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A Factorial Survey on the Acceptance of Inheritance Tax Evasion in Germany

Martin Abraham
University of Erlangen-Nuremberg

Kerstin Lorek
University of Erlangen-Nuremberg

Friedemann Richter
University of Erlangen-Nuremberg

Matthias Wrede
University of Erlangen-Nuremberg

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Martin Abraham, Kerstin Lorek,
Friedemann Richter, Matthias Wrede*

University of Erlangen-Nuremberg (FAU)

This version: June 2014

Abstract

Using the example of the inheritance tax, this paper examines whether and how the strictness of tax compliance norms depends on the interrelation between tax objectives, tax design, and taxed behavior. Building on the literature on tax evasion, optimal inheritance taxation, family economics, and social norms, the paper hypothesizes that a larger non-declared amount of transfer decreases the acceptability of tax evasion and that both an asset with emotional value and a higher degree of kinship increase the acceptance of evasion. Utilizing a survey with an experimental design on the acceptance of inheritance tax evasion that was conducted in Germany in 2012, the paper confirms these hypotheses empirically. The results indicate that violating a compliance norm is justifiable if the tax objectives are not infringed upon by the evasion or if the tax design is not considered useful to accomplish the aim of the tax. In contrast, the norm violation is less acceptable, if the underlying goal is at stake.

JEL Classification: H21, H24, H26

Keywords: tax compliance, social norms, tax evasion, inheritance tax

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*University of Erlangen-Nuremberg, School of Business and Economics, PO Box 3931, 90020 Nuremberg, Germany, corresponding author: e-mail: `matthias.wrede@fau.de`

1 Introduction

This paper builds on the tax compliance literature initiated by the work of Becker (1968) and Allingham and Sandmo (1972), on recent developments in optimal taxation theory, on family economics, and on the literature regarding social norms and institutions. The deterrence model of Allingham and Sandmo (1972) has been prevalent in the literature for many years (see, e.g., Yitzhaki, 1974; Andreoni, Erard, and Feinstein, 1998). It was previously stressed in the seminal work of Allingham and Sandmo (1972) that both pecuniary and non-pecuniary factors play an important role in explaining compliance behavior. However, their representation of a person's "reputation as a citizen" as something that can be adversely affected by noncompliance detection received less attention compared to their arguments about monetary deterrence. Since then, empirical results have repeatedly indicated that the observed level of compliance is often higher than predicted by the classical deterrence model (see, e.g., Alm, Jackson, and McKee, 1992). One shortcoming of these studies is that the perceived audit rate is assumed to be equal to the number of audits divided by the number of all tax files. According to a large-scale field experiment by Kleven, Knudsen, Kreiner, Pedersen, and Saez (2011), the gap between theoretical predictions based on this oversimplified definition of the audit rate and empirical findings can be somewhat explained by evasion possibilities. These authors examined the difference between self-reported income and income subject to third-party reporting in Denmark, concluding that there is substantially less evasion under third-party reporting. In Denmark, almost all income (95%) is third-party reported; thus, low overall evasion rates can be observed. Additional missing elements of understanding tax compliance decisions were put forward in behavioral studies (see, e.g., Cialdini, 1989; Alm, Jackson, and McKee, 1993; Torgler, 2002). These studies led to the consensus that other factors, such as norms (see, e.g., Wenzel, 2004; Traxler, 2010) or justice concerns (see, e.g., Wenzel, 2002; Alesina and Angeletos, 2005), are also important for explaining compliance behavior.

Within the last few decades, a vast empirical and theoretical body of literature has evolved that incorporates norms as an important determinant of tax compliance behavior. However, norms are often simply incorporated as a black box explanation of deviations from the standard deterrence model. This paper attempts to provide more detailed insights into the tax compliance norm and its determinants, focusing in particular on the interplay of tax objectives, tax design, and taxed behavior. In a theoretical discussion, we combine insights from different strands of literature and derive hypotheses on the strictness of a tax compliance norm, which we subsequently test empirically using data from a survey conducted in Germany in 2012.

Unlike most of the current literature, our focus is not on income taxation but rather on inheritance taxation. Inheritance taxes are interesting for at least two reasons. First, inheritances have become more relevant in recent years and will become even more so in the future as their share of national income is increasing (Piketty, 2011; Schinke, 2012). Inheritance accounts for a substantial source of personal wealth; thus, inheritance taxation could be a potentially desirable tool for redistribution. Second, inheritance taxes are controversially debated among scientists, policymakers, and the public (for an overview on

the controversy in the US, see Gale and Slemrod, 2001; Graetz and Shapiro, 2005), and some countries have recently abolished the inheritance tax altogether.

This paper makes two major contributions to the literature on tax compliance: it sharpens our understanding of the tax compliance norm in general and both derives theoretically and confirms empirically determinants of the inheritance-tax compliance norm. Referring to optimal taxation theory, family economics, and the literature on social norms, we provide theoretical arguments for a compliance norm and theoretically and empirically analyze the determinants of its strictness. Because we employ a factorial survey design, which lets respondents evaluate the acceptability of tax evasion under varying contextual information in a randomized setting, we are able to identify causal effects of situational factors on respondents' judgments about the acceptability of tax evasion. The analysis demonstrates that a large amount of evasion, an asset type without any emotional value, and lack of kinship between a bequeather and heir decreases the acceptance of evasion. The results indicate that violating a compliance norm is justifiable if the tax objectives are not infringed upon by the evasion or if the tax design is not considered useful for accomplishing the aim of the tax. In contrast, the norm violation is less acceptable if the underlying goal is at stake. The theoretical arguments and predictions can be considered as a more general perspective on the inclusion of social norms in economic theory.

Our paper has several general tax policy implications. First and foremost, to ensure a high level of tax compliance, any tax should be carefully designed to be consistent with the underlying goals of taxation, which in turn need to be shared by taxpayers. Second, the close relationship between tax objectives and the strictness of tax compliance norms may guide tax audits. If the sole goal of tax audits were to increase tax revenue, then tax audits should focus on those areas in which tax design and tax objectives are inconsistent. Thus, tax compliance norms are weak. If, however, tax audits were intended to be consistent with tax objectives, audits should primarily be carried out wherever the tax implements the goals of taxation appropriately because tax evaders in these areas not only violate legal norms but also social norms. Third and more specifically, our survey evidence suggests that the inheritance tax and its two-dimensional progressive tax schedule have considerable public support in Germany. This finding, however, does not imply that the underlying equity and efficiency tax objectives could not also be reached with alternative redistribution mechanisms such as an income tax or an annual wealth tax.

