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journal homepage: [www.elsevier.com/locate/soceco](http://www.elsevier.com/locate/soceco)Perceived tax evasion and the importance of trust<sup>☆,☆☆</sup>Henrik Hammar<sup>a,1,2</sup>, Sverker C. Jagers<sup>b,2</sup>, Katarina Nordblom<sup>a,\*,3</sup><sup>a</sup> Department of Economics, University of Gothenburg, P.O. Box 640, SE 405 30 Göteborg, Sweden<sup>b</sup> Department of Political Science, University of Gothenburg, P.O. Box 711, SE 405 30 Göteborg, Sweden

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## ABSTRACT

Using Swedish individual survey data, we analyze the perception of tax evasion in terms of ten different taxes. We find large variation across taxes, highlighting the importance of studying different taxes separately rather than treating tax evasion as one common phenomenon. We focus on the importance of trust in taxpayers and in politicians. Those who do not trust their fellow citizens are more likely to believe that they are evading taxes, but distrust in politicians has an even greater effect, especially for redistributive and fiscally motivated taxes. Hence, it is important for politicians to be perceived as trustworthy in order to be able to collect taxes for maintaining the welfare state.

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## 1. Introduction

Maintaining a general welfare state requires quite large tax revenues. In a non-totalitarian society, tax payment must, at least to some extent, be voluntary and it is therefore important to make people willing to pay the taxes they are obliged to pay. There is a large body of literature on tax compliance that gives explanations to what actually makes people willing to pay taxes.<sup>4</sup> One important determinant has shown to be the *perception* of what others

do: If people are convinced that their co-citizens are doing their fair share, they are themselves more willing to contribute, while perceived tax evasion (true or not) among others affects tax compliance negatively.<sup>5</sup> Hence, understanding *perceived* tax evasion is important in order to prevent *true* tax evasion. This paper attempts to do just that; we analyze factors that make people believe that others evade various kinds of taxes. We use individual survey data from Sweden – a country with a high general tax-level and with a large public sector – and we specifically analyze the respondents' perceived evasion of ten different taxes.<sup>6</sup> An obvious advantage of studying perceived rather than actual tax evasion by means of a survey is of course that we can expect respondents to answer more truthfully when they are not asked to reveal their own behavior in this rather sensitive matter. We find trust both in taxpayers and in politicians to be very important for perceived tax evasion in the sense that (1) the more the respondents claim to trust other people (i.e. taxpayers), the less they suspect them to cheat. However, for

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<sup>4</sup> See Andreoni et al. (1998) for a thorough survey.

<sup>5</sup> Torgler and Schneider (2005) who study Austria find a strong negative impact of perceived tax evasion on tax morale as do Frey and Torgler (2006) using data from 30 European countries.

<sup>6</sup> The taxes are municipal and state income taxes, payroll tax, corporate tax, real estate tax, gift tax, wealth tax, alcohol tax, vehicle tax, and carbon dioxide tax on fossil fuels.

most taxes the effect of political distrust is even greater: (2) respondents who distrust the politicians in the Swedish parliament are about twice as likely to perceive evasion of payroll, corporate, real estate, gift, and wealth taxes to be common compared to those who do not distrust the politicians.

Trust is commonly considered to be important for the maintenance of social capital (Putnam, 1993, 2000) and for the general social and economic development in societies (Rothstein and Uslaner, 2005). For instance, generalized trust as defined by Yamagishi and Yamagishi (1994) roughly deals with to what degree one trusts that others do their share. Empirical findings also show that trust in the government, public officials, and in the legal system has a significant positive effect on tax morale (see e.g. Tyler, 1990; Scholz and Pinney, 1995; Scholz and Lubell, 1998; Torgler, 2003a,b, 2004), and a study by the Swedish Tax Agency (STA) (2005b) – STA is an autonomous public authority accountable to the Swedish Government – shows that the most common argument legitimizing tax evasion among Swedes is that those in leading positions in society violate the social norms. Moreover, generalized trust is important for people's willingness to pay taxes (see e.g. Scholz and Lubell, 1998; Frey and Torgler, 2006), and as stated by Bordignon (1993), one can even regard it as unfair to comply if others do not. Hence, trust is likely to be an important determinant for actual as well as for perceived tax evasion. A key finding in this paper is that political and generalized trust appear to play different roles for the perceived evasion of different types of taxes.

Previous research on tax evasion and compliance has mainly dealt with income taxes and to some extent with VAT.<sup>7</sup> This, we argue, is probably a too simplified view. Taxes differ for example with respect to how technically easy they are to evade and how popular they are, and these factors can also be expected to affect the perceived evasion of different taxes. This is also what we find; both the perceived occurrence of tax evasion and its determinants differ among taxes. To our knowledge, this is the first tax-evasion study that looks at several kinds of taxes.

