

WORKING PAPER SERIES -

No. 41 | October 2020 | revised March 2021

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TRR 266 Accounting for Transparency

Funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation): Collaborative Research Center (SFB/TRR) – Project-ID 403041268 – TRR 266 Accounting for Transparency

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How Does Trust Affect Concessionary Behavior in Tax Bargaining?

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Abstract

We analyze the impact of trust on bargaining behavior between auditor and auditee in a tax setting. We study the effect of interpersonal trust and trust in government on both taxpayer and tax auditor. In an experiment with variation in pairwise trust settings, we find evidence that both kinds of trust affect the bargaining behavior, albeit in different ways. While trust in government increases taxpayers' tax offers, interpersonal trust may lead to more concessionary behavior of tax auditors moderated by trust in government. Our findings help tax authorities to shape programs to enhance compliance in an atmosphere of trust.

Keywords: Bargaining, behavioral taxation, interpersonal trust, tax audit, trust in government

JEL Classification: C92; D91; M40; H20; H25; H83

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We acknowledge valuable comments from James Alm, Harald Amberger, Kay Blaufus, Giorgio Coricelli, Ben Greiner, Martin Fochmann, Rita Julien, Matthias Kasper, Erich Kirchler, Reinald Koch, Jonathan Leigh Pemberton, Rainer Niemann, Rupert Sausgruber, Jason Seligman, Maximilian Zieser, participants of Paderborn University TAF Brown Bag Seminar, the 2nd DFG Workshop of the Scientific Network "Behavioral Taxation", the DIBT research seminar at WU Vienna, conference "Co-operative Compliance: Towards Improved Tax Certainty" at WU Vienna, the 82nd VHB Annual Business Researcher Conference, National Tax Association the 113th Annual Conference on Taxation, the 8th Annual Conference of the Tax Administration Research Centre. We also thank Steven Kachelmeier and Ben W. Van Landuyt for sharing details of their experiment. We gratefully acknowledge financial support from the Austrian Science Fund (FWF): W 1235-G16. Sureth-Sloane and Wu gratefully acknowledge financial support by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) – Collaborative Research Center (SFB/TRR) Project-ID 403041268 – TRR 266 Accounting for Transparency.

An earlier version of this paper circulated under the title "Sweetheart deals in tax bargaining? How trust affects concessionary behavior".

1. Introduction

This study analyzes how interpersonal trust between taxpayer and tax auditor, and both parties' trust in government, affect their bargaining behavior when discussing tax payments on ambiguous tax issues. We exploit the relationship between the taxpayer and the tax auditor, in a trustworthy or non-trustworthy government setting, to examine the multi-stage bargaining process and the resulting tax payments in an experimental research design.

Taxpayers—in particular, firms and their representatives—regularly find themselves in a position of "knowing that the resolution of the ultimate tax liability is often a long process of negotiation" (Slemrod, 2007). Tax-related bargaining in a lawful environment typically occurs for at least one of three reasons. First, it may occur where the rule of law, especially tax law, is only weakly pronounced (Egger et al., 2020) or is ambiguous. For instance, the discussion regarding appropriate transfer prices or hybrid finance leaves room for interpretation and affects the amount of tax due. Second, bargaining may apply both formally and informally during a tax audit to avoid litigation. In fact, tax settlements are preferred over litigation in most countries (Franzoni, 2004).¹ Third, bargaining situations may also arise in a cooperative compliance relationship, where tax auditor and taxpayer discuss potential disagreements in an early stage (Stojanovic, 2016; OECD, 2008, 2013). Several countries have established such programs, including Austria, Australia, the Netherlands, and the United Kingdom.

There is no uniform expectation on whether and how a trust-based relationship affects the outcome of a tax bargaining process. For example, cooperative compliance programs consistently emphasize the importance of trust as a compliance-enhancing measure, and Sweden has decided not to further pursue its cooperative compliance project, in part because of the perceived danger of cronyism and sweetheart deals, which would result in unequal treatment and unfair competition (Freedman et al., 2009; Björklund Larsen, 2016). Similarly, under a permanent tax audit, the interpersonal relationship between the tax payer and the tax auditor might evolve and affect tax bargaining decisions. In some countries—for

¹ For example, in the United States and Brazil (Viana and Alves, 2020), it is used as a formal path to avoid court proceeding.

example, Australia, Japan, and the Netherlands—tax auditors are rotated regularly to prevent them from developing relationships with taxpayers (OECD, 2006).

In such bargaining situations, it is not only institutions (the firm and the government authority) that are involved, but ultimately always individuals (in our case: the taxpayer and the tax auditor) who bargain and make decisions. While the effect of interpersonal trust on bargaining among two players is examined in extant psychology and decision analysis literature, the tax bargaining process has distinct features that have not been explicitly addressed in prior literature. First, bargaining partners are not at equal footing. Instead, usually taxpayers are subordinate to powers granted to the authority and its representatives by law. Second, a tax auditor acts as a representative of government, hence trust works in two ways: trust in government—i.e., the opinion that tax system and tax authorities are fair and add to the common good—and interpersonal trust between bargaining partners both apply, and the effect is ex-ante unclear. Third, while these features apply also to other bargaining situations between government representatives and citizens, for instance in the health, energy, or finance sector, a tax setting is special because cash implications of bargaining outcomes are immediately obvious.