The paper is organized as follows. Section 2 provides empirical and descriptive evidence on the relevance and evolution of inheritances and wealth inequality in industrialized countries and gives some background information on the inheritance tax in Germany. Examining tax objectives and tax compliance norms, Section 3 derives the hypotheses on the strictness of tax compliance norms. Subsequently, Section 4 describes the survey experiment, its methodological background, and the results, including robustness checks. Section 5 presents concluding remarks.

2 The Relevance and Evolution of Inheritances and Inheritance Taxation

Because this paper relates the strictness of tax compliance norms to tax objectives and tax design using the example of the inheritance tax in Germany, it is informative to explain patterns of inheritance and tax institutions in Germany. Therefore, this section briefly describes empirical findings on inheritances in Western countries and provides an institutional background on the inheritance tax in Germany.

2.1 Empirical Findings on Inheritances and Wealth

Bequests and gifts account for a substantial proportion of personal income in industrialized countries. As shown by Piketty (2011) in France, the annual inheritance flows as a share of national income follow a U-shaped pattern in the long-run.[1] In the nineteenth and early twentieth century, the annual inheritance flow as share of national income was fairly high (20-25%). It fell in the middle of the twentieth century to less than 5%. Starting in the late twentieth-century, the share has been rising and has even been accelerating (Piketty, 2011). Similar patterns were found for the United Kingdom (Atkinson, 2013), Sweden (Ohlsson, Roine, and Waldenström, 2013), and Germany (Schinke, 2012). According to these macro-perspective estimations, inheritances have become more relevant in recent years and will become even more important in the future as their share of national income is increasing.

Additionally, since 1910 the rate of wealth inequality over time follows a U-shaped pattern. The wars and economic crises of the 20th century have reduced wealth inequality substantially, but the wealth concentration has increased since the 1970s (Alvaredo, Atkinson, Piketty, and Saez, 2013; Piketty and Saez, 2014). Wealth inequality is not only higher than income inequality (according to Grabka and Westermeier (2014), the Gini coefficient in Germany is 0.78[2]), but also strongly correlated with income inequality.

Earnings, education, and wealth are strongly correlated across generations.[3] The cumulative effect of intergenerational transmission via various channels, such as inherited ability, social capital investment (norms, networks), human capital investment, and inherited wealth, is that "parental income and wealth are strong predictors of the likely economic status of the next generation"(Bowles and Gintis, 2002). Recent studies have come to the conclusion that intergenerational mobility is highly persistent. For 1971-1993 cohorts in the US, rank-based measures of intergenerational mobility have remained stable (Chetty, Hendren, Kline, Saez, and Turner, 2014). Surname-occurrence measures of social mobility are stable across countries and over time (Clark, 2014). Because inequality has increased, the effects of intergenerational immobility are larger than in the past (Chetty, Hendren, Kline, Saez, and Turner, 2014). There is a broad body of literature disentangling

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[1]Analyzing data for France over the years 1820-2050.

[2]For cross-country comparisons, see Cowell, Karagiannaki, and McKnight (2012); European Central Bank (2013).

[3]For a recent overview of these correlations and causal effects, see Black and Devereux (2011).

the effects of nature and nurture on educational achievement and a person's respective ability to generate income. Plug and Vijverberg (2003) conclude that a large proportion of educational attainment in offspring can be explained by inherited ability. Sacerdote (2002) uses a data set with "quasi-random assignment of children to [adoptive] parents", showing sizeable treatment effects of family environment on education and socio-economic status. Although social environment and good educational institutions do indeed foster child development, there is evidence that the better-off can attain a cumulative advantage through multiple channels, both monetary and non-monetary. The empirical findings indicate both the rising importance of inheritances in general and an unequal distribution of the propensity to receive bequests within the population (Alvaredo, Atkinson, Piketty, and Saez, 2013). Some empirical evidence on the distribution and propensities of bequests is discussed in sociological literature. For instance, Szydlik (2004) shows that the (grown-up) children of well-off, well-educated, high-earning parents in Germany have a higher probability of receiving and of giving inheritances. Künemund, Motel-Klingebiel, and Kohli (2005) analyze the effect of gifts and inheritance on inequality among middle-aged children. They show that inequality can increase as a result of large bequests and gifts. Similar patterns are found for inter-vivos transfers. Albertini and Radl (2012) show for a set of European countries that there are higher propensities to receive inter-vivos transfers if the parental donors have higher income and are of a higher social class. One reason for this given is the wish of parents to avoid downward mobility, leading to greater support of children from higher-class parents than of children from lower-class parents.

2.2 Institutional Background of the Inheritance Tax in Germany

The design and perception of taxes is affected by institutions, including legal institutions and societal norms. These dimensions undoubtedly differ among countries.[4] Hence, the characteristics of these dimensions need to be evaluated on a country-level. The institutional settings for inheritance and gift taxation vary widely among different countries.[5] Although some countries, such as Australia, Canada, Austria, Norway, and Sweden, do not levy inheritance or estate taxes of any kind, there is heavy taxation on inheritances in other countries. Moreover, one must distinguish between two main types of bequest taxation. A distinction is made by the source of revenue collection. The estate tax is levied on the total bequest of the deceased, largely independent of kinship to recipients and allocation among them. In contrast, the inheritance tax is levied on the recipient's side and usually depends on certain characteristics and conditions of the heir (Cremer and Pestieau, 2006). The tax burden for large families is lower under a progressive inheritance tax than under a progressive estate tax (Hines Jr., 2010). Inheritance taxation is applied in Germany and is referred to in the study at hand.[6] Because the survey was conducted in Germany, the

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[4]See Masson and Pestieau (1997) for country classifications based on the type of taxation and freedom of bequest.

[5]See Cremer and Pestieau (2006) for a broader survey on wealth transfer taxation.

[6]Henceforth, for the sake of simplicity, the terms bequest, estate, and inheritance will be used interchangeably despite being well aware of the distinctions between them.

survey design relates to inheritance taxation and the determinants of tax allowances and exemptions granted in the German inheritance tax code.