The Swedish taxes that we investigate in this paper differ in popularity, with the real estate and gift taxes being the most unpopular. Also, the tax base (e.g. carbon dioxide, alcohol, income, gifts) and motives (steering, fiscal, distributional) differ among these taxes, which may affect the perception of tax evasion. It turns out that more than 70% of the respondents think that gift and wealth tax evasion is common, while only 17% think that evasion of the vehicle tax and the carbon dioxide tax on gasoline and diesel is common.

The paper is organized as follows. In Section 2 we present some suggested determinants of tax evasion in general. Thereafter we present a formal model of tax evasion and our formulation of the hypotheses. Section 4 contains a presentation of the data including a description of the studied taxes, followed by a regression analysis in Section 5. Some concluding remarks in Section 6 end the paper.

## 2. Suggested determinants of tax evasion in general

There are a number of explanations to why people evade taxes (or do not evade them), and we will here focus on three that have shown to be very important: self-interest, social norms concerning tax evasion, and trust.<sup>8</sup>

Perhaps the most obvious reason for someone to try to earn money “off the record” is to keep his or her wallet in good shape; in other words, people want to maximize their expected net income

(see e.g. Allingham and Sandmo, 1972; Clotfelter, 1983; Andreoni et al., 1998; several contributions in Mansbridge, 1990). Two evasion factors that can be included in this self-interest motive are marginal tax rates and the detection probability. The higher the marginal tax rate, the higher the gain from withholding income from tax authorities, but the higher the detection probability, the lower the expected utility of evasion. Some taxes are technically easier to evade than others. For instance, if taxable income is reported by employers directly to the tax authorities, then the technical evasion possibilities for an employee are smaller than if it were the employee's duty to report.

The second factor concerns the fact that taxes differ with respect to how popular they are, or to how fair they are perceived to be, which can be expected to affect the social norms towards tax evasion. A tax that is generally considered to be unfair may, socially, be relatively acceptable to evade. It could also be the case that popularity and perceived fairness vary across motives for taxation. Whether redistributive taxes are perceived as fair depends on the taste for redistribution. Similarly, the attitude towards mainly fiscal taxes depends on the opinion about the optimal size of the public sector.

Our third fundamental factor for the understanding of tax evasion is, as already mentioned, *trust*. Generalized trust is one important factor determining the probability that people will pay their taxes (see e.g. Scholz and Lubell, 1998; Frey and Torgler, 2006). The reason is found in the rational choice theory and the social dilemma literature (Komorita and Parks, 1994) and is rather self-explaining: If I trust that most other citizens pay their taxes, then I am more inclined to pay mine. Political trust is also found to have a positive effect on tax morale (see e.g. Scholz and Lubell, 1998; Torgler, 2003a,b, 2004). Simply put: If I do not trust that politicians are doing what they are supposed to do, then I become more tempted to evade taxes.

## 3. Model and hypotheses

In a theoretical model, we try to incorporate the previously mentioned explanations of tax compliance. When modeling the agent's problem in an Allingham-Sandmo fashion, we add a “social-taxpayer factor” to the utility function. We also include utility from the public sector itself, i.e. an explicit modeling of the perceived benefits of public expenditures (financed by taxes and administered by politicians and public officials). We assume that utility is strictly concave in consumption, implying that the individual is risk averse. We also assume that the individual receives two kinds of income,  $Y_A$  and  $Y_B$ , both subject to taxation but possibly at different rates. The expected utility,  $E[U]$ , is

$$E[U] = (1 - p)U[Y_A - t_A DY_A + Y_B - t_B DY_B] + pU[Y_A - t_A DY_A + Y_B - t_B DY_B - f_A(Y_A - DY_A) - f_B(Y_B - DY_B)] - d_A(Y_A - DY_A) - d_B(Y_B - DY_B) + E[\theta], \quad (1)$$

where  $Y_i$  is total gross income of type  $i$  and  $DY_i$  is declared income, which is taxed at the tax rate  $t_i$ ,  $i = A, B$ .<sup>9</sup> Income evaded is therefore  $Y_i - DY_i \geq 0$ . The subjective probability of auditing is  $p$ , and in that case both kinds of income are audited.<sup>10</sup> If the individual is caught, a fine proportional to the evaded amount has to be paid,  $f_i(Y_i - DY_i)$ .

<sup>7</sup> Related to value added tax there has been considerable work undertaken (Adams and Webley, 2001; Bergman and Nevares, 2006; Cnossen, 1994; Webley et al., 2006).

<sup>8</sup> See e.g. Scholz and Lubell (1998), Torgler (2003a,b), Davis et al. (2003), and Fortin et al. (2007).

<sup>9</sup> Naturally, the model can be extended to a “many-tax” model. For reasons of presentation we choose to model only two taxes.

<sup>10</sup> Allingham and Sandmo (1972) discuss what affects  $p$ , and Sandmo (2005) extends this discussion. In this paper we do not analyze this probability *per se*.