Accordingly, we differentiate between two types of trust, *interpersonal trust* and *trust in government*. It is important to distinguish between these two forms of trust, as they may have different effects. Prior literature suggests that *interpersonal trust* makes one person favorably interpret another's intentions and actions (Uzzi, 2000). Higher levels of interpersonal trust in negotiations under ambiguity may foster a willingness to accept less favorable bargaining outcomes (Gargiulo and Ertug, 2006). In a tax bargaining situation between trusted individuals, the taxpayer may be more willing to pay higher tax, and the tax auditor may be more willing to demand less tax. The latter may even result in wrongful preferential treatment of the taxpayer, i.e., a sweetheart deal. This expectation is in line with psychology theory that suggests that social interaction leads to unwarranted affect-based trust by auditors, and that auditors compromise auditor skepticism (Hobson et al., 2020).

Moreover, *trust in government*, i.e., the opinion that tax authorities are benevolent and add to the common good, is likely to influence tax bargaining. A tax auditor's low trust in her own government

may negatively affect her efforts to negotiate higher tax payments effectively. The lack of goal congruence (e.g. tax auditors and tax authorities not sharing values or goals), and the lack of psychological capital (e.g. a government perceived as unfair or intransparent, and thus harming tax auditors' internal motivation) lead to low employee performance (Bouckenooghe et al., 2015).² In addition, building on the slippery slope framework in Kirchler et al. (2008), we expect low levels of trust in government to impair the taxpayer's willingness to pay higher taxes. To summarize, while trust in government may lead to a higher willingness to collect/pay taxes for both tax auditors and taxpayers to serve the country, interpersonal trust can have opposing effects on tax auditors.

To capture these potentially opposing incentives in our incentivized laboratory experiment, we generate a 2×2 design with 304 participants. After generating variation in interpersonal trust between the participants as well as variation in their trust in government, we randomly assign participants the role of either taxpayer or tax auditor and let them bargain about an ambiguous (yet legal) tax payment.³ We observe the participants' behavior at three stages of the tax bargaining process: the non-binding initial demand/offer before bargaining, the size of concessions made during bargaining, and the final demand/offer after bargaining.

Overall, we observe that *interpersonal trust* between taxpayers and tax auditors, and their *trust in government* affect the tax bargaining of taxpayers and tax auditors, but in different ways. First, we find complex effects of both types of trust on tax auditor bargaining behavior. Auditors with high trust in government and a low level of interpersonal trust in the taxpayer ask for higher initial tax payments (moderate concessionary tax auditor behavior). Auditors with low trust in government and some level of interpersonal trust in the taxpayer demand lower tax payments, i.e., they are less inclined to bargain a more favorable deal for their government (concessionary tax auditor behavior). Second, we find evidence

 $^{^{2}}$ We acknowledge that the government's goal is not maximizing tax payments, but rather collecting the right amount of taxes at the right time. However, we only look at an ambiguous amount of tax payments, which is considered "right" in any case regardless of the bargained amount. We assume that maximizing tax payments can be optimal for tax authorities, conditional on the fact that the full range is the "right" amount.

³ We consider only situations in line with the law. We do not consider wrongdoing scenarios such as corruption or tax evasion. For simplicity, we assume the bargaining is directly about tax payments. The outcome would be isomorphic for all types of bargaining, such as tax base, tax rate, or special treatment, as they all correspond to tax payments eventually.

for the effect of trust in government on taxpayer behavior, but no significant results for interpersonal trust affecting taxpayer behavior. Taxpayers with high levels of trust in government offer higher tax payments than taxpayers with a low level of trust in government (concessionary taxpayer behavior), in line with theory (Kirchler et al. 2008). To conclude, a high level of interpersonal trust increases the likelihood of concessions through tax auditor behavior, while a high level of trust in government decreases the likelihood of concessions through taxpayer behavior.

Our study contributes to the literature in three ways. First, we contribute to the literature on tax bargaining between taxpayers and tax authorities, by adding the behavioral aspect of trust and showing how different kinds of trust affect tax bargaining behavior. Previous literature has only considered situations where multinational firms bargain with host country governments about tax rules (Markle and Robinson 2019), tax rates (Doyle and van Wijnbergen, 1994; Bond and Samuelson, 1989) or tax deductions (Egger et al., 2020), and where taxpayers and tax authorities bargain for a pre-trial settlement (Franzoni, 2004).