In this section, we briefly provide relevant information on the institutional details of the German inheritance tax (for a brief overview on the reform act of 2009 and major changes, see Kessler and Eicke, 2009). We refer to the rules of law as of 2012 (based on the reform act of 2009), when the survey was conducted. The taxation of wealth transfers in Germany is regulated in the "Inheritance and Gift Tax Law"[7]. Inter-vivos transfers and testamentary transfers are treated as the same to prevent tax planning behavior. Three different tax classes exist. Bequests within the family are treated more generously by providing lower tax rates, higher allowances, and higher exemptions (for more details, see Table 8 in the Appendix). There are also special tax allowances for the pensions (the so called *Versorgungsfreibeträge*) of spouses and civil partners as well as tax allowances for children. Further exemptions exist for inherited real estate, business property and assets, and art and paintings. Real estate that is used for the heir's own use for a defined time period is not taxed at all. Business property and assets are subject to specific rules that can lead to lower taxes. Art and paintings that are of public interest and made available to the public or science receive a reduced tax as long as the costs to enable their public or scientific use are normally higher than the revenues received as a result of its being made available. The highly progressive tax schedule consists of seven tax brackets. Depending on the tax class and the value of the taxable bequest, tax rates vary from 7% to 50% (the schedule is shown in Table 9 in the Appendix). In 2012, 37% of cases are classified into tax class 3 (non-relatives) (Statistisches Bundesamt, 2012).

The revenue of the inheritance and gift tax is almost negligible from a federal level perspective. In 2012, the tax generated revenue of 4,304.7 million Euros, which is approximately 0.7 percent of the total tax revenue in 2012 (see Statistisches Bundesamt, 2012). Due to the high level of inheritance concentration and the progressive tax schedule, 55% of this tax revenue came from the 6% of taxpayers whose tax liabilities exceeded 500,000 Euros each.

3 Theoretical Analysis

The main underlying hypothesis of this paper is that the strictness of tax compliance norms is closely linked to the objectives of taxation and their interplays with tax instruments. To justify this hypothesis and to derive its implications, we consecutively examine tax design and tax compliance norms for inheritance taxation.

3.1 Tax Objectives and Tax Design

The literature on optimal taxation provides insights into the ideal tax design given some limitations in the availability of information and instruments. A set of models on optimal inheritance taxation have evolved based on the general optimal taxation theory. We will

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[7]Erbschaftsteuer- und Schenkungsteuergesetz (ErbStG)

briefly review the main properties and results, ultimately relating them to the evolution of inheritances (for a broader overview on the economic literature on inheritance taxation, see, Cremer and Pestieau, 2006; Boadway, Chamberlain, and Emmerson, 2010; Kopczuk, 2013). Following the infinite horizon models on capital taxation of Judd (1985) and Chamley (1986), the optimal inheritance tax should be zero in the long run, because a tax on capital income creates a growing distortion of inter-temporal choices. A similar result is given by Atkinson and Stiglitz (1976), who argue that non-linear earnings taxes are a more efficient tool for redistribution. However, recent research has shown that most results hold only under very strict model assumptions. In addition, bequest motives play a crucial role meaningfully calibrating the welfare function (see Cremer and Pestieau, 2006). Whereas taxation of accidental bequests is non-distortionary, taxation of planned bequeathing behavior that is based in altruism or exchange motives is markedly differently. In particular, it is stressed in the economic literature that optimal transfer taxes should account for welfare-relevant externalities, such as altruism and joy-from-giving motives (see Kaplow, 2008, 2010; Kopczuk, 2013). A recent paper by Piketty and Saez (2013) develops a model of optimal inheritance taxation that demonstrates the classic equity-efficiency trade-off. On the one hand, the inheritance tax may be an important instrument to redistribute money from the wealthy to the less fortunate because wealth is (increasingly) unequally distributed and the distribution of wealth transfers is strongly skewed positively. On the other hand, the tax distorts the savings of farsighted bequeathers and their labor supply (Hines Jr., 2013) in addition to being unable to distinguish the bequest motives. In short, efficiency arguments favor low tax rates or even the abolishment of inheritance taxes, whereas equity arguments focusing on unequal bequest propensities and unequal inheritance distributions support inheritance taxation. Piketty and Saez (2013) find that the optimal inheritance tax rate might be as large as 50-60% or even higher for top bequests.

Justice-related considerations such as horizontal and vertical equity play a major role in tax design. Persons with a higher socioeconomic status are more likely to receive a large bequest. Large bequests can lead to an accumulation of advantages, therefore increasing inequality. Persons with a lower socio-economic status receive fewer bequests of lesser value. A tax system that includes the taxation of large bequests could decrease inequality more strongly than a system that does not so. The design of the inheritance tax accounts for this by using larger tax rates for larger bequests. Thus, heirs receiving a larger bequest can be taxed more heavily than recipients of lower-value inheritances (vertical equity). People receiving assets of the same monetary value should be taxed equally (horizontal equity). However, this argument holds only under the assumption that inheritance taxation is a legitimate and efficient tool for redistribution. As argued by Hines Jr. (2010), the usefulness of intergenerational transfer taxes for redistribution should not be judged the analysis of inheritance and estate taxes alone but should also be compared to alternative options for income and wealth taxes. The evaluation of inheritance taxes therefore crucially depends on the underlying tax objectives.

As most inheritances and gifts take place within the family (see above), family values are affected by the inheritance and gift tax. The family is legally and socially seen as a unit of care and support (Pollak, 1985). Inheritances can be considered as a historically

evolved model of moral obligation. For a long period, the family was the only entity that supported family members in times of need (Becker and Murphy, 1988). This aspect of family is currently less pronounced in industrialized countries, but it still exists. For instance, parents are legally committed to care for their children up to a certain age, but grown-up children are often also still cared for by and endowed with gifts from their parents (Pollak, 1985). Additionally, with joint taxation, the view of family as unit of support is implemented in income tax law. Bequests can be seen as a final peace of support for remaining family members. Furthermore, families are considered to be institution that are investing in their members' wellbeing and education. Parents leave bequests and gifts to their children due to altruism (Becker, 1988) or paternalistic preferences (Pollak, 1988). Both motives include the utility of children in the utility function of parents; Pollak (1988) states that this applies even to grown-up children. Supposing that, compared to bequests to non-relatives, bequests within a family are intentional rather than accidental, optimal taxation theory implies that transfers within the family should be taxed less.[8] Those views are integrated into the tax design by the division of heirs in different tax classes depending on kinship and by allowing exemptions for close family members.