We also include a possible *disutility* of tax evasion,  $d$ , to create a social taxpayer.<sup>11</sup> The disutility function is assumed to be convex, i.e.  $d'(Y - DY) \geq 0$  and  $d''(Y - DY) \geq 0$ , and captures the psychological cognition and social norm that you *should not* evade taxes. It emerges irrespective of whether the individual is caught or not. Hence, it deters evasion. People may differ in their conscience regarding tax evasion, where some have high and others have low degrees of disutility evading both taxes (cf. Vogel, 1974). We also allow for different social norms regarding the two taxes. It may be the case that the social norm for not evading tax  $B$  is stronger than that for not evading  $A$ , implying that  $d_B > d_A$  for the same amount evaded.

Moreover, in line with Bordignon (1993), we include a public good,  $\theta$ , in the utility function. For simplicity, the expected utility of the public good,  $E[\theta]$ , is linear and enters additively.<sup>12</sup> The good is provided by the public sector and financed by taxes. The expected value of the public good is simply the total amount of tax payments in the economy (taxes  $A$  and  $B$  paid by all  $N$  taxpayers in the economy) multiplied by the expected quality of the politicians,  $E[q]$ , and a general preference for the public good,  $\gamma > 0$ . The better the job the politicians do in administrating tax revenues, the larger the value of the public good. However, total tax payments as well as the quality of politicians are not known with certainty to the specific taxpayer. Hence, the expected value of the public good is:

$$E[\theta] = \gamma E \left[ q \sum_{i=A,B} \sum_{n=1}^N t_i DY_{in} \right] = \gamma E[q] \sum_{i=A,B} \sum_{n=1}^N t_i E[DY_{in}]. \quad (2)$$

The individual taxpayer maximizing (1) wrt  $DY_A$  and  $DY_B$  results in the following first-order conditions:

$$\begin{aligned} \frac{\partial E[U]}{\partial DY_A} &= -(1-p)t_A U'(Y) - p(t_A - f_A)U'(Z) + d'_A + \gamma E[q]t_A \geq 0 \\ \frac{\partial E[U]}{\partial DY_B} &= -(1-p)t_B U'(Y) - p(t_B - f_B)U'(Z) + d'_B + \gamma E[q]t_B \geq 0 \end{aligned} \quad (3)$$

A condition holds with equality if there is positive evasion of the tax.  $Y$  and  $Z$  refer to net income with and without addition, respectively. If the individual does not evade any of the taxes, then the following conditions must hold when  $Y_i = DY_i$ ,  $i = A, B$ :

$$\begin{aligned} \Delta_A &= U'(Y)(t_A - pf_A) - d'_A - \gamma E[q]t_A < 0 \\ \Delta_B &= U'(Y)(t_B - pf_B) - d'_B - \gamma E[q]t_B < 0 \end{aligned} \quad (4)$$

We can immediately see that, compared to the standard Allingham and Sandmo (1972) model, tax evasion is less prevalent if we also consider social norms and public good provision. If there is tax evasion, which of the taxes is most likely to be evaded? The individual evades  $A$  but not  $B$  if and only if

$$\frac{d'_A + \gamma t_A E[q]}{t_A - pf_A} < U'(Y) < \frac{d'_B + \gamma t_B E[q]}{t_B - pf_B} \quad (5)$$

at the point where no evasion takes place. The social norms are important: If  $d'_A$  is closed or equal to zero while  $d'_B$  is large, then  $A$  and not  $B$  would be evaded if tax and penalty rates were the same.<sup>13</sup>

<sup>11</sup> Gordon (1989), Torgler (2003a,b), Fortin et al. (2007), and Sandmo (2005) analyze the inclusion of this disutility function. In Gordon's and Fortin et al.'s papers, the disutility is linear in the evaded amount, whereas Sandmo assumes it to be strictly convex.

<sup>12</sup> Note that this implies that there is no income effect associated with the public good,  $\theta$ .

<sup>13</sup> In other words, all else equal it is less costly from a "bad conscience" point of view to cheat with a tax if there is a social norm that says that it is relatively socially acceptable.

When it comes to the expected quality of politicians, we have the condition for no tax evasion from (4):

$$\Delta_i = U'(Y)(t_i - pf_i) - d'_i - \gamma E[q]t_i < 0$$

which is differentiated wrt  $E[q]$  as:

$$\frac{\partial \Delta_i}{\partial E[q]} = -\gamma t_i < 0, \quad i = A, B. \quad (6)$$

Thus, a higher expected quality of politicians means that tax evasion is less likely. However, the higher the tax rate, the stronger the effect of the quality of politicians. The same holds true for the general preference of the public good,  $\gamma$ : A higher (marginal) utility of the public good increases the importance of  $E[q]$ .

### 3.1. Hypotheses about perceived tax evasion

In the empirical part we analyze perceived tax evasion, which means that we capture people's expectations about other people's actions. According to the expected utility function (1), people experience disutility from evading taxes. Hence, it is generally seen as something bad to evade taxes. We would therefore expect that people with a higher degree of general trust would be more likely to think that their fellow citizens feel bad about evading taxes (a higher  $d$ ), and therefore expect tax evasion to be less frequent.

