Schneider, Friedrich; Kirchler, Erich; Maciejovsky, Boris

Working Paper
Tax avoidance, tax evasion, and tax flight: Do legal differences matter?

Working Paper, No. 0104

Provided in Cooperation with:
Johannes Kepler University of Linz, Department of Economics

Suggested Citation: Schneider, Friedrich; Kirchler, Erich; Maciejovsky, Boris (2001): Tax avoidance, tax evasion, and tax flight: Do legal differences matter?, Working Paper, No. 0104, Johannes Kepler University of Linz, Department of Economics, Linz

This Version is available at:
http://hdl.handle.net/10419/73290

Terms of use:
Documents in EconStor may be saved and copied for your personal and scholarly purposes.
You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.
Social Representations on Tax Avoidance, Tax Evasion, and Tax Flight:  
Do Legal Differences Matter?  

by  

Friedrich Schneider, Erich Kirchler and Boris Maciejovsky  

Working Paper No. 0104  
March 2001
Social Representations on
Tax Avoidance, Tax Evasion, and Tax Flight:
Do Legal Differences Matter?$

Erich Kirchler*, Boris Maciejovsky*, Friedrich Schneider‡

March, 2001

Abstract
Although from an economic point of view, legal considerations apart, tax avoidance, tax evasion and tax flight have similar effects, namely a reduction of revenue yields, and are based on the same desire to reduce the tax burden, it is likely that individuals perceive them as different and as unequally fair. Overall, 252 fiscal officers, business students, business lawyers, and entrepreneurs produced spontaneous associations to a scenario either describing tax avoidance, tax evasion, or tax flight, and evaluated it as positive, neutral or negative. The results indicate that social representations differ with respect to tax avoidance, tax evasion, and tax flight. Tax evasion was perceived rather negatively, tax flight neutrally, and tax avoidance positively. Tax knowledge was found not to be correlated neither with tax avoidance nor with tax evasion.

Keywords: Tax Evasion; Social Representations; Tax Knowledge
JEL-Classification: H26; K34; K42
PsycInfo Classification: 2900; 4200

§ The authors gratefully acknowledge research assistance by Michael Senoner and Nicola Trink.
* University of Vienna, Department of Psychology, Unit of Economic Psychology, Universitaetsstrasse 7, A-1010 Vienna, Austria
º Humboldt-University of Berlin, Department of Economics, Institute for Economic Theory III, Spandauer Strasse 1, D-10178 Berlin, Germany
‡ Johannes Kepler University of Linz, Department of Economics, A-4040 Linz-Aufhof, Austria.
1. Introduction

From a macro-economic perspective – legal considerations apart - tax avoidance, tax evasion, and tax flight have similar negative effects on the national budget. Hence, economists suggest to analyze their effects jointly, and no longer discriminate between them (e.g., Cross and Shaw, 1982). However, from a psychological perspective it is assumed that taxpayers perceive tax avoidance, tax evasion, and tax flight differently, despite their identical economic consequences.

In this paper we contrast the two research positions by investigating social representations of tax avoidance, tax evasion, and tax flight. Social representations (Moscovici, 1981; 1984) allow a direct comparison of economic and psychological predictions on the same data level. Since the economic line of reasoning focuses on the macro-perspective, we cannot study individual opinions or attitudes but rather their socially embedded equivalents, the so-called social representations.

The paper is organized as follows: In section 1.1 definitions of tax avoidance, tax evasion, and tax flight are provided as well as empirical research is discussed. Section 1.2 deals with the concept of social representations, and in section 1.3 our hypotheses are introduced. Section 2 deals with the research method, particularly with the participants, the design, the material, and the procedure. In section 3 our results are presented, particularly focussing on the central core of the social representations, their semantic contents, attitudes towards tax avoidance, tax evasion, and tax flight, their perceived fairness, as well as tax knowledge. Eventually, in section 4 we discuss the most striking results.

1.1 Tax avoidance, tax evasion, and tax flight

Tax avoidance refers to an attempt to reduce tax payments by legal means, for instance by exploiting tax-loopholes, whereas tax evasion refers to an illegal reduction of tax payments, for instance by underreporting income or by stating higher deduction-rates.¹ Tax flight refers to the relocation of businesses, only in order to save taxes, for instance by making use of offshore tax havens.