Second, we contribute to the audit literature (Bame-Aldred and Kida, 2007; Kachelmeier, 2020; Nelson and Tan, 2005), especially the literature on tax auditor behavior (Roberts, 1995; Toma and Toma, 1992; Blaufus et al., 2020; Khan et al., 2016; Alissa et al., 2014). We show that not only auditors of financial statements (from private auditing firms), but also auditors as representatives of a government agency are likely to compromise under specific forms of trust. Although psychological factors have been considered for financial statement auditors (King, 2002; Quadackers et al., 2014; Koch and Salterio, 2017; Hobson et al., 2020; Kadous and Zhou, 2019; Aschauer et al., 2017), they are not yet well-researched in the case of tax auditors. Tax auditor behavior may differ from that of financial statement auditors, as the personal liability and intrinsic motivation are different: tax auditors are not personally liable for auditing errors and collecting more taxes may be regarded as beneficial for the greater good. Additionally, while financial statement auditors are hired by clients, tax auditors are instead employed by government; thus, the power dynamics between the two parties may be different. Prior research exploring taxpayer and tax auditor interaction is limited, and mostly uses standard game theory in a

principal-agency framework (Alm and McKee, 1998), or interviews (Smith and Stalans 1994). We complement their results by empirically investigating the effect of one informal factor (trust) on the interaction between taxpayer and tax auditor.⁴ We interpret tax auditors' trust in government as goal congruence between tax auditors and tax authorities, and thereby provide a new perspective on goal congruence problems. Also, we provide evidence that the interaction between taxpayer and tax auditor is important for the willingness to collect taxes. We complement Kachelmeier and Van Landuyt (2017) by showing that financial statement auditors, and also tax auditors, are more likely to compromise in cases of pleasant social interaction. Overall, as we single out the role of tax auditors as distinct from the tax authority they represent, our study highlights the role of the individual tax auditor in tax collection and how auditor discretion affects tax assessment decisions depending on her specific relationship with the taxpayer. Our findings suggest that tax authorities should be aware of interpersonal trust because under specific conditions it can potentially undermine the tax collection process.

Third, we contribute to tax psychology literature (Alm 2019, Blackwell 2007, Farrar et al. 2020, Feld and Frey 2002, Hofmann et al. 2008, Mascagni 2018, Mendoza et al. 2017), which focuses on trust between taxpayers and tax authorities but omits the role of tax auditors. Here we contribute by extending the application of the trust concept of the slippery slope framework by Kirchler et al. (2008) in two ways. First, we show that trust is relevant not only for taxpayers' decision on non-/compliance, but also for bargaining situations. Second, not only do we consider the taxpayer's trust in government, but we also add the tax auditor as an additional player in the tax game. More specifically, we introduce the concept of interpersonal trust between tax auditors and taxpayers and extend this body of research to examine the effect of interpersonal trust on tax bargaining and, thus, tax payments.

The results of our study are relevant for the design of governance in the public sector, as trust is a governance mechanism (Bradach and Eccles, 1989). Governance possibly aligns the interest of citizens with government, tax auditor/taxpayer with tax authority, and government agents with their government.

⁴ Murakami and Taguchi (2015) establish the role of individual trustworthiness for tax payments. We extend their experimental findings by adding how variations of different types of trust influence the behavior of taxpayers and tax auditors.

We provide evidence of the importance of governance in a tax authority: without good governance, recent tax policy programs such as cooperative compliance, aimed at increasing trust between taxpayers and tax authorities, may suffer from unintended consequences arising from interpersonal trust between tax auditors and taxpayers. Based on our results, tax authorities may consider implementing policy measures that foster trust in government while reducing interpersonal trust. More specifically, the implementation of co-operative compliance could include auditor rotation, or automated audit processes. Also, rotation seems important in traditional tax audits, because recurring audits by the same tax auditor might lead to situations of interpersonal trust and undermine the tax-collection process. Our findings may extend to non-tax settings, such as bargaining situations occurring in the financial, energy, or health industries. In these settings, representatives of government and non-government supervisory authorities encounter bargaining processes with subjected persons and representatives, leading to direct or indirect cash effects. Their bargaining behavior may also be affected by trust in the government, and by interpersonal trust.

2. Theory and Hypotheses Development

Most research on trust in the fields of psychology, sociology, management, and auditing emphasize the positive effects of trust on economic and/or social outcomes (Anderson & Weitz, 1989; Berg et al., 1995; Lewis & Weigert, 1985; McAllister, 1995; La Porta et al., 1997; Rousseau et al., 1998). One part of the trust literature is concerned with behavioral aspects of trust and its potentially detrimental consequences. We draw on this literature to predict how trust may influence the bargaining behavior of the taxpayer and the tax auditor and finally translates into tax payments.

2.1 Trust

Our study differentiates between interpersonal trust and trust in government. While a large part of the trust literature focuses on the consequences of interpersonal trust (e.g., Doney and Cannon, 1997), another stream highlights the importance of individuals' trust in public institutions (e.g., Lewis and Weigert, 1985). We define trust as "the willingness of a party to take a risk" (Lewis and Weigert, 1985)

and "to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Schoorman et al., 2007). In our study, this concept of trust is applicable to both interpersonal trust and trust in government, both at auditor and taxpayer level.