However, generalized trust is likely to be more relevant for taxes with broader tax liability than for taxes like the gift or wealth tax. If one trusts people in general, it may still be the case that one thinks that the wealth tax is commonly evaded, simply because "people in general" are not obliged to pay this tax. The possibility to evade taxes could also interact with generalized trust. For taxes that are difficult to evade, perceived tax evasion could be low irrespective of the degree of trust. Hence, generalized trust should be of larger importance for taxes that are relatively easy to evade, leading us to our first hypothesis:

**H1.** A high level of generalized trust decreases the perception of tax evasion, and the effect is stronger for broader tax bases and easily evaded taxes.

In the theoretical model, we allow for disutility to differ across taxes, depending on the social acceptance, and we find it likely that perceived tax evasion is more common among unpopular taxes, all else equal. We approximate the perceived (un)popularity with the own opinion about the tax, and state the second hypothesis in a subjective way:

**H2.** If a tax rate is regarded as too high, then the perception of tax evasion increases.

From condition (6), we assume that distrust in politicians results in lower expected utility of tax payments and lower tax compliance. Some taxes are more likely to be influenced by political trust than others. Taxes primarily motivated by redistribution are more likely to be evaded if people do not trust or like the redistributive aim of the politicians. Moreover, if people distrust politicians, it is likely that they want politicians to have as little influence as possible over resources, implying more evasion also of fiscally motivated taxes. We find it reasonable to expect that those who *distrust* politicians also expect others to do the same; i.e. those who distrust politicians will state higher *perceived* tax evasion than others. Hence our third hypothesis:

**H3.** Distrust in politicians increases the perception of tax evasion, and the effect is stronger for fiscal and redistributive taxes.

The taxes studied differ in many ways; i.e. in their possibilities to be evaded, tax bases, popularity, and motives. Since these factors

**Table 1**  
Schematic description of taxes by motivation, revenues, evasion possibility, and tax base

Tax	Primary motivation <sup>a</sup>	Secondary motivation <sup>b</sup>	Revenues 2003, billion SEK <sup>c</sup>	Evasion possibilities <sup>d</sup>	Tax liable
Municipal income tax (on labor income)	Fiscal, aim to finance public goods and services.	Redistribution	403	Difficult to evade this tax due to the employer obligation to report to the tax authority. However, all income earned in the "black" economy evades this tax. Evasion is also possible through illegal deductions. Same as for the municipal income tax.	Income earners
State income tax (on labor income)	Redistribution	Fiscal	33	Evasion possible if not reporting who works how much in a firm.	Income earners
Payroll tax	Fiscal, Social security	Redistribution	316	For groups of companies transfer pricing makes evasion possible, but rather difficult.	Employers
Corporate tax	Fiscal	Redistribution, especially from capital owners.	40	Technically very easy to evade and conditioned upon that individuals receiving gifts report to tax authority. Now abolished.	Companies
Gift tax	Redistribution		0.3	Technically possible to evade for some types of capital as long as there are tax havens that do not report capital income to tax authorities in the home country. Difficult to evade wealth created by increased value of real estate.	Those receiving sizable gifts.
Wealth tax	Redistribution	Fiscal	5	Technically difficult to evade, since the tax is determined by sales of estate in the last couple of years. Evasion is partly possible by stating the wrong information about the estate to the tax authority.	Those owning wealth.
Real estate tax	Fiscal, tax base with low elasticity.	Redistribution	13	Technically difficult to evade to any significant extent. To evade, one can deregister but still use the vehicle.	Those owning real estate.
Annual vehicle tax	Fiscal, tax base exhibit low elasticity.	Externality motivation, since car use implies externalities.	8	Technically difficult to evade if you only fill up at gas stations. Possible by using e.g. diesel aimed for use in the agricultural sector.	Those owning a car or a motor cycle.
Carbon dioxide tax on gasoline and diesel	Externality motivation.	Fiscal, low price elasticity of demand.	24	Easy to evade if you produce or buy home-distilled alcohol; difficult if you buy alcoholic beverages.	Those buying fuels for transport purposes cars or motor cycles.
Alcohol tax	Externality motivation.	Fiscal	11		Those buying alcohol.

<sup>a</sup> Primary motivation refers to the main explicit function of the tax.

<sup>b</sup> Secondary motivation refers to whether the tax has other foreseen positive effects on the goal fulfillment of other political goals. Note that fiscally motivated taxes, naturally, are used for something supposedly good, including transfer between individuals as well as within groups of individuals over time. This implies that a fiscal motive is a prerequisite for many of the typical redistributive goals that a general welfare state is associated with (e.g. finance education, health care).

<sup>c</sup> Revenues are from the Swedish Tax Agency (STA, 2005a, Table 4.1, 5.1, 6.9, and 7.11) and show the relative importance of the tax from a public budget perspective. In 2003, one USD was approximately worth SEK 7.43.

<sup>d</sup> The ease at which the taxes can be evaded is here qualitatively assessed. Obviously, it is hard to quantify the magnitudes, but the relation between revenues and possibilities to evade taxes are of interest.