¹ In reality however there are many gray areas that do not permit an easy differentiation between tax avoidance and tax evasion (Slemrod and Yitzhaki, 2000).
Since tax avoidance, tax evasion, and tax flight have similar effects, namely a reduction of revenue yields, and are based on the same desire to reduce the tax burden, economists suggest not to differentiate between them, but rather to analyze their effects jointly (Cross and Shaw, 1982). However, this line of argumentation – solely focusing on analytical research methods – takes not into account results of empirical evidence on actual tax behavior. The prescriptive power of analytical models of tax evasion (e.g., Allingham and Sandmo, 1972), mainly focusing on exogenous variables like audit-frequency and sanction, lacks conclusive empirical evidence, indicating that the sole consideration of monetary consequences is not sufficient to reliably describe actual behavior (Alm, McClelland and Schulze, 1999; Baldry, 1987; Bosco and Mittone, 1997; Cullis and Lewis, 1997; Kaplan and Reckers, 1985; Webley, Robben, Elffers and Hessing, 1991).

There is a substantial body of literature available on individual tax evasion, underlying the importance of psychological factors on the decision-outcome, like framing effects (e.g., Chang, Nichols and Schultz, 1987; Kirchler and Maciejovsky, 2001; Robben, Webley Elffers and Hessing, 1990; Schepanski and Shearer, 1995), perceived justice (e.g., Dornstein, 1987; Kirchler, 1997; Spicer and Becker, 1980; Spicer and Lundstedt, 1976), the importance of attitudinal aspects (e.g., Kirchler, 1999; Lewis, 1979; Vogel, 1974), the role of opportunity (e.g., Clotfelter, 1983; Groenland and van Veldhoven, 1983; Porcano, 1988; Wärneryd and Walerud, 1982; Weigel, Hessing and Elffers, 1987; Wallschutzky, 1984), etc. There are also other studies focusing on legal tax avoidance, indicating that respondents believe that the "ordinary man" has to bear most of the tax burden (Kinsey, 1984) and they wish to reduce tax-loopholes (Song and Yarbrough, 1978). However, while there is a large number of studies available either focusing on tax avoidance or on tax evasion, hardly any studies have been concerned with the differentiation of tax avoidance and tax evasion.

1.2 Social representations

Social representations are defined as the sum of socially shared ideas, opinions, and attitudes (Moscovici, 1981; 1984). They are a broad defined concept, capturing social reality, and having similarity with myths, beliefs, and ideologies. Moscovici and Hewstone (1983) extend the concept of social representations by defining them as "common-sense" theories. Thus, instead of focusing on individual attitudes and opinions, everyday-knowledge becomes the centre of research interest.
The sum of socially shared knowledge, concepts, and beliefs which are embedded in a social net comprises psychological as well as sociological factors. The production and the function of social representations are closely related to one another. Social representations serve as means to establish coherence within groups and to allow a distinction between groups.

Vergès (1987) distinguishes between three aspects of social representations: (i) relevant attitudes, opinions and evaluations towards an object, (ii) available information and knowledge about an object, and (iii) the structure of emotional, cognitive, and motivational factors associated with an object. Abric (1996) distinguishes between the central core and the peripheral system of social representations. The central core is defined as a stable, un-negotiable, and non-transformable part of the representations, whereas the peripheral system accounts for inter-individual differences with respect to a stimulus object.

Social representations are not investigated by questionnaires, structured interviews or experiments, but rather in a setting that allows respondents to reply freely, for instance by producing spontaneous associations to a stimulus object.

1.3 Hypotheses

Since from a macro-perspective, tax avoidance, tax evasion, and tax flight have similar effects on revenue yields, and are based on the same desire to reduce the tax burden, economists suggest to analyze their effects jointly (e.g., Cross an Shaw, 1982). However, from a psychological point of view it is likely that taxpayers discriminate between tax avoidance, tax evasion, and tax flight, and perceive them as unequally fair. According to the macro-perspective of the economic line of reasoning, social representations are investigated in order to contrast predictions of economics and psychology on the same data level.

*Hypothesis 1:* An analysis of social representations on tax avoidance, tax evasion, and tax flight allows for a clear distinction between them.

In addition, we do not only expect that tax avoidance, tax evasion, and tax flight are socially perceived differently, but also that they are perceived as unequally fair.