3.2   Tax Compliance Norms

German tax compliance laws are in "General Fiscal Law" and inheritance and gift-giving regulation are in "Inheritance and Gift Tax Law". Both define tax obligations and tax rates as well as sanctions for tax crimes. Those legal sanctions are instruments to support tax compliance through deterrence. The deterrence model has been discussed in economics since Allingham and Sandmo (1972) published the first formal model of tax compliance. The question of why people pay their taxes is being analyzed not only theoretically but also empirically using experiments, survey data, and process data (see, for an overview, e.g., Alm, Jackson, and McKee, 1992; Torgler, 2002). The main findings of this field of research are that the deterrence model cannot fully explain the high level of tax compliance in western countries. Assuming a rational actor who decides whether to evade or pay taxes based on benefits and costs, the observed level of tax evasion should be higher than it is (see Alm, McClelland, and Schulze, 1992). Reasons other than deterrence are assumed to influence people to pay their share of taxes. Those reasons are referred to as institutional factors and social and personal norms (Torgler, 2002).

Norms are "expectations about actions [one's own actions, those of other people or both] which express what action is right or what action is wrong"? (Coleman, 1987). For those expectations to be social norms, they have to be shared by others and sustained by their approval (Elster, 1989). For norms (legal as well as social) to be followed, people must be aware of the norms and they must accept them as legitimate. Furthermore, compliance with the norms must be controlled and enforced. Norms are enforced by internal and external sanctions. The sanctions influence the costs and benefits of an action and constrain the choices people make (Coleman, 1987). In the case of tax evasion, people behave according

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[8]Donations are an exception to this rule.

to the norm that everyone should pay taxes and should not evade them. If deviations are detected, one might not only face legal sanctions as defined in the "General Fiscal Law" but also informal sanctions such as negative attention, criticism, and ostracism (external sanctions) or guilt and shame (internal sanctions) (Doran, 2009; Bobek, Hageman, and Kelliher, 2013). Deviations from the norms can be observed and might be accepted by society if one or more of those requirements – awareness, legitimacy, and enforcement – are not fulfilled. It can be assumed that people are aware of the norm of inheritance tax compliance. Legally, this norm is controlled and enforced, although not at a level that allows for the detection of every deviation. Socially, the control and enforcement of this norm is more difficult. As tax declarations are not public and deviations can hardly be detected by other members of the society, it is difficult to control and enforce the social norm. Whether the norm of inheritance tax compliance is accepted as legitimate depends on the perceived usefulness of the norm as an instrument to fulfill the underlying dimensions and aims of the tax (at least in the long run).

The inheritance tax is especially considered to be an instrument for the government to increase equality of opportunities across families through redistribution. Evading taxes jeopardizes this redistribution. If this underlying goal is accepted, paying the tax should be considered a legitimate norm even though the people who have to pay inheritance taxes experience a financial loss. Non-compliant behavior should then not occur and not be accepted. The more that non-compliant behavior jeopardizes the legitimate aim of the tax, the stronger the non-acceptance. That implies that non-compliant behavior that does not jeopardize the legitimate aim of the norm is more accepted. This is the case if the aim of redistribution and reduction of inequality of opportunities is not endangered. There are two situations that can be considered to not endanger the mentioned aim: the evaded good has little value or the evaded good is not considered to be a useful instrument for redistribution. Because the value of inherited assets and the wealth of heirs are strongly positively correlated, evasion of goods of small value does not interfere with redistributive goals. The second situation is the case of bequests consisting of non-monetary assets. The objects have symbolic meanings and are important to the heir for remembering family members and traditions (Stum, 2000). They are loaded with memories of the late relative and represent the estate of the family more than money does. The assets create identity and give a feeling of belonging (Lettke and Lange, 2007; Beckert, 2008). Selling such a good to pay an inheritance tax would destroy the emotional value of the good and therefore lead to an efficiency loss. However, transaction costs also arise (e.g., for hiring a consultant to evaluate the value of the asset), which undermines the equity goal of the taxation. Furthermore, inherited assets often not only have a monetary but also a psychological or emotional value for the heir. The evasion of inheritance tax payments for inherited money is therefore considered to be more harmful to the aim of redistribution than an evasion for non-monetary assets. Moreover, the cost of control and sanctioning might be too high in situations that involve only small deviations that are not considered useful as redistribution instruments. Those arguments lead to the following two hypotheses.

Hypothesis 1 *The smaller the value of the evaded good, the greater the acceptability of*

tax evasion.

Hypothesis 2 *Tax evasion for non-monetary transfers with emotional value is more acceptable than tax evasion for money.*

As argued above, family values and considerations are important in situations of wealth transfers. The state is expected to respect the family as unit of care and support as well as accept the family's autonomy. Transfers within the family should not be exposed to state interference by taxation or at least only to mild tax rates. For the purpose of redistribution, only transfers between families should be subject to taxes. The tax law already includes family values by granting exemptions and using different tax classes depending on kinship. If people consider the existing rules to insufficiently respect family values, they may wish to implicitly grant larger allowances by accepting deviation. This could also be the case if people are not fully aware of existing allowances and tax rates. Hence, we would expect acceptance of evasion insofar as transfers within a family are concerned and less acceptance if transfers take place between persons of different families. From these consideratiosn the following hypothesis follows.

Hypothesis 3 *Tax evasion is more likely to be accepted when the transfer takes place between family members.*

A weak compliance norm and a low statutory tax rate are either substitutes or complements, depending on the assumptions of respondents. If respondents conjecture that tax rates do not differ across categories, status dependent compliance norms are a substitute for differentiated tax rates. If respondents take into consideration that tax rates are lower for close relatives and low values, the weak compliance norm complements the low tax rate.

4 Empirical Analysis

4.1 General Method

Kirchler and Wahl (2010) discuss research methods and empirical strategies used in the research on tax evasion. The topic is addressed in several studies using a variety of research methods, such as field and laboratory experiments, agent-based modeling and surveys (Kirchler and Wahl, 2010). We contribute to the literature by using a factorial survey design (also known as vignette analysis). In social science, the factorial survey is commonly used to study attitudes and justice considerations, e.g., fairness perceptions, risk attitudes, fair income distributions, or acceptability of a certain behavior, all of which rely on a specific situation or context. The method's major objective is to determine the relative importance of multiple prevalent factors simultaneously (Rossi and Nock, 1982). The experimental character of the method allows for the identification of causal effects. Vignettes are descriptions of (hypothetical) situations, in which the characteristics of interest can be systematically varied. Survey respondents are asked to evaluate the situation presented in the vignette on a given scale. Because the vignettes are assigned randomly and the

characteristics are varied systematically, one can interpret the judgments as the outcomes of an experimental situation. The respondents' judgments (dependent variable) can be explained by vignette characteristics (Level 1) and respondents' attributes (Level 2). Usually a respondent evaluates more than one of these vignettes. The resulting data therefore is nested (multilevel data). The variation in the vignettes and respondents characteristics is used to identify causal effects accordingly and to indicate the dimensions that matter most in a particular context.[9] We implement a factorial survey to analyze the strictness of a particular norm. A design is presented below to analyze situations and factors that could conflict with an existing tax compliance norm.