**Table 2**  
Perception of tax evasion for ten different taxes, in percent ( $n = 1670$ )<sup>a</sup>

	No answer	Very common	Rather common	Rather unusual	Very unusual	No opinion	Opinion balance <sup>b</sup>
Municipal income tax	1.0	7.1	23.1	36.0	10.0	22.8	-15.8
State income tax	1.4	8.6	26.6	32.5	8.8	22.1	-6.1
Payroll tax	1.7	7.9	28.7	28.8	5.1	27.9	+2.7
Corporate tax	1.6	10.4	29.0	20.6	3.5	34.8	+15.3
Gift tax	1.6	17.5	34.2	16.9	3.3	26.3	+31.5
Wealth tax	1.4	18.6	37.2	15.6	3.8	23.5	+36.4
Real estate tax	1.5	4.7	17.3	35.2	16.6	24.8	-29.8
Annual vehicle tax	2.0	2.6	10.0	35.3	26.5	23.7	-49.2
Carbon dioxide tax on gasoline and diesel	1.5	2.7	9.6	31.4	25.0	29.8	-44.1
Alcohol tax	1.3	9.9	17.4	24.0	18.9	28.4	-15.6

<sup>a</sup> Answer to the question: How common do you think tax evasion is among people who are obliged to pay the following taxes?

<sup>b</sup> The opinion balance is calculated by ("Very common" + "Rather common") - ("Rather unusual" + "Very unusual").

could be assumed to affect perceived tax evasion, we consequently state our last, somewhat simplistic, hypothesis:

**H4.** The perception of tax evasion differs among taxes.

#### 4. Data

We investigate perceived evasion of ten Swedish taxes: municipal and state labor income taxes, payroll tax, corporate tax, gift tax, wealth tax, real estate tax, vehicle tax, carbon dioxide tax, and alcohol tax. Table 1 schematically presents the studied taxes to highlight how they differ in some crucial dimensions.

Table 1 makes clear that evasion possibilities differ among taxes. For example, taxes on labor can be escaped through excessive deductions. However, employers report employee income to the tax authorities, which makes it unlikely that regular income earners are able to evade income taxes completely. Activities in the "black" economy are by nature hard to measure, but working in the black economy could of course enable evasion of income taxes. The now eliminated gift tax was very easy to evade,<sup>14</sup> especially for gifts other than real estate or other registered assets. After receiving a gift worth more than SEK 10,000, one had to fill out and submit a form declaring the size of the gift.<sup>15</sup> This self-reporting system made it easy to evade the gift tax, and the possibility to audit this tax was quite limited. Also the net wealth tax could need a few words of explanation, since Sweden is one of few countries with such a tax. The wealth tax was 1.5% of net wealth above SEK 1.5 millions for singles during the studied period and 2 millions for couples. The other extreme is the annual vehicle tax, which is based on the national vehicle register. The only possibility to evade this tax is to deregister the car while still using it. Since a deregistered car has a special mark on its rear license plate, such fraud is easily detected.

We use survey responses to a mail questionnaire sent out in the fall of 2004 to a random sample of 3000 Swedes, aged 18–85, whose addresses were collected from the National Register. In total 1774 individuals returned the questionnaire (net response rate is 64%). The sample is considered representative for the Swedish population at large.<sup>16</sup> Out of the 1774 respondents, 1670 answered at least

one of the questions on tax evasion. The following question was asked:

How common do you think tax evasion is among people who are obliged to pay the following taxes?

Table 2 shows the responses for the ten studied taxes. As shown by the "opinion balance"<sup>17</sup> to the far right in the table, we see that the perceptions differ significantly among taxes. This fact supports the fourth hypothesis that it might be fruitful to look at several taxes as opposed to a general perception of tax evasion. The two taxes that the respondents think are the most cheated with are the gift tax (+31%) and the wealth tax (+36%). Conversely, people perceive the annual vehicle tax (-49%) and the tax on carbon dioxide (-44%) to be the least evaded. It is important to stress that these figures only consider those who stated an opinion on tax evasion and that there were many (between 22 and 35%) who did not state any opinion about evasion of one or more taxes.

If we view Table 2 from the perspective of tax motives, we see a rather interesting pattern. The two taxes that most people assume others to evade – the taxes on wealth and gifts – turn out to be taxes primarily aimed at redistribution. These taxes also have a smaller tax base than many of the other taxes since mostly rich people are tax liable. The least evaded taxes according to the respondents (vehicle and carbon dioxide taxes) are taxes paid by many people<sup>18</sup>; the carbon dioxide tax is mainly motivated from an externality perspective, while the vehicle tax mainly has a fiscal motivation as well as an externality motive. If we look at Table 2 and relate it to evasion possibilities (cf. Table 1), we also conclude that easily evaded taxes are perceived to be evaded to a larger extent than taxes that are technically harder to evade.