We follow Rousseau et al. (1998) and define interpersonal trust as "the intention to accept vulnerability based upon positive demands of the intentions or behavior of another."⁵ To define trust in government, we refer to Kirchler et al. (2008). We describe trust in government as a general opinion of individuals and social groups that the tax authorities are fair and work beneficially for the common good. From an ex-ante perspective, the two types of trust are expected to influence bargaining behavior differently, as discussed below.

2.2 Interpersonal Trust and Bargaining

Using a meta-analytic model, Kong et al. (2014) recognize three types of consequences that trust has on negotiation: behavior, extrinsic outcomes, and outcome satisfaction. We focus on the behavior and extrinsic outcomes and examine how interpersonal trust affects concessionary behavior in bargaining, including the non-binding initial demand/offer before bargaining that serves as an anchor, the concessions made during the bargaining process, and the final demand/offer after bargaining.

Theory suggests that interpersonal trust leads one person to positively interpret another person's intentions and actions (Uzzi, 2000). A higher degree of interpersonal trust during bargaining under ambiguity could lead to a willingness to accept less favorable bargaining outcomes. In other words, trust can be interpreted as the intention of the trusting person to adjust her behavior to satisfy the demands and needs of the trusted person (Anderson and Narus, 1990; Anderson and Weitz, 1989). In bargaining, parties with trust are more likely to exhibit a sense of empathy and concern for the outcomes of the other (Naquin and Paulson, 2003), behave less competitively, and make concessions towards an agreement

⁵ We focus on relationship-based trust, i.e., trust that arises from affect (affect-based trust). It is also called affect-based trust, identification-based trust, emotional trust, relational trust, or personal trust. In other words, we look at the social perspective of trust, rather than the rational perspective.

(Pruitt, 1983; Ross and Wieland, 1996; Ross and Chen, 2004). Gargiulo and Gokhan Ertug (2006) argue that people are more likely to be complacent and accept less satisfactory outcomes in a relationship with trust. It is thus likely that higher levels of interpersonal trust lead to a more concessionary bargaining behavior for the taxpayer as well as the tax auditor.

Moreover, bargaining behavior can be generally differentiated into integrative and distributive behaviors. Integrative bargaining strategies include more cooperative behaviors and aim to reach agreements of high joint benefits (Kimmel and et al. 1980). In contrast, individuals who follow distributive bargaining strategies seek to purely maximize their own outcomes (Coleman and Fraser, 2005; De Dreu et al., 2000). In a meta-study, Kong et al. (2014) report a negative relationship between interpersonal trust and distributive bargaining behavior, suggesting that lower levels of interpersonal trust lead to more competitive bargaining in order to maximize one's own "piece of the pie."

Consistent with this view, Hobson et al. (2020) and Quadackers et al. (2014) suggest that trust in clients impairs the professional skepticism of financial statements auditors. Bamber and Iyer (2007) find that close ties between auditor and client may lead to preferential audit treatment regarding materiality issues. In the same vein, tax auditors with high levels of trust in taxpayers may also be more likely to show concessionary behaviors. Unlike financial statement auditors, tax auditors are not personally liable for the audit result and, as agents of a government, are likely to operate based on a different set of values and incentives when compared to corporate auditors. Moreover, we only consider the range of bargaining outcomes within which tax payments are legal. As such, the association between interpersonal trust and concessionary behaviors may be stronger in the relationship between tax auditor and taxpayer than in relationships of a client and a professional service provider.

We, therefore, predict the following hypotheses on the effects of interpersonal trust on taxpayer and tax auditor bargaining behavior in a setting where both sides aspire to a deal.

Hypotheses 1a: *High interpersonal trust leads to more concessionary behavior in bargaining a tax payment for the tax auditor.*

Hypotheses 1b: High interpersonal trust leads to more concessionary behavior in bargaining a tax

payment for the taxpayer.

Table 1 panel A summarizes our hypotheses and their underlying theory.

"Insert table 1 panel A here"

2.3 Trust in Government and Tax Bargaining

We expect that taxpayer trust in government matters for tax bargaining behavior. Extensive tax research has investigated the relationship between a taxpayer's trust in the tax authority and tax compliance behaviors (Braithwaite and Braithwaite, 2001; Feld and Frey, 2002; Alm and Torgler, 2011; Torgler, 2007; James and Edwards, 2008; Farrar et al., 2020a). Kirchler et al. (2008) suggest in the slippery slope framework that trust in tax authorities plays a fundamental role in tax compliance. Their study predicts that a trustworthy climate will lead to more voluntary tax compliance and increase the likelihood that taxpayers contribute their tax share out of a sense of obligation. Tax experiments on tax compliance support this view and also reveal that trust and low tax audit probabilities exert a similar effect on voluntary taxation (Blackwell, 2007; Alm, 2012, 2019). We draw on the slippery slope framework to predict how trust in government influences taxpayer bargaining behavior. Thus, we expect that the relevance of taxpayer trust in government applies not only to non-/compliance decisions, but extends to bargaining behavior.