4.2   A Factorial Survey Design to Measure Prevailing Norms in the Context of Tax Evasion

We aim to measure the acceptance of (tax compliance) norm violations and to provide explanations for why these violations are viewed as agreeable in some situations and disagreeable in others. As outlined in Section 3, the conflicting goals of taxation might be an explanation and will be tested empirically. The vignette is designed as follows:

The **45**-year old **Mr.** Miller **inherits** stocks from his/her **father**, that are equal to the amount of the tax allowance, thus remaining tax-free. Additionally, he/she inherits **50,000** Euros **in cash**. Therefore, the total bequest exceeds the tax-free allowance, and the cash money is liable for taxation. Mr. Miller does not declare the cash to the tax authority and thus evades taxes.

In your opinion, how acceptable or unacceptable is the behavior of Mr. Miller?

The participants provided their answer on a 5-point Likert-scale
(1 - "completely unacceptable" to 5 - "completely acceptable")

Suppose evasion has been detected. Should the evader be penalized?

The respondents could answer either yes or no.

The vignettes consist of 6 dimensions with 2 to 4 different levels, which are gender, the heirs' ages, type of transfer, relationship, type of inheritance (assets), and extent of evasion. Table 1 provides an overview of the dimensions and their levels. The total vignette universe, the Cartesian product of all levels, is 768. After the exclusion of one implausible combination, which is family jewels from an acquaintance, the universe was reduced to 720 vignettes. Each vignette should be evaluated several times and by different persons. Because the number of participants was limited to 524 persons and - to have statistical

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[9]A more detailed introduction into the method is given in Rossi and Nock (1982) and Sauer, Liebig, Auspurg, Hinz, and Donaubauer (2009).

power - each vignette should be evaluated at least 6 times, it was necessary to select a subsample. A random subsample of 524 vignettes was drawn, and subsets (decks), each with 6 vignettes, were built. Thus, each participant had to answer 6 vignettes, and all sets of vignettes were presented to at least 6 participants. Due to dropouts, the final number of vignettes, 2866, is slightly lower than the maximum number of vignettes of 3144 ($3144 = 524 \times 6$). For each vignette, the respondents have to judge to which degree the given behavior is acceptable and whether the evader should be punished.

Dimension	Levels	#
Age of Heir	25, 45, 65	3
Heir's Gender	Male, Female	2
Type of Transfer	Inheritance, Gift	2
Relation between Testator and Heir	Father, Uncle, Close Friend, Acquaintance	4
Value of Bequest (in Euro)	5,000 €, 10,000 €, 50.000 €, 100,000 €	4
Type of Bequest (Asset Type)	Cash Money, Painting, Family Jewels,	
	Coin collection	4

Table 1: Dimensions and levels of vignettes

At the vignette level, gender can be considered a usual control variable. The same applies for type of transfer because both taxes on bequests and gifts are part of the unified inheritance and gift tax regulation. Age can be considered a signal for different economic situations and needs. The value of the evaded good can be used to evaluate vertical and horizontal equity considerations (Hypothesis 1). Moreover, the bequeathed asset type is varied to identify its use for redistribution. As outlined in Section 3, money can be easily taxed, divided and transferred among people. In contrast, a picture of equal value can be taxed, divided and transferred less easily and thus might be considered a less appropriate tool for redistribution. Thus, evasion of non-monetary items could be considered less severe because it does not infringe upon the redistributional goal of inheritance taxation (Hypothesis 2). Kinship is included to test Hypothesis 3. The degree of kinship is used to differentiate whether the motive to take care of a person varies by kinship within families and, more importantly, to analyze the differences between family members and unrelated persons.

In our analysis, we also control for relevant characteristics of the respondents, such as gender, age, education, income, family values, attitude toward redistribution, and whether they already received inheritances.

4.3   Data Collection & Sample

The survey was conducted using the WiSo-Panel, an online access panel run at the University of Freiburg. The Panel includes approximately 10,000 households (effective October 2011) that have agreed to participate in online surveys on an irregular basis (Göritz, 2011). Participation is voluntary (Opt-In-Panel) and incentivized by several means, such as money,

gifts, donations, and bonus points. Our sample includes 524 participants who answered the survey. The population in our sample is heterogeneous with respect to socio-demographic characteristics and recruiting practice.[10] The data were collected in September 2012. The vignette sets were programmed using STATA. The online questionnaire was programmed using UNIPARK. The recruiting was performed by WiSo-Panel.

Although the panel population is heterogeneous in its various socio-demographic dimensions, it is not fully representative of the German population. In our sample, the proportion of women is slightly larger than that of the population, and, on average, the respondents are significantly younger, better educated, and have higher incomes. Because participation is voluntary, participants are most likely more interested in social issues than the average citizen and are likely more interested in inheritance taxation in particular.[11]

The resulting data set is as follows:

1. Basic information on respondents (i.e., gender and age) with no missing values

2. Additional Respondent data collected in the survey, such as information on income, family orientation, and inheritance history. For some questions, incomplete data (missing values) exists.

3. Vignette judgments, which will be used primarily for our analysis.

4.4 Results

The answers of the respondents to the main question are rather uniformly distributed across levels of acceptance (see Table 2). On average, the respondents are slightly against penalties: the respondent wants to penalize the tax evader in only 46% of the cases. Because the fraction of respondents voting for a penalty declines with the level of acceptance, the answers can be considered consistent. Interestingly, in 103 cases, the participants do not want any punishment even though they consider tax evasion completely unacceptable. An explanation could be that these individuals have strong preferences for privacy protection or that they expect crowding out of intrinsic motivation by audits and fines. Those respondents who ask for punishment although they regard evasion as completely acceptable (57 cases) supposedly consider tax evasion as a gamble and do not have strong moral sentiments about it.

Although variations in levels of dimensions induced substantial variation in preferences on punishment and levels of acceptance, many participants vary neither punishment nor level of acceptance. A total of 169 participants never ask for punishment and 134 participants always do. Among the 162 participants who select the same level of acceptance throughout the survey, 57 consider evasion to be completely unacceptable and 42 consider evasion to be completely acceptable. 17, 32, and 14 respondents choose acceptance levels 2, 3, and 4, respectively. The fact that 99 individuals ($\approx 20\%$) always selected an extreme

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[10]The respondent sample is shown in Table 7 in the Appendix.