As discussed above, there are several possible explanations to perceived tax evasion. Table 3 presents the summary statistics for all included variables. The degree of generalized trust captures trust in other taxpayers. In the questionnaire the respondents were asked to what extent people in general can be trusted. The answers could be distributed from 0 (People in general cannot be trusted) to 10 (People in general can be trusted). We create two dummy variables: If the answer is 8–10 one is trusting, and if it is 0–3 one is distrusting (i.e. 4–7 represents the reference group).

Since not all taxes are directed to all people, the degree of generalized trust may not be important for all taxes. The payroll tax and the corporate tax are taxes that should be paid by companies. For these taxes, we also include trust and distrust in large corporations

<sup>14</sup> The gift tax was abolished December 17th, 2004, i.e. after the data collection for this study took place; see below.

<sup>15</sup> The gift tax was then 10% of the gift amount exceeding SEK 10,000 up to SEK 300,000 if the donor and recipient were close family (spouse or descendent) and up to SEK 70,000 for other relations. The tax was progressive so that the amounts exceeding 300,000 and 70,000 respectively were then taxed at 20% and above a final gift amount (varying depending on relation between donor and recipient) the tax was 30% of the gift.

<sup>16</sup> The SOM institute (Society-Opinion-Media) administers the data collection. The institute is managed jointly by the Department of Political Science, Public Administration and Journalism/Mass Communication at Göteborg University. See <http://www.som.gu.se/english.htm> for more information on the SOM institute, and

Nilsson (2005) for a thorough description of sample characteristics in comparison to Sweden at large.

<sup>17</sup> The opinion balance is calculated by ("Very common" + "Rather common") - ("Rather unusual" + "Very unusual").

<sup>18</sup> In our sample, 86% of the respondents have access to a car in the household.

**Table 3**  
Summary statistics

Variable	Description	Obs.	Mean
Political trust	Political trust for the Swedish Parliament is 4 or 5 on a five grade scale	1207	0.25
Political distrust	Political trust for the Swedish Parliament is 1 or 2 on a five grade scale	1207	0.32
Generalized trust	Generalized trust is 8–10 on a 0–10 scale	1222	0.39
Generalized distrust	Generalized trust is 0–3 on a 0–10 scale	1222	0.06
Trust in large corporations	Trust in large corporations is 4 or 5 on a five grade scale	1200	0.21
Distrust in large corporations	Trust in large corporations is 1 or 2 on a five grade scale	1200	0.38
Trust in small businesses	Trust in small businesses is 4 or 5 on a five grade scale	1208	0.53
Distrust in small businesses	Trust in small businesses is 1 or 2 on a five grade scale	1208	0.07
University or College	Studies at university or has university degree	1221	0.31
High income	If the household earns more than 300 kSEK (single adult) or 500 kSEK (two or more) per year	1238	0.16
Low income	If the household earns less than 200 kSEK (single adult) or 300 kSEK (two or more) per year	1238	0.23
Home owner	Home owner	1238	0.54
Big city	If the individual lives in big city area	1220	0.64
Countryside	If the individual lives in the countryside	1220	0.16
Car owner	If access to car in the household	1230	0.86
Company owner	If the individual owns a company	1088	0.11
Aged 15–29	Age 15–29 years	1238	0.15
Aged 65–85	Age 65–85 years	1238	0.21
Female	Female	1238	0.46

**Table 4**  
Description of tax attitudes among those who state an opinion

	Obs.	Share believing evasion is common	Share wanting to decrease the tax
Municipal income tax	1180	0.39	0.56
State income tax	1171	0.45	0.59
Payroll tax	998	0.50	0.64
Corporate tax	818	0.59	0.32
Gift tax	1079	0.72	0.76
Wealth tax	1125	0.74	0.50
Real estate tax	1151	0.29	0.78
Annual vehicle tax	1175	0.16	0.54
Carbon dioxide tax on gasoline and diesel	1087	0.17	0.53
Alcohol tax	1110	0.38	0.60

and in small businesses.<sup>19</sup> These dummy variables are designed in the same manner as the degree of generalized trust, although the respondents here only had five alternatives. Distrust is represented by 1–2 and trust by 4–5 (i.e. 3 represents the reference group). By comparing the figures, we see that people in general trust small firms to a much larger extent than large ones. We have the same structure for political trust, where the respondents were asked to what extent on a five-degree scale they trust the politicians in the parliament to perform their tasks.

Since we focus on perceived tax evasion, we try to control for the extent to which the respondent is familiar with the various taxes and actual evasion possibilities. We do so by including information on some relevant background factors closely related to specific taxes. These are being a home owner for the real estate tax, car owner for carbon dioxide tax and annual vehicle tax, and company owner for payroll and corporate taxes.

We have no information of social acceptance of tax evasion per se, but we do have information about whether one wants to decrease the tax rate or not. In Table 4, we present the share of respondents who want to decrease the tax together with the share who think that tax evasion is very or rather common. Among the taxes in our study, the real estate and gift taxes are the most

unpopular.<sup>20</sup> Table 4 contains fewer observations than Table 2, because in Table 4, as well as in the regressions, we only include respondents who actually have an opinion on tax evasion in order to avoid measurement errors in the dependent variable.<sup>21</sup>

Furthermore, we control for age, university education, gender, and income. Since income is not a continuous variable in the SOM survey, we categorize respondents into three groups: low, middle, and high income earners. In the regressions, middle income earners serve as the reference group.