For tax auditors, organizational theory suggests that employee trust in the organization leads to higher goal congruence (Edwards and Cable, 2009), or shared values and goals between tax auditors and the tax authorities, which in turn leads to high employee performance (Bouckenooghe et al., 2015). In this setting, tax auditors' trust in the government can be viewed as a form of goal congruence (i.e., support for how tax revenues are spent). Goal congruence affects psychological capital, and can enhance internal motivation, positive organizational behavior (Bouckenooghe et al., 2015), and employees' organizational commitment (Reichers, 1985). Wright (2007) finds evidence that the importance employees place on mission is related to their work motivation in public sectors. As such, we expect that tax auditors' trust in government affects their bargaining behavior.

We therefore predict the following hypotheses on the effects of trust in government on taxpayer and tax auditor bargaining behavior.

Hypotheses 2a: *High trust in government leads to less concessionary behavior in bargaining a tax payment for the tax auditor.*

Hypotheses 2b: *High trust in government leads to more concessionary behavior in bargaining a tax payment for the taxpayer.*

Table 1, panel B summarizes our hypotheses and their underlying theory.

"Insert table 1 panel B here"

2.4 Interactive Effect of Interpersonal Trust and Trust in Government

Next, we explore how interpersonal trust affects taxpayer and tax auditor bargaining behavior. Interpersonal trust is likely to affect bargaining behavior differently because it is context-specific (high/low trust in government).

As trust is a governance mechanism (Bradach and Eccles, 1989), it should discourage behaviors that are not in the best interest of the organization. In general, trust in government incentivizes more tax collection/payments. Simply put, trust aligns the interests of the tax auditor and the tax authority, and requires tax auditors to regulate themselves to act in the best societal interest of their principal (Carnahan et al., 2010). More broadly, trust aligns the interest of citizens and government, and serves as a social control (Dekker, 2004; Gangl et al., 2015). While high interpersonal trust between tax auditor and taxpayer can lead to concessionary behavior by the tax auditor and affect tax collection negatively, a tax auditor's high trust in government should mitigate this behavior. Thus, we expect that more trust in government by the tax auditor reduces the auditor's propensity to behave in a concessionary way, i.e. his propensity to favorable deals (i.e. deals in favor of the taxpayer). Meanwhile, as high interpersonal trust between tax auditor and taxpayer can lead to more concessionary behavior by taxpayers, which positively affects tax payments, taxpayers' high trust in government will further promote higher tax payments.

Based on this discussion, we hypothesize on the interaction of interpersonal trust and trust in

government:

Hypotheses 3a: With high trust in government, the positive effect of interpersonal trust on tax auditors' concessionary behavior is less pronounced.

Hypotheses 3b: *With high trust in government, the positive effect of interpersonal trust on taxpayers' concessionary behavior is more pronounced.*

3. Experimental Design

3.1 Setting

We implement four treatments in a 2×2 between-subjects design. To investigate how both interpersonal trust and trust in government influence the bargaining of tax payments, we require a total of four groups of participants with different levels of trust.⁶ We apply a three-step approach and follow Kachelmeier and Van Landuyt's (2017). We generate independent variables in the first and second steps, and we use them as indirect inputs for the third step where we test dependent variables. In the first step, we exogenously induce different levels of interpersonal trust in pairs. In the second step, we exogenously induce different levels of interpersonal trust in pairs. In the second step, we exogenously induce different levels of trust. We include a manipulation check in both treatments respectively. In the first and second steps, we do not use tax framing, and participants do not know that the third step is a tax game.

In the third step, participant-pairs from the first step (with high or low interpersonal trust) enter the tax game in one of the four groups, depending on their prior priming in the first and second steps. In each pair, one takes the role of a taxpayer, while the other takes the role of a tax auditor. The roles are randomly assigned and do not swap later in the game. In our third step, the tax game, we test for three dependent variables to measure concessionary behavior, each for the tax auditor and the taxpayer separately: the initial tax payment offer/demand (before bargaining, disclosed only to the experimenter, but not to their respective partner, and not binding), the final tax payment offer/demand (after bargaining and thus

⁶ Group 1: High interpersonal trust; high trust in government. Group 2: High interpersonal trust; low trust in government. Group 3: Low interpersonal trust, high trust in government. Group 4: Low interpersonal trust, low trust in government.

binding), and the concessions made while bargaining (i.e., the difference between initial and final offer/demand).⁷ After the tax game, we collect demographic information and payout remuneration.