[11]Selection takes place at two stages. First, the participants had chosen to be included in the Panel and, second, they had accepted the invitation to participate in our particular survey on inheritance taxation.

Evasion ...	Penalty		Total
	No	Yes	
completely unacceptable	103	520	623
2	117	412	529
3	396	218	614
4	396	109	505
completely acceptable	538	57	595
Total	1,550	1,316	2,866

Table 2: Overview on answers

acceptance level indicates that a non-negligible fraction of the population has rather strong opinions on tax evasion.

Our preferred empirical estimation gives the acceptance level a metric interpretation. Although the treatment effects referred to by our main hypotheses are observed at the vignette level, the empirical analysis must take into account that respondents judge several vignettes. As a benchmark, the first two columns of Table 3 show ordinary-least-square (OLS) estimations of the treatment effects with standard errors clustered at the respondent level. Respondent characteristics are included in column (2), and they are not included in column (1). The OLS estimation gives a biased estimation of the treatment effects because the respondents' characteristics and the variables at the vignette level might be correlated and due to unobserved heterogeneity. The fixed-effect (FE) model shown in column (3) of Table 3 corrects for observed and unobserved heterogeneity at the respondent level. In columns (4) and (5), the results of a random-effect (RE) model without and with respondent-level variables are shown. Although the FE model is our preferred model because it does not assume orthogonality between individual characteristics and included explanatory variables, the RE model has some merit because we are not interested in the judgments of particular respondents and the RE model makes it possible to analyze the effects of observed respondents' characteristics. Furthermore, because the null hypothesis of nonsystematic differences in coefficients of the FE and the RE model without respondent-level variables cannot be rejected according to a Hausman test, the orthogonality assumption may hold, and a RE model can also be used. With respect to interpretation, this is a signal that the respondents' characteristics do not change the treatment effects significantly.

dep. var.: acceptance	(1) OLS	(2) OLS	(3) FE	(4) RE	(5) RE
Heir's gender: female	-0.075	-0.044	-0.068*	-0.068*	-0.068*
	(0.058)	(0.057)	(0.030)	(0.030)	(0.033)
Heir's age: 25	0.122*	0.153*	0.103**	0.104**	0.116**
	(0.060)	(0.060)	(0.037)	(0.037)	(0.039)
Heir's age: 45	0.022	0.039	0.034	0.033	0.038
	(0.064)	(0.065)	(0.038)	(0.038)	(0.040)
Transfer: gift	0.087	0.099	0.042	0.046	0.042
	(0.057)	(0.056)	(0.031)	(0.030)	(0.032)
Relation: father	0.189*	0.235**	0.168***	0.169***	0.175***
	(0.081)	(0.083)	(0.048)	(0.048)	(0.051)
Relation: uncle	0.131	0.148	0.141**	0.141**	0.120*
	(0.088)	(0.088)	(0.048)	(0.048)	(0.050)
Relation: close friend	0.115	0.151	0.044	0.049	0.034
	(0.082)	(0.085)	(0.046)	(0.046)	(0.049)
Type: painting	0.252***	0.169*	0.298***	0.294***	0.280***
	(0.075)	(0.079)	(0.049)	(0.049)	(0.051)
Type: jewels	0.184*	0.131	0.243***	0.239***	0.246***
	(0.077)	(0.080)	(0.054)	(0.053)	(0.058)
Type: coin collection	0.225**	0.166*	0.259***	0.256***	0.255***
	(0.078)	(0.077)	(0.051)	(0.050)	(0.052)
Value: 10000	-0.415***	-0.363***	-0.305***	-0.313***	-0.290***
	(0.080)	(0.085)	(0.048)	(0.047)	(0.051)
Value: 50000	-0.668***	-0.681***	-0.591***	-0.596***	-0.582***
	(0.083)	(0.088)	(0.050)	(0.049)	(0.053)
Value: 100000	-0.896***	-0.936***	-0.851***	-0.855***	-0.857***
	(0.088)	(0.089)	(0.060)	(0.060)	(0.064)
Respondent: medium income		0.285*			0.280*
		(0.136)			(0.137)
Respondent: high income		0.613**			0.608**
		(0.220)			(0.221)
Constant	3.123***	3.183***	3.076***	3.077***	3.104***
	(0.117)	(0.844)	(0.064)	(0.083)	(0.840)
Other respondent characteristics	no	yes	no	no	yes
Observations	2866	2502	2866	2866	2502
F	11.91	6.713	20.85		
σ_u			1.218	1.187	1.173
σ_e			0.727	0.727	0.723
R^2	0.0657	0.140			
R_a^2	0.0614	0.127	0.188		
R_w^2			0.191	0.191	0.194
R_b^2			0.0190	0.0193	0.118
R_o^2			0.0639	0.0641	0.137

Standard error clustered at the respondent level, *** $p<0.001$, ** $p<0.01$, * $p<0.05$

Reference categories: heir's gender: male, heir's age: 65, transfer: inheritance,
relation: acquaintance, type: cash money, value: 5000, respondent: low income

