTHER CONTROLLED)						
YEAR (EQ9-14)						
1981						
WOMAN	0.211***	5.87	0.071	0.107***	3.15	0.042
1990						
WOMAN	0.125***	3.38	0.040	0.198***	5.87	0.079
1999						
WOMAN	0.188***	6.25	0.058	0.191***	7.02	0.076
COUNTRIES (EQ15-30)						
FRANCE						
WOMAN	0.196***	3.99	0.074	0.226***	4.69	0.090
GREAT BRITAIN						
WOMAN	0.179***	3.25	0.053	0.197***	3.91	0.078
ITALY						
WOMAN	0.126***	2.89	0.040	0.001	0.03	0.0004
THE NETHER LANDS						
WOMAN	0.252***	4.21	0.088	0.180***	3.1	0.070
DENMARK						
WOMAN	0.393***	4.47	0.055	0.365***	6.06	0.136
BELGIUM						
WOMAN	0.138***	2.63	0.051	0.222***	4.31	0.084
IRELAND						
WOMAN	0.281***	3.66	0.073	0.237***	3.46	0.094
SPAIN						
WOMAN	0.137***	3.72	0.041	0.149***	4.47	0.059

Notes: 22 estimations, control variables not reported. Significance levels: * $0.05 < p < 0.10$, ** $0.01 < p < 0.05$, *** $p < 0.01$. Specification structure in line with EQ 3 and 7.

APPENDIX

Table A1. Description of variables

Variable	**Derivation**
AGE	Continuous variable
GENDER	FEMALE (MALE in the reference group)
EDUCATION	Continuous variable At what age did you or will you complete your full time education, either at school or at an institution of higher education? Please exclude apprenticeships
MARITAL STATUS	DUMMY: MARRIED=1, all other classes (divorced, separated, widowed, single) in the reference group.
Economic CLASS	People sometimes describe themselves as belonging to the working class, the middle class, or the upper or lower class. Would you describe yourself as belonging to the: DUMMY: UPPER CLASS, the rest (middle class, working class and lower class) is the reference group.
OCCUPATION STATUS	SELFEMPLOYED, the rest (part time employed, at home, unemployment, student, retired, other) is in the reference group.

Source: Inglehart et al. (2000).

Table A2. Summary statistics

INDEPENDENT VARIABLES	**Obs**	**Mean**	**Std. Dev**	**Min**	**Max**
JUSTIFIABILITY OF CORRUPTION	40623	0.722	0.448	0	1
JUSTIFIABILITY OF TAX EVASION	40725	0.507	0.500	0	1
GENDER	41533	0.528	0.499	0	1
AGE	41344	43.58625	17.633	15	98
EDUCATION	40266	16.964	3.693	5	74
MARRIED	41307	0.580	0.494	0	1
SELFEMPLOYED	41253	0.064	0.246	0	1
UPPER CLASS	36543	0.382	0.486	0	1