Our design allows us to observe the tax payment as the outcome of the bargaining game, where the two parties need to cooperate to avoid an impasse, and also compete to achieve the best outcomes for themselves (Komorita and Parks, 1995). Participants in both roles (taxpayer, tax auditor) are provided with extrinsic incentives and with information that supports intrinsic motivation. In our tax game, we ask for the taxpayer's offers and tax auditor's demands simultaneously, so that we can analyze the effect of trust separately. Simultaneous moves of taxpayers and tax auditors also help us ascertain that trust and not a reaction to the other party's demand/offer drives the result. We simulate real-life situations within a laboratory setting by incorporating tax language and donating collected tax payments to tax-funded institutions. Figure 1 illustrates our setting with respect to Steps 1-3.

"Insert figure 1 here"

3.2 Participants, Procedures, and Experimental Manipulation

The laboratory sessions took place in November 2019 in a university facility. We recruited 304 student volunteers through ORSEE (Greiner, 2015). Student participants are appropriate for our research question because the tasks are simple, and there is no need for contextual realism or expertise (Libby et al., 2002). We implement the experiment using z-Tree software (Fischbacher, 2007). Instructions were given on the laboratory computer on screen. Participants in the laboratory do not see each other and remain anonymous throughout the whole experiment in order to rule out the effect of trust before the experiment. The experiment, including all steps, took on average 30 minutes per participant.

Step 1: Manipulation of Interpersonal Trust

The first step of the experiment aims to generate different levels of interpersonal trust among participants. Therefore, we assign participants randomly into a high trust (low trust) group and treat each

⁷ The outcome (i.e., the amount due after bargaining) is not our main variable of interest.

group with information about trust (distrust) in three ways. The first treatment consists of a writing task in which participants are asked to write about a personal trust (betrayal) experience. In this stage, participants can write three minutes about their personal experience on computers in the laboratory. Second, the two groups are provided with treated instructions about the trust game, as described below. Both groups receive instructions with the same wording except that the high (low) trust group's instructions contain the word partner (opponent), following Burnham et al. (2000). Third, before entering into the trust game, we provide the two groups with different previous results of the game: high (low) levels of trust and trustworthiness in settings like this. Further, we give them hints for their individual payout to prime for trust to make the most money (prime for distrust to not end up empty-handed). The detailed treatment methods are provided in the Appendix.

We use a well-established game based on Berg et al. (1995) after treating the participants with information about trust (distrust). We randomly match two participants from within the same manipulation group (i.e., both high-trust, or both low-trust, respectively) as pairs to play this game. In this game, participants start with an initial virtual endowment of E\$10. Participants are assigned the role of either "Sender" or "Receiver." In Round 1 of this game, the Sender can send any amount X of her endowment to the Receiver, keeping E\$10-X. The amount sent to the Receiver is tripled, such that if the Sender sends E\$4, a total of E\$12 is passed on to the Receiver, who will now have E\$22 (E\$10 endowment + amount received from the Sender). The Receiver then decides how much E\$ she sends back to the original Sender.

In Round 2 of this game, we apply identical rules, but now the participants swap roles, such that participants taking the role of Sender in Round 1 now become the Receiver in Round 2. Figure 2 presents the rules of the game. The amount first passed by the Sender captures trust (Camerer, 2003), which is relevant for our study.⁸ Thus, the purpose of this game is to generate an exogenous variation in interpersonal trust among the participants measured as the amount sent by the Sender. We use the amount

⁸ The amount returned to the "Sender" by the "Receiver" captures trustworthiness and is not relevant four our study.

that is sent for our manipulation check for interpersonal trust. We let the participants play two rounds (one round as Sender and one round as Receiver) because participants are more reluctant to trust in later stages, and thus playing more rounds would reduce our variation in interpersonal trust level (Ho and Weigelt, 2005).

"Insert figure 2 here"

Step 2: Manipulation of Trust in Government

Next, we seek to generate an exogenous variation in trust in government. We divide participants from the previous high-trust (low-trust) group further into two random groups, to have four groups in a 2x2 design. We then present each group with positive (negative) information about the fictitious country of "Varosia". (Wahl et al., 2010). Details about the description of Varosia are provided in the Appendix. The purpose of this step is to generate exogenous levels of trust in government among the participants. After this priming, we ask how much participants trust Varosia's government, including its tax authority, on a scale of 0 to 10 (0 being not at all and 10 being very much) and let them justify their answer as a reinforcing priming and manipulation check.

Step 3: The Tax Game

Our priming from the first and second step leads to random allocation of our participants to one of the four groups in a 2x2 design:

	High interpersonal trust	Low interpersonal trust
High trust in government	76 participants (38 pairs)	76 participants (38 pairs)
Low trust in government	76 participants (38 pairs)	76 participants (38 pairs)

We use a tax game of two rounds. In Round 1, we randomly assign participants, within their respective group, and in their matched pairs, the role of either taxpayer (resident of Varosia) or tax auditor (employed by the tax authority of Varosia) and let them bargain about an ambiguous tax payment to be made by the taxpayer. The ambiguous amount of tax payment ranges between E\$100 and E\$130. Any amount between E\$100 and E\$130 is considered legal under the tax law of Varosia. The economic utility maximizing outcome for the taxpayer would be a tax payment of E\$100. The tax auditor is informed that the government expects a tax collection of E\$120, thereby setting a reference point. Both are informed that any amount above E\$100 is equally donated to tax-funded institutions. This information serves as intrinsic motivation for the tax auditor to collect money for "a good cause."

In Round 1, we pair participants with the same person with whom they interacted in the trust game of Section 3.2.2, to build on their interpersonal trust (distrust) in pairs. After the instruction, the taxpayer (tax auditor) is asked about the amount she wants to offer (demand) if the demand (offer) by the other party is not binding. They know that this decision (initial offer/demand) will not be disclosed to the other party. Before the taxpayer (auditor) can make her decision, i.e., the final offer (demand), both have the possibility to bargain the tax payment by using a text chat function. After the two-minute chat is closed, the taxpayer (auditor) makes her final offer (demand). If the tax offer is greater than or equal to the demand, the final tax payment amounts to the offer made by the taxpayer. If the offer is less than the auditor's demand, no deal is reached. In line with our research question, both players are incentivized to avoid confrontation, which would lead to costly court procedures, and to reach a deal. The taxpayer is further incentivized to pay little.

In Round 2, participants retain the same roles and negotiate with participants with whom there was no interaction in the previous Task 1 but within the same treatment group. The rules remain unchanged, i.e., the taxpayer (auditor) makes her initial offer (demand), then enters a chat function where the tax payment can be bargained, and then makes her actual offer (demand). This round serves the purpose of a manipulation check because it examines the effect of general trust, not interpersonal trust.

We use a one-shot game, as it provides a clean setting that limits the potential for alternative interpretations. We measure concessionary behavior using the three variables: the non-binding initial demand/offer before bargaining; the concessions made during bargaining; and the actual final demand after bargaining. Tax auditors' concessionary behavior increases the propensity to favorable deals (in

favor of the taxpayer), while taxpayers' concessionary behavior reduces the propensity to favorable deals (in his favor).

Incentive Structure

Participants in both roles (taxpayer, tax auditor) are incentivized or motivated on different levels. First, they receive E\$5 as a participation fee, in experimental currency.

Second, the interpersonal trust game is incentivized so that Sender and Receiver have a payout of their respective E\$ after one round of the game (i.e., the Sender's payout is the sum of her endowment, minus her transfer to the Receiver, plus the retransfer from the Receiver; the Receiver's payout is the sum of her endowment, plus the tripled transfer from the Sender, minus the retransfer to the Sender).

Third, the incentive structure for the tax game differs between the tax auditor's role and the taxpayer's role. Unlike Khan et al. (2016), in our setting the tax auditor receives a fixed salary of E\$15 if a deal is reached. She receives zero if no deal is reached. She is informed that she is expected to collect a certain amount of tax (reference point, E\$120), and she is provided with intrinsic motivation (it is her job; it is used for the public good; donation to tax-funded organizations). We do not offer variable monetary incentives to tax auditors for several reasons. Operationally, pairs with high levels of trust would reach a deal in the middle if both were incentivized in monetary terms. Moreover, our setting caters to the external validity, as anecdotal evidence from many European countries suggests that tax authorities refrain from tax revenue-related bonus-schemes for tax auditors in order to prevent overly aggressive audit behavior.⁹ The incentive for tax auditors to go for the deal (or otherwise receive zero) represents the implicit benefit of making a deal for the tax auditor's future career. Tax auditors have a trade-off between demanding low tax payments to increase the probability of a deal and thus securing the fixed salary, and bargaining for a higher tax payment to benefit the government due to intrinsic motivation.

The taxpayer's incentive structure also incentivizes a deal: she also receives zero if no deal is reached.

⁹ We acknowledge that tax auditors may be rewarded indirectly for the tax they collect (for example, future promotion or reputational gains). However, bonus payout is a different game and we choose to approximate the effect by fixed salary.

Further, the better the deal for the taxpayer (i.e., the closer the deal is to E\$100), the higher taxpayer's remuneration. Her payout is based on E\$130 minus the deal amount.

Taxpayer and tax auditor are both fully informed about their own, and each other's financial incentives.

For the actual payout at the end of the experiment, in addition to the show-up fee, the computer randomly chooses between the possible payout from the trust game and the possible payout from the tax game. This randomization of actual payout is important to avoid that the conscious payment bias from the previous trust game (participants in the high-trust group earn more than in the low-trust group) affects the tax game. At the beginning of the experiment, participants are informed about the show-up fee and that they will engage in two tasks from which only one round of one task will be selected randomly for payout. Experimental currency is translated into Euro, and on average, participants received a cash payment of \notin 11.96.¹⁰ Table 2 summarizes the incentive structure of the experiment.

"Insert table 2 here"

4. Results

4.1 Manipulation Checks

The first priming treatment is aimed at achieving variation in interpersonal trust among the participants. Table 3 presents the result of the trust game. In the first round of the game, participants in the high-trust group sent significantly higher amounts of E\$ to their partner than participants in the low-trust group (Panel A, p<0.05), which confirms that our manipulation was successful. In the second round, the effect is more significant, showing that the trust game itself reinforces priming (Panel B, p<0.01). These, and the result of both rounds together (Panel C, p<0.001), indicate a successful first manipulation that created different levels of interpersonal trust, which are exogenous to the later stages of the experiment. In an untabulated test, participants in the high-trust group also return significantly higher amounts of E\$ to their partner than participants in the high-trust group, suggesting that the high-trust

¹⁰ This includes € 2 extra for overtime for some participants.

group shows higher trustworthiness, as well.

"Insert table 3 here"

In the second priming treatment, we present participants with positive (negative) information about the fictitious government of Varosia. The second priming is supposed to create variation in trust in government among the participants. After participants read the positively (negatively) manipulated information, we conduct a manipulation check by asking the participants how much they trust Varosia's government on a scale from 0 (low trust) to 10 (high trust). Additionally, we asked participants to explain their decision by writing approximately 50 words. Table 4 summarizes our results for this manipulation check and indicates a successful second manipulation (p<0.001) that created different levels of trust in government that are exogenous to the later stages of the experiment.

"Insert table 4 here"

4.2 Summary of Efficiency Figures

After two rounds of successful manipulations, we let the primed participants bargain about an ambiguous amount of taxes to be paid by the taxpayer as explained above. Table 5 suggests that, on average, trust in government seems to affect the possibilities of reaching a deal between tax auditors and taxpayers, as high trust in government leads to more deals. The relationship between trust in government and the likelihood of reaching a deal is statistically significant (table 15). The percentage of deals reached is the lowest when both interpersonal trust and trust in government are low (63.16%) while offers from taxpayers are also the lowest. The low possibility of reaching a deal when trust in government is low is mainly driven by low offers from taxpayers.

Average tax payments and average offers from taxpayers are higher when trust in government is high. The demands from tax auditors are the lowest with high interpersonal trust and low trust in government. Average initial offers do not display considerable variation across groups, while the average initial demand is the highest in the low interpersonal trust and high trust in government group. The average offer is lower when there is low trust in government. Table 5 presents these results.

"Insert table 5 here"

4.3 Primary Findings

Tax auditors

Figure 3 and table 6 show tax auditors' initial demands of tax payments. Panel A of table 6 indicates that tax auditors with low interpersonal trust and high trust in government demand the highest tax payments initially (Average=119.90). Interpersonal trust and trust in government together affect initial demand from tax auditors, and the interaction is statistically significant (F=3.46, p=0.0648, two-tailed).

"Insert figure 3 and table 6 here"

Figure 4 and table 7 show tax auditors' final demands of tax payments after bargaining. Tax auditors with high interpersonal trust and low trust in government demand the least tax payments (Average=112.61). However, we do not observe statistical significance for interpersonal trust, trust in government, and the interaction of the two variables.

"Insert figure 4 and table 7 here"

Figure 5 and Table 8 summarize tax auditors' difference between initial and final demand (concessions made)¹¹ during bargaining. The interaction between interpersonal trust and trust in government significantly affects tax auditors' change in demand, during bargaining. We take a closer look at the subgroups and find that in the group with high trust in government, high interpersonal trust leads to low initial demand from tax auditors (table 9, panel A), although this effect disappears after bargaining (table 11, panel A). At first glance, it is counterintuitive that tax auditors with low interpersonal trust, compared to tax auditors with high interpersonal trust, decrease their demands more (table 10, panel A). However, we observe that after bargaining, tax auditors and taxpayers mostly reach a deal at E\$115 (the average of tax auditors' actual demands and the average of taxpayers' actual offers after bargaining are all approximately E\$115). We interpret this result as both parties in the high trust-in-government group

¹¹ We define our variable "Concession" as the amount by which the initial demand is reduced (negative sign) or increased (positive sign) in the final demand.

regard E\$115 as the fair amount after bargaining, despite what the initial belief is.¹² In the low trust-ingovernment group, high interpersonal trust leads to greater decreases in the demand from tax auditors during bargaining (table 10, panel B). We interpret this result as tax auditors with low trust in government having less intrinsic motivation to bargain a more beneficial deal for the tax authority.

"Insert figure 5 and table 8 here"

In general, these results are partially consistent with the notion that high interpersonal trust leads to more concessionary behaviors of tax auditors (H1a), but in varying ways depending on the stage. In the initial demand stage before bargaining, when trust in government is high, tax auditors have a higher initial demand before bargaining if the level of interpersonal trust is low. On the contrary, during the bargaining, tax auditors with high interpersonal trust make more concessions in a high trusted in government, while tax auditors with a high level of interpersonal trust make more concessions in a low trusted in government (H3a). In other words, low interpersonal trust between tax auditors and taxpayers may affect tax auditors' behavior and decrease their propensity to favorable deals, while we do not find consistent evidence for the effect of trust in government for tax auditors (H2a).

Taxpayers

Figure 6 and table 12 show initial tax payment