*Hypothesis 2:* Tax avoidance is expected to be perceived more positively than tax flight which in turn is expected to be perceived more positively than tax evasion.
Empirical evidence indicates that tax knowledge is correlated with tax compliance. Groenland and van Veldhoven (1983) showed that profound tax knowledge implies low tax compliance, whereas the results of a study by Kirchler and Maciejovsky (2001) imply the opposite to be true, little tax knowledge was associated with low tax compliance. Eriksen and Fallan (1996) showed that following an increase in tax knowledge, respondents consider their own tax evasion as more serious, the perceived fairness in taxation increased, and attitudes towards other people’s tax evasion became stricter. Since Kirchler and Maciejovsky (2001) report that little tax knowledge is associated with low tax compliance, one plausible explanation could be that tax knowledge is positively correlated with legal tax avoidance and at the same time negatively correlated with illegal tax evasion.

Hypothesis 3: Tax knowledge is positively correlated with legal tax avoidance and negatively correlated with illegal tax evasion.

2. Method

2.1 Participants and design

Overall, 252 fiscal officers, students of economics and business administration specializing in auditing and accounting, business lawyers, and entrepreneurs participated in the study. A detailed description of the subsamples is provided in Table 1.

Insert Table 1 about here

The study was conducted as a 3 x 4 factorial design. Independent variables were (i) a fictive scenario of a person engaged in tax avoidance, tax evasion, or tax flight, and (ii) respondents’ employment groups (tax officers, business students, business lawyers, and entrepreneurs). Both experimental factors were between-subjects factors, and participants were randomly presented one of the three scenarios. The assignment of employment groups to scenario conditions is shown in Table 2.

Insert Table 2 about here

2.2 Material and procedure

Participants read one of the three scenarios (see Figure 1), produced spontaneous associations to it, and evaluated them as positive, neutral or negative. Before starting the associative task,
participants were asked to answer a control question about the scenario for a manipulation check. Overall, ten participants failed to respond correctly. Their data were excluded from the analyses. In addition to the associations, participants were asked to judge perceived fairness of tax avoidance, tax evasion, and tax flight (scale ranging from 1 = unfair to 9 = fair), and to respond to a multiple-choice test on tax knowledge (see Appendix).

Fiscal officers were approached during a further education program; students at lectures at the university; business lawyers were contacted through large law agencies; and entrepreneurs were contacted in their firms and stores. Responding to the questionnaire took approximately 25 minutes.

3. Results

In the following, free associations of four employment groups on tax avoidance, tax evasion, and tax flight were analyzed, (i) for detection of a possible central core and the peripheral system of social representations, and (ii) for semantic contents. Moreover, (iii) attitudes towards tax behavior and (iv) fairness judgments were investigated, as well as (v) tax knowledge.

3.1 Central core of social representations towards tax behavior

Participants were asked to produce spontaneous associations to the scenario in the questionnaire. Overall, 880 associations were produced, 507 of them were different. In the condition with the scenario on tax avoidance, 261 associations were counted of which 156 were different. In the condition on tax evasion, 309 associations were generated of which 182 were different, and in the condition on tax flight, participants produced 310 different associations of which 169 were different.

Table 3 displays the most likely core elements of the associations on tax avoidance, tax evasion, and tax flight. Associations were ranked according to their frequency of being mentioned and to their average position in the association process. The program Evoc (Vergés, 19xx) was used to determine the cut-off level for frequencies and to determine the
means of the associations. Only those associations were analyzed which were not literal repetitions of what was written in the scenarios.

Overall, 5 associations were identified as most likely core elements of tax avoidance, 11 associations as core elements of tax evasion, and 4 associations as most likely core elements of tax flight. Tax avoidance was associated with legal, with an intention to save taxes, with cleverness and a good idea as well as with costs. Tax evasion, on the other hand, was associated with illegal, fraud, criminal prosecution, risk, tax-audit, punishable, penalty, and the risk of getting caught. Also, rather neutral associations like income declaration and tax saving as well as black money were produced. Tax flight was associated with an intention to save taxes, with an impression that taxes are substantially lower abroad as well as with double tax agreement and costs of relocation.