### 5. Logistic regression to explain perceived tax evasion

In order to analyze what makes people think that others evade different taxes, we run logistic regressions. As the dependent variable we use whether one thinks that tax evasion is very or rather common (=1) compared to rather or very unusual (=0).<sup>22</sup> We try to avoid some of the endogeneity problems by using predicted probabilities of thinking that the tax rate is too high as one of the explanatory variables.<sup>23</sup> The other explanatory variables used in estimations are assumed to be exogenous.

In Table 5, we present the results from logistic regressions in estimated odds ratios. A value above one indicates that the variable increases the probability of perceived tax evasion, whereas an estimate below one means that the variable decreases the same

<sup>19</sup> Trust and distrust in small businesses are included in the regressions for income taxes as well. The reason for this is that tax evasion through black market work has to be sanctioned by the employer, which is more likely in small businesses than in large corporations.

<sup>20</sup> In a related paper, Hammar et al., 2006 analyze the attitudes towards different taxes and find that there is only weak support for increasing taxes, but that the “support” varies. Support is highest for the carbon dioxide tax on gasoline and diesel, tax on wealth, and for the corporate tax. Moreover, most people prefer to decrease or completely remove the real estate tax and the gift tax.

<sup>21</sup> One could, of course, argue that we should include even fewer respondents, namely only those who actually have an opinion about all the taxes. However, this would imply less information from all the respondents who have an explicit opinion about some tax or taxes that they are more familiar with (for those tax regressions with most observations in Table 5, this would result in roughly 400 observations less). It should also be noted that it probably is the respondents with explicit opinions on perceived tax evasion for some taxes, but not for others, who to some extent drive the results.

<sup>22</sup> In order to have enough variation in the dependent variable, however, the gift and wealth taxes are coded according to whether one believes it is very common (=1), and the “rather common” category is included in the reference group (=0).

<sup>23</sup> Since the other explanatory variables can be expected to also determine attitudes towards the tax levels, we first run logit regressions where whether one wants to decrease the tax in question constitutes the dependent variable. Then we predict probabilities for wanting to decrease the tax, and finally use these predicted probabilities as instruments in the logistic regressions.

**Table 5**  
 Explanations of the perception that tax evasion is common (=1), estimated odds ratios

	Municipal income tax	State income tax	Payroll tax	Corporate tax	Real estate tax	Gift tax	Wealth tax	Alcohol tax	Vehicle tax	Carbon dioxide tax
The tax is too high	1.55***	1.31**	0.53	0.35**	0.86	0.92	0.29***	0.85	1.24	1.22
Generalized trust	0.77*	0.79*	0.81	0.69*	1.11	1.14	0.88	0.90	0.80	1.05
Generalized distrust	1.06	1.10	1.27	0.80	1.56*	1.21	1.07	1.48*	0.61	1.73*
Political trust	0.75*	0.77	0.97	0.98	0.93	0.98	0.96	0.92	0.80	0.68*
Political distrust	1.42**	1.43**	1.82**	2.42**	1.94**	1.95**	2.54***	1.21	0.97	0.83
Trust in large corporations	-	-	1.26	0.77	-	-	-	-	-	-
Distrust in large corporations	-	-	1.48**	1.90**	-	-	-	-	-	-
Trust in small businesses	0.81	0.80*	0.67**	0.81	-	-	-	-	-	-
Distrust in small businesses	1.68**	1.35	1.19	2.60**	-	-	-	-	-	-
University or College	0.87	0.87	0.90	0.85	0.75*	1.25	1.07	1.02	0.42***	0.58***
High income	1.44**	1.25	1.32	0.89	1.23	1.61**	1.14	1.06	0.99	0.80
Low income	0.89	0.99	0.89	0.91	1.37	0.71	1.12	0.83	1.19	1.03
Home owner	-	-	-	-	0.62**	-	-	-	-	-
Car owner	-	-	-	-	-	-	-	-	0.62**	0.56**
Company owner	1.13	0.91	0.44**	0.44**	-	-	-	-	-	-
Aged 15–29	0.81	0.85	1.36	1.16	1.68***	1.39	0.61**	1.36*	1.78***	1.25
Aged 65–85	1.05	1.06	1.06	1.26	0.48***	1.18	0.59**	1.24	0.57**	0.78
Female	0.85	0.99	1.66***	1.52**	1.51***	0.72**	0.92	1.16	1.58***	1.41**
Number of observations	1039	1028	845	766	1006	891	1024	939	1112	1029

\*  $p < 0.10$ .

\*\*  $p < 0.05$ .