Table 3: OLS, FE, and RE estimates

The results shown in Table 3 enable us to make strong statements. First, the differences in coefficients and significance levels between the OLS estimations and the panel methods indicate that OLS is not appropriate due to unobserved heterogeneity. Second, at the vignette level, the FE model and the RE model give very similar results. The results do not depend on the estimation method, and differences in magnitude are negligible. Third, Hypotheses 1-3 are strongly supported by the data. Referring to Hypothesis 1, the empirical analysis shows the following result. Due to constraints in design such as a limited number of dimensions and levels, the value of the inheritance was designed as categorical variable. The value of 5,000 Euros served as a reference category. Our empirical analysis shows that higher values reduce the acceptance of tax evasion sizably. For instance, evading 100,000 Euros reduces the acceptability of this criminal behavior by approximately 0.86 scale points ($p < 0.001$ in FE) compared to the reference category. The comparison of the coefficients of 10,000, 50,000 and 100,000 Euros indicates that the effect of the value of bequests is non-linear and that the marginal effect declines if the value increases. Hypothesis 2 aims at possible differences between monetary and non-monetary assets, based on the explanations provided in Section 3. The differences among the non-monetary assets seem not to matter much. Nevertheless, the non-monetary assets are considered to be substantially different from the reference category, i.e., pure cash money. For instance, violating the disclosure requirements of a painting is more acceptable ($\beta = 0.298$, $p < 0.001$ in FE) than the evasion of money.[12] With respect to Hypothesis 3, the effects of kinship on acceptance of tax evasion are as follows. Again, the results are compared to a reference category (acquaintance). We find positive coefficients for intra-family transfers from the father ($\beta = 0.17$, $p < 0.001$) and the uncle ($\beta = 0.12$, $p < 0.01$) compared to the reference category.[13] These results support the hypothesis that intra-family transfers are different from transfers outside the family and that evasion of within-family transfers is slightly more accepted. Fourth, tax evasion by women is significantly less accepted than tax evasion by men. This may reflect traditional role models and is consistent with empirical evidence on gender differences in illegal behavior (Gilligan, 1982). Tax evasion by 25-year-old heirs is significantly more accepted than tax evasion by 65-year-old heirs, presumably because younger adults are on average less affluent and needier than people in their forties and sixties. Perhaps because bequests and gifts are close substitutes and the affluent have higher propensities to receive both bequests and inter-vivos transfers, bequests and inter-vivos transfers are treated similarly. Fifth, certain individual characteristics, such as gender, age, income, educational level, and received or expected inheritances, are controlled for at the respondent level. However, most of them are insignificant. An interesting result is the positive coefficient ($\beta = 0.6$, $p < 0.01$) of the high-income group (household net income > 3000 Euros) and the smaller positive coefficient ($\beta = 0.28$, $p < 0.05$) of the medium-income group (household net income between 1500 and 3000 Euros). The reference category is represented by the low-income group (household net income < 1500 Euros). However,

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[12]For the sake of simplicity, all coefficients will be presented in brackets and denoted as β.

[13]The result is robust to a specification in which the two family members are lumped together and compared to bequests made to people outside of the family.

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this result should be treated with care because this effect might represent a difference between the recipients of taxed transfers and others rather than a difference between high-income earners and low-income earners. Moreover, some answers from a questionnaire at the end of the survey were included to control for some possibly relevant attitudes. There are no significant effects for a positive attitude toward redistribution, inheritance expectations (being affected), and most items of questions to measure family support. Including respondents' characteristics affects the size and significance of the coefficients at the vignette level only marginally.

4.5   Robustness Check

In our main specification, we interpret the dependent variable as metric, although it is measured on a 5-point scale. However, we also estimate an ordered-logit model (Table 4 in the Appendix), taking into account the ordinal structure of the data, which shows similar results. Likewise, the inclusion of respondents' characteristics has only a minor effect on the size and significance of the vignette variables.

Using logit models, we examine the effect of vignette variables and respondents' characteristics on the willingness to penalize the tax evader. Even if the degree of acceptance varies, many respondents either penalize all evaders or none; thus, there is much less within-respondent variation for many vignette dimensions. With the exception of the coefficients of age and gender, the estimation results of the logit model and the RE-logit model (see Table 5 in the Appendix) are qualitatively consistent with the results shown in Table 3. However, age and gender have no effect on the willingness to punish the tax evader.

Using the same methods, we also analyze a dummy variable, which indicates weak acceptability if the variable acceptance has a value of 3 or higher. The results (see Table 6 in the Appendix) are largely consistent with the results we obtain from the analysis of the willingness to penalize the tax evader. Together with the ordered-logit estimation of the variable acceptance, this estimation makes us feel confident that our main results are quite robust regarding the specification of the dependent variable and the choice of the estimation model.

5   Concluding remarks

We consider tax evasion in which legal norms and social norms complement one another. Although there are substantial arguments that tax compliance is supported in general, in specific situations, there are competing motives that can alleviate the strictness of a compliance norm. In our empirical analysis, we show that fairness and equity considerations, as well as the desire to protect the family, play an important role for the evaluation of inheritance tax evasion. Respondents are more lenient if evasion takes place in intra-family transfers or through family-related assets. In contrast, evasion of large monetary amounts is considered less acceptable. All dimensions (kinship, value of bequest, asset type) are already integrated in the design of the German inheritance tax. Hence, the extent to which

respondents anticipate the law or would be in support of even stronger exemptions for families and higher tax rates for large bequests is unclear. Because it was necessary to limit the complexity of the factorial survey design, we cannot provide a clear-cut answer to this question. However, this is of minor relevance in the context of a research question that aims to evaluate the interplay between the compliance norm and tax objectives. Further research could analyze this situation more closely. Although not being in the heart of our analysis, we find that evasion of bequests that are targeted to younger people is more likely to be tolerated. This finding could be interesting for optimal tax theory and the debate on the role of tagging.

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Appendix

Additional Regression Outputs

	(1)	(2)
dep. var.: acceptance	Ordered Logit	Ordered Logit
Heir's gender: female	0.832*	0.828*
	(0.071)	(0.077)
Heir's age: 25	1.320**	1.328*
	(0.140)	(0.150)
Heir's age: 45	1.089	1.100
	(0.123)	(0.131)
Transfer: gift	1.142	1.122
	(0.099)	(0.103)
Relation: father	1.604***	1.691***
	(0.221)	(0.248)
Relation: uncle	1.398*	1.345*
	(0.195)	(0.199)
Relation: close friend	1.060	1.049
	(0.141)	(0.150)
Type: painting	2.602***	2.615***
	(0.378)	(0.410)
Type: jewels	2.275***	2.396***
	(0.364)	(0.420)
Type: coin collection	2.350***	2.437***
	(0.347)	(0.382)
Value: 10000	0.378***	0.395***
	(0.051)	(0.057)
Value: 50000	0.155***	0.155***
	(0.023)	(0.025)
Value: 100000	0.068***	0.065***
	(0.012)	(0.013)
Respondent: medium income		2.890*
		(1.384)
Respondent: high income		7.837**
		(6.189)
cut1	0.025***	0.076
	(0.008)	(0.221)
cut2	0.263***	0.852
	(0.073)	(2.473)
cut3	2.501***	7.366
	(0.693)	(21.359)
cut4	25.098***	78.571
	(7.644)	(228.073)
var(_cons[ID])	60746687.968***	17782704.443***
	(1.473e+08)	(43328082.276)
Other respondent characteristics	no	yes
Observations	2866	2502
Number of groups	485	417

Robust standard errors in parentheses, *** p<0.001, ** p<0.01, * p<0.05
Reference categories: heir's gender: male, heir's age: 65, transfer: inheritance, relation: acquaintance, type: cash money, value: 5000, respondent: low income

Table 4: Ordered logit: odds ratios

	(1)	(2)	(3)
dep. var.: punishment	Logit	RE Logit	RE Logit
Heir's gender: female	1.116	1.271	1.206
	(0.090)	(0.206)	(0.209)
Heir's age: 25	0.874	0.816	0.763
	(0.075)	(0.166)	(0.170)
Heir's age: 45	0.941	1.008	0.962
	(0.090)	(0.213)	(0.211)
Transfer: gift	0.855	0.815	0.847
	(0.071)	(0.137)	(0.152)
Relation: father	0.776*	0.522*	0.616
	(0.093)	(0.144)	(0.177)
Relation: uncle	0.804	0.584*	0.659
	(0.101)	(0.158)	(0.185)
Relation: close friend	0.839	0.729	0.868
	(0.102)	(0.191)	(0.237)
Type: painting	0.705**	0.220***	0.245***
	(0.084)	(0.064)	(0.074)
Type: jewels	0.751*	0.224***	0.198***
	(0.085)	(0.064)	(0.062)
Type: coin collection	0.741**	0.272***	0.301***
	(0.085)	(0.070)	(0.082)
Value: 10000	1.743***	4.650***	4.041***
	(0.217)	(1.337)	(1.240)
Value: 50000	2.522***	22.125***	19.297***
	(0.342)	(6.916)	(6.482)
Value: 100000	3.122***	46.848***	44.090***
	(0.398)	(16.514)	(16.851)
Respondent: medium income			0.689
			(0.585)
Respondent: high income			0.212
			(0.240)
Constant	0.722	0.265*	0.001
	(0.123)	(0.168)	(0.004)
$\ln(\sigma_u^2)$		34.496***	30.101***
		(7.819)	(7.255)
Other respondent characteristics	no	no	yes
Observations	2866	2866	2502
Number of groups		485	417

Standard errors clustered at the respondent level, *** $p<0.001$, ** $p<0.01$, * $p<0.05$

Reference categories: heir's gender: male, heir's age: 65, transfer: inheritance,
relation: acquaintance, type: cash money, value: 5000, respondent: low income

Table 5: Logit and RE-logit estimates: odds ratios

	(1)	(2)	(3)
dep. var.: weak acceptability	Logit	RE Logit	RE Logit
Heir's gender: female	0.900	0.807	0.804
	(0.076)	(0.123)	(0.131)
Heir's age: 25	1.153	1.558*	1.623*
	(0.109)	(0.308)	(0.344)
Heir's age: 45	1.062	1.345	1.311
	(0.104)	(0.260)	(0.271)
Transfer: gift	1.137	1.434*	1.368*
	(0.097)	(0.216)	(0.217)
Relation: father	1.250	1.930**	1.847*
	(0.157)	(0.479)	(0.488)
Relation: uncle	1.167	1.478	1.298
	(0.157)	(0.367)	(0.343)
Relation: close friend	1.037	0.879	0.818
	(0.133)	(0.221)	(0.220)
Type: painting	1.386**	2.941***	2.728***
	(0.162)	(0.763)	(0.768)
Type: jewels	1.243	2.051**	2.141**
	(0.144)	(0.503)	(0.563)
Type: coin collection	1.269*	2.293**	2.213**
	(0.152)	(0.584)	(0.604)
Value: 10000	0.555***	0.236***	0.261***
	(0.064)	(0.056)	(0.066)
Value: 50000	0.366***	0.071***	0.075***
	(0.047)	(0.019)	(0.022)
Value: 100000	0.318***	0.034***	0.034***
	(0.042)	(0.010)	(0.011)
Respondent: medium income			2.511
			(1.357)
Respondent: high income			11.532**
			(9.603)
Constant	0.809	0.314**	0.656
	(0.138)	(0.133)	(2.365)
$\ln(\sigma_u^2)$		21.461***	18.317***
		(3.616)	(3.180)
Other respondent characteristics	no	no	yes
Observations	2866	2866	2502
Number of groups		485	417

Standard errors clustered at the respondent level, *** $p<0.001$, ** $p<0.01$, * $p<0.05$

Reference categories: heir's gender: male, heir's age: 65, transfer: inheritance,

relation: acquaintance, type: cash money, value: 5000, respondent: low income

Table 6: Logit and RE-logit estimates: odds ratios

Characteristics of the respondents

Socio-Demographic Characteristics	Freq.	Perc.
Gender		
Female	278	53.05
Male	246	46.95
Age Groups		
15-24	43	8.21
25-44	225	42.94
45-64	199	37.98
65-86	57	10.88
Education		
No certificate (yet)	8	1.53
Lower secondary school certificate (Hauptschule)	49	9.35
Middle secondary school certificate (Realschule)	165	31.49
Higher secondary school certificate ((Fach-)Hochschulreife)	147	28.05
University degree ((Fach-)Hochschulabschluss)	140	26.72
PhD	15	2.86
Employment Status		
(Self-)employed	303	57.82
Schooling & Training	72	13.74
Retired	79	15.08
Unemployed	44	8.40
Parental Leave	4	0.76
Others	22	4.20
Family Status		
Married	212	45.59
Single	186	40.00
Divorced	56	12.04
Widowed	11	2.37
Income		
Less than 1500 Euro	168	39.44
1500 to 3000 Euro	190	44.60
More than 3000 Euro	68	15.96
Not stated	98	18.70

Table 7: Summary statistics

Tax Classes and Tax Rates

Tax class	Degree of kinship	Allowances (tax-free) EUR	Special allowance for provision	Household goods and other mobile physical goods
I	spouse, civil partner	500,000	256,000	41,000 plus 12,000
	(step)children	400,000	52,000 − 10,300 depending on age	
	children of late (step)children children of (step)children other offspring of (step)children	200,000		
	adoptive parents and grandparents (inheritance)	100,000		
II	(adoptive) parents and grandparents (gifts) siblings nieces and nephews stepparents divorced spouse repealed civil partner children in law parents in law	20,000		12,000
III	other heirs and donations	20,000		12,000

Table 8: Tax classes, exemptions, and allowances

Value of taxable bequest up to including. ... EUR	Rate in tax class		
	I	**II**	**III**
75,000	7	15	30
300,000	11	20	30
600,000	15	25	30
6,000,000	19	30	30
13,000,000	23	35	50
26,000,000	27	40	50
> 26,000,000	30	43	50

Table 9: Tax rates

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