Participants clearly distinguished between tax avoidance, tax evasion, and tax flight in their spontaneously produced associations as expected under hypothesis 1. Tax avoidance was associated with legality and cleverness, whereas tax evasion was considered to be illegal, a criminal offence, and as being risky. Eventually, tax flight was associated with the lower perceived tax burden abroad and with an intention to save taxes, but also with associated costs of relocating and with the restriction of double tax agreements. Interestingly, tax saving was considered to be a motive for all three tax-reduction possibilities, namely for tax avoidance, tax evasion, and for tax flight. However, they differ with respect to the perceived importance of that motive. Tax saving was highly considered to be a central motive for tax flight and tax avoidance, but was only mentioned relatively late in the association process for tax evasion, indicating that the wish to save taxes is overlaid by thoughts of illegality, risk, or by criminal prosecution.

3.2 Semantic content of social representations towards tax behavior

In a further step of analysis, the 507 different associations were categorized. First, four experts developed a category scheme according to the associations. Overall, 35 semantic categories plus an additional category for those associations that do not fit in the regular scheme were developed. Then, three further experts explained the categories and instructed to categorize independently all different associations into the 36 categories. In case
of disagreement the experts had to further discuss until an agreement was reached. Table 4 shows the categories and the respective characteristic associations as well as frequencies of associations by experimental conditions. The categories "literal repetition of the scenario" as well as the "rest"-category were not included in the analysis.\textsuperscript{2}

Insert Table 4 about here

A correspondence analysis on frequencies displayed in Table 4 yielded two dimensions which explained 31\% and 23\% of the variance. The two dimensions divide the data according to (i) legality and (ii) to morality. Figure 2 indicates that the produced associations on tax avoidance, tax evasion, and tax flight are clearly differentiated from one another as indicated by the corresponding clusters, irrespective of the employment group.

Insert Figure 2 about here

Tax avoidance was perceived as legal and as moral, tax evasion as illegal and immoral, and finally tax flight as legal and as immoral. More precisely, tax avoidance was associated with the acceptance of tax reduction, the make use of tax allowances, legal tax reduction, horizontal justice, and with tax loophole. Tax evasion was associated with risk tendency, peccadillo, intentional evasion, audit and sanction, opportunity, black money, inacceptance, unintentional errors, and with vertical justice. Hence, tax evasion again is basically associated with shadow economy and is considered as a criminal offence. Tax flight was associated with tax havens, negative consequences of tax flight, with flight abroad, bureaucracy, economic advantages of tax flight, economic consequences, with unprofitable, with criticism on the tax system, and with the wish to reduce the tax burden.

3.3 Attitudes towards tax behavior

Participants were asked to evaluate their spontaneously produced associations. According to these responses attitudinal indices were computed (de Rosa, 1996). The polarity index results from the difference between the number of positive and negative associations, related to the total number of associations produced by a participant. It ranges from -1 (negative attitude) to +1 (positive attitude). The neutrality index is calculated as the relative frequency of neutral associations related to the total number of associations. It varies from 0 to 1.

\textsuperscript{2} An additional correspondence analysis was run with all 36 categories leading to similar results.
Two 3 by 4 analyses of variance with scenario and employment groups as independent variables and polarity index as well as neutrality index as dependent variables yielded the following results: For the polarity index, only the scenario was significant \( F(2; 208) = 5.22; p < .001 \), indicating that independent of employment group \( F(3; 208) = 0.95, p = .42 \), participants produced most negative associations in the condition of tax evasion \( (M = -.26; SD = .48) \); rather neutral associations in the tax flight condition \( (M = .11; SD = .56) \) and relatively positive associations in the tax avoidance condition \( (M = .29; SD = .52) \), as expected under hypothesis 2. With regard to the neutrality index, the analysis of variance revealed a main effect for employment group \( F(3; 208) = 5.60; p < .01 \), whereas the scenario had no influence \( F(2; 208) = 1.23, p = .29 \). Fiscal officers \( (M = .35; SD = .29) \) and entrepreneurs \( (M = .31; SD = .32) \) produced the least neutral associations, followed by business lawyers \( (M = .24; SD = .27) \). To the contrary, business students produced rather neutral associations \( (M = .17; SD = .23) \).

3.4 Subjective fairness of tax behavior

Participants in all experimental conditions were asked to answer three items on subjective fairness of tax avoidance, tax evasion, and tax flight on a nine-step scale, ranging from 1 = unfair to 9 = fair. It was hypothesized that despite the fact that tax avoidance, tax evasion, and tax flight lead to identical economic consequences, they are not perceived as equally fair by taxpayers.

A repeated analysis of variance with tax avoidance, tax evasion, and tax flight as repeated factor and employment group as independent factor indicates significant differences between the sample \( F(3; 243) = 9.18, p < .001 \). In all employment groups tax avoidance was considered to be fairest \( (M = 8.17; SD = 1.84) \), whereas tax evasion was considered to be unfairest \( (M = 2.92; SD = 2.27) \). Subjective fairness of tax flight was rated in between tax avoidance and tax evasion \( (M = 6.34; SD = 2.79) \), as predicted under hypothesis 2. Figure 3 indicates that fiscal officers generally perceived all three tax-reduction possibilities to be unfairer, whereas entrepreneurs considered tax flight to be fairer in comparison to others.
3.5 Attitudes and perceived fairness within the context of tax knowledge

Overall, participants were asked to answer 10 multiple-choice questions on tax knowledge (see Appendix; Cronbach = .62). In each question they had to choose the correct answer out of four possible ones. An index was computed out of the ten questions, ranging from 0 = no correct answers to 1 = all questions correctly answered.

An analysis of variance with tax knowledge as dependent factor and employment group as independent factor yields significant differences between the sample with respect to knowledge (F(3; 238) = 74.88, p < .001). Fiscal officers scored highest (M_F = .94, SD_F = .08), followed by business students (M_S = .88, SD_S = .12), and business lawyers (M_L = .80, SD_L = .20). Entrepreneurs, on the contrary, achieved the poorest results (M_E = .51, SD_E = .18), may be because they rely on professional advice when tax issues are concerned.

With respect to hypothesis 3, it was investigated whether tax knowledge is positively correlated with tax avoidance and negatively correlated with tax evasion. Our results, however, do not confirm this conjecture. Considering the whole sample tax knowledge is neither correlated with the perceived fairness of tax evasion (r(238) = -.06, p = .33), nor with the perceived fairness of tax avoidance (r(242) = -.02, p = .80). However, for the subsample of business lawyers and entrepreneurs it was shown that profound tax knowledge is positively correlated with perceived fairness of tax avoidance (r(56) = .56, p < .001; r(37) = .33, p < .05), indicating that the better one’s knowledge the fairer (s)he perceives tax avoidance. For the subsample of fiscal officers, on the other hand, it could be shown that tax knowledge is negatively correlated with perceived fairness of tax evasion (r(70) = -.24, p < .05), indicating that the lower one’s knowledge about taxes the fairer one perceives illegal evasion.

4. Discussion

Our results indicate that despite the similar effects of tax avoidance, tax evasion, and tax flight on revenue yields, 252 fiscal officers, business students, business lawyers, and entrepreneurs clearly discriminated in their spontaneously produced associations between them. Tax avoidance was perceived as legal and as moral, tax evasion as illegal and immoral, and finally tax flight as legal and as immoral. In addition, tax avoidance was more positively evaluated than tax flight and than tax evasion, which was least positively evaluated. Tax knowledge was found not to be correlated neither with tax avoidance nor with tax evasion.
References


Vergès, P. 19xx. Evoc


Table 1: Socio-demographic characteristics of the sample

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Fiscal officers</th>
<th>Business students</th>
<th>Business lawyers</th>
<th>Entrepreneurs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>75</td>
<td>82</td>
<td>56</td>
<td>39</td>
<td>252</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>34</td>
<td>40</td>
<td>17</td>
<td>8</td>
<td>99</td>
</tr>
<tr>
<td>Male</td>
<td>32</td>
<td>40</td>
<td>39</td>
<td>29</td>
<td>140</td>
</tr>
<tr>
<td>Missing values</td>
<td>9</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>28.84</td>
<td>26.13</td>
<td>33.43</td>
<td>45.74</td>
<td>31.62</td>
</tr>
<tr>
<td>SD</td>
<td>7.06</td>
<td>6.86</td>
<td>6.17</td>
<td>12.50</td>
<td>10.28</td>
</tr>
<tr>
<td>Missing values</td>
<td>19</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td>Formal education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compulsory school</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Secondary school</td>
<td>45</td>
<td>74</td>
<td>0</td>
<td>12</td>
<td>131</td>
</tr>
<tr>
<td>College/university</td>
<td>23</td>
<td>6</td>
<td>56</td>
<td>8</td>
<td>93</td>
</tr>
<tr>
<td>Missing values</td>
<td>7</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Net monthly income in Austrian Shillings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 10,000</td>
<td>0</td>
<td>55</td>
<td>0</td>
<td>4</td>
<td>59</td>
</tr>
<tr>
<td>10,001 – 20,000</td>
<td>51</td>
<td>9</td>
<td>4</td>
<td>9</td>
<td>73</td>
</tr>
<tr>
<td>20,001 – 30,000</td>
<td>11</td>
<td>5</td>
<td>13</td>
<td>6</td>
<td>35</td>
</tr>
<tr>
<td>30,001 – 40,000</td>
<td>1</td>
<td>2</td>
<td>11</td>
<td>15</td>
<td>29</td>
</tr>
<tr>
<td>&gt; 40,000</td>
<td>0</td>
<td>0</td>
<td>26</td>
<td>0</td>
<td>26</td>
</tr>
<tr>
<td>Missing values</td>
<td>12</td>
<td>11</td>
<td>2</td>
<td>5</td>
<td>30</td>
</tr>
</tbody>
</table>

Note: 100 Austrian Shillings equal 7.27 Euro or 6.92 US$ (June, 2000)
Table 2: Participants by experimental condition

<table>
<thead>
<tr>
<th>Employment groups</th>
<th>Tax avoidance</th>
<th>Tax evasion</th>
<th>Tax flight</th>
<th>Incorrectly answered control question</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal officers</td>
<td>21</td>
<td>21</td>
<td>33</td>
<td>3</td>
<td>75</td>
</tr>
<tr>
<td>Business students</td>
<td>27</td>
<td>28</td>
<td>27</td>
<td>5</td>
<td>82</td>
</tr>
<tr>
<td>Business lawyers</td>
<td>19</td>
<td>16</td>
<td>21</td>
<td>0</td>
<td>56</td>
</tr>
<tr>
<td>Entrepreneurs</td>
<td>13</td>
<td>15</td>
<td>11</td>
<td>2</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>80</td>
<td>92</td>
<td>10</td>
<td>252</td>
</tr>
</tbody>
</table>
Table 3: Most likely core elements of the associations on tax avoidance, tax evasion, and tax flight

<table>
<thead>
<tr>
<th>Associations</th>
<th>Tax avoidance</th>
<th>Tax evasion</th>
<th>Tax flight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>M</td>
<td>f</td>
</tr>
<tr>
<td>Legal</td>
<td>15</td>
<td>2.33</td>
<td>12</td>
</tr>
<tr>
<td>Tax saving</td>
<td>8</td>
<td>1.63</td>
<td>7</td>
</tr>
<tr>
<td>Clever</td>
<td>8</td>
<td>3.00</td>
<td>7</td>
</tr>
<tr>
<td>Good idea</td>
<td>5</td>
<td>1.60</td>
<td>6</td>
</tr>
<tr>
<td>Costs</td>
<td>5</td>
<td>2.60</td>
<td>5</td>
</tr>
<tr>
<td>Tax-audit</td>
<td>5</td>
<td>3.60</td>
<td></td>
</tr>
<tr>
<td>Black money</td>
<td>5</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>Tax saving</td>
<td>4</td>
<td>2.25</td>
<td></td>
</tr>
<tr>
<td>Punishable</td>
<td>4</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td>Penalty</td>
<td>4</td>
<td>4.00</td>
<td></td>
</tr>
<tr>
<td>To get caught</td>
<td>4</td>
<td>5.00</td>
<td></td>
</tr>
</tbody>
</table>

Note: The columns f refer to the absolute frequency of associations, and the columns M display the mean of the positions of the associations.
Table 4: Frequencies of categorized associations by employment group and scenario

<table>
<thead>
<tr>
<th>No.</th>
<th>Category</th>
<th>Fiscal officers</th>
<th>Business students</th>
<th>Business lawyers</th>
<th>Entrepreneurs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Intentional tax evasion</td>
<td>3</td>
<td>1</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Tax evasion based on errors</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Intransparency of the tax system</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>Tax havens</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Legal tax reduction</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Economic advantages of tax flight</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>Flight abroad</td>
<td>2</td>
<td>2</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Injustice</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>Vertical justice</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>Horizontal justice</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>Cleverness</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>Audit and sanction</td>
<td>0</td>
<td>8</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>13</td>
<td>Individual justification</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>Personal advantage</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>Illegal</td>
<td>1</td>
<td>7</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>16</td>
<td>Peccadillo</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>17</td>
<td>Negative consequences of tax flight</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>18</td>
<td>Economic consequences</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>19</td>
<td>Tax types</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>Harmonization of the tax system</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>21</td>
<td>Bureaucracy</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>22</td>
<td>Criticism on the tax system</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>23</td>
<td>Unprofitable</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>24</td>
<td>Inacceptence of tax reduction</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>25</td>
<td>Opportunity</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>26</td>
<td>Make use of tax allowances</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>27</td>
<td>Wish to reduce the tax burden</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>28</td>
<td>Risk tendency</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>29</td>
<td>Tax loophole</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>30</td>
<td>Acceptance of tax reduction</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>31</td>
<td>Black money</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>32</td>
<td>Reactance</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>33</td>
<td>Tax law</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>34</td>
<td>Tax office</td>
<td>0</td>
<td>6</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>
Mr. Paul K. is owner of a successful travel agency.

Last month he has earned an extra income in the amount of 75,000 Austrian Shillings for organizing a special event.

Mr. Paul K. considers to make use of legal tax loopholes in order to reduce his tax payments.

(Mr. Paul K. considers not to declare his extra income in his income declaration.)

[Mr. Paul K. considers to relocate his headquarters to another country in order to reduce the tax burden in the future.]

Note: The expression in the third paragraph without parentheses describes tax avoidance, the expression in parentheses describes tax evasion, whereas the expression in brackets describes tax flight.
Figure 2: Correspondence analysis of associations on tax avoidance, tax evasion, and tax flight with respect to employment group.
Figure 3: Perceived fairness of tax avoidance, tax evasion, and tax flight with respect to employment group
Appendix:

Multiple-choice test on tax knowledge (correct answers are indicated in *italics*).

1. Austria’s top marginal income tax-rate is? (32%; 42%; 50%; 60%)

2. For which of the following expenditures there is no tax allowance? (*third party insurance*; insurance premium for retirement; payments for tax consultants; payments for officially registered religious bodies)

3. Which tax had to be harmonized after Austria joined the European Union? (local taxes; *value-added tax*; income tax; capital yields tax)

4. How does the sales tax differ from value-added tax in Austria? (the sales tax is 10%, whereas the value-added tax is 20%; the sales tax is 20%, whereas the value-added tax is 10%; *both taxes are synonyms*; sales tax refers to entrepreneurs, whereas value-added tax refers to consumers)

5. The corporate income tax in Austria is? (25%; 34%; 48%; 60%)

6. Which of the following positions is not an essential part of a receipt? (time; date; amount; value-added tax)

7. What exception allows a financial year to be shorter than twelve months? (*a company is being set up or shut down*; tax authorities gain more insight in companies’ affairs; a shorter financial year is not allowed; a shorter financial year can be chosen individually)

8. Which of the following legal forms belongs to legal entities? (ordinary partnerships; sole proprietors; *corporations*; limited partnerships)

9. When is income tax not applicable? (when the income is illegal; *when the income is not listed in the codified law*; when the income has already been subject to another tax; there is no reason that income tax is not applicable)

10. Financial asset gains that belong to companies’ fixed assets of a limited are part of which income source? (*business income*; self-employed income; income from capital gains; other income)


9105 ZWEIMÜLLER, Josef, WINTER-EBMER, Rudolf: Manpower training programs and employment stability, in: Economics, 63, 1995, S. 128-130


9108 PFAFFERMAYR, Michael, WEISS, Christoph R., ZWEIMÜLLER, Josef: Farm income, market wages, and off-farm labour supply, in: Empirica, 18, 2, 1991, S. 221-235


9126 SCHNEIDER, Friedrich: Public choice - economic theory of politics; A survey in selected areas. Dezember 1992, in:


Barth, Erling and Zweimüller, Josef: Relative wages and profitability with respect to the size of firms: an empirical investigation for Austria. September 1993.