\*\*\*  $p < 0.01$ .

probability and the farther from 1, the greater is the impact. We find that the hypothesized result that a too high tax rate increases perceived tax evasion only holds for the two income taxes, but those effects are strong and highly significant; in terms of municipal income tax, the probability of perceiving evasion as common increases by 55% if one regards the tax as too high.

The hypothesis that generalized trust should have a negative, and distrust a positive, impact on perceived tax evasion for taxes with a broad tax base is confirmed. Generalized trust decreases the perceived evasion of the municipal income tax. Hence, those who think that people in general are trustworthy believe that the municipal income tax is evaded less than other people think and we find the same effect, although a bit weaker, for the state income tax and the corporate tax as well. Those who distrust people suspect more evasion of alcohol, carbon dioxide, and real estate taxes. Generalized trust and distrust have no effect on perceived evasion of the gift and wealth taxes, probably indicating that “people in general” are not liable for those taxes. The vehicle tax is very hard to evade, so it may very well be the case that even if people distrust others, they simply do not believe that they have a possibility to evade that tax. When it comes to taxes paid by companies, distrust in large corporations and small businesses turns out to have strong effects on perceived tax evasion on the payroll tax and the corporate income tax. This indicates that if people trust the taxpayers (individuals or firms), they believe they pay their taxes. We also include trust and distrust in small businesses for the two direct income taxes. We find that those who distrust small businesses think that evasion of the municipal income tax is significantly higher than others, but the effect on the state income tax is weaker. This comes as no surprise, because owners of small firms seldom have sufficiently high incomes to be obliged to pay the state income tax.

We notice that political distrust is more important than trust (compared to the “middle” trust group). Those who distrust the politicians in the parliament are more likely than others to think that tax evasion is common. This result is significant for all primarily redistributive and fiscal taxes, i.e. all taxes except the alcohol, vehicle, and carbon dioxide tax. As mentioned above, this result is in line with the findings by STA (2005b), which claims that the most common explanation of tax evasion in Sweden is that “Individuals in prominent positions are breaking social norms.”<sup>24</sup> Moreover, we find that there is no significant political trust dimension for taxes intended to correct for externalities.

People who are likely to pay a particular tax think that evasion is less common of that tax. Compared with people not owning a home, home owners are less likely to suspect evasion from the real estate tax. The same pattern is found for car owners in terms of vehicle and carbon dioxide taxes and for company owners in terms of payroll and corporate taxes. One possible explanation of this is that they “know” or have experienced the relative difficulties in evading these taxes, alternatively that their own experience is that people do not cheat with these taxes (for other reasons). A third possibility may be a kind of self-serving bias – they do not expect people with whom they have a lot in common to be evaders.

## 6. Concluding remarks

In this paper, we have studied the Swedish people’s perceptions of the occurrence of tax evasion. Our main result is that distrust in politicians increases perceived evasion of redistributive and fiscal taxes, and that the effects are strong. We also find that distrust in

<sup>24</sup> It should also be noted that the variable political distrust and its effects are independent of political attitudes. Our results on perceived tax evasion are independent of political attitudes as well.

politicians is more important than trust or distrust in fellow citizens in explaining the perception of tax evasion for most of the studied taxes.

The standard result, that higher tax rates increase the probability of tax evasion, is derived in models with income taxes only and with a dominating substitution effect (see e.g. Allingham and Sandmo, 1972). Thus, these results are further corroborated in this study. People who think that income taxes are too high also believe that evasion of these taxes is more common. However, we find no similar result for other taxes.

We have shown that the perceived tax evasion and the factors explaining it vary across taxes. This fact points at the importance of analyzing tax evasion and compliance of different taxes separately, instead of treating tax evasion as one common phenomenon. The two Swedish taxes that people think are the most evaded are the gift and wealth taxes, two taxes that are primarily motivated by redistribution. Here political distrust is a very important determinant of perceived tax evasion. These taxes are to a large extent based on self-reported information and are therefore rather easily evaded, since compliance relies on people's willingness to comply.

Thinking a couple of steps ahead, we find important implications for politicians in countries with large welfare states. The general welfare state requires significant tax revenues, and in a non-totalitarian society there must be some degree of voluntary compliance. As long as people's preparedness to comply with the tax system is dependent on what others do and there are evasion possibilities, people need to trust that the politicians do a good job, both in official and private matters. If those in leading positions do not set good examples it may have severe effects on social norms, making people in general believe that tax evasion is more common, irrespective of whether they trust their fellow citizens or not. This in turn may have a negative impact on true compliance: "If I am convinced that everyone else is cheating, why should I be honest?" (cf. Frey and Torgler, 2006). If we are correct in this, setting a good example and avoiding scandals hence become tremendously important for politicians, not only in order to become re-elected, but also in terms of the probabilities of financing the politics during the current term of office. However, it is probably worth being a bit cautious regarding the interpretation of political trust. We ask for trust in politicians, but political distrust may in fact be a sign of something else and more fundamental, a more general aversion to the political system as such. However, with our data we are unable to make that distinction, but it is naturally an important task for future research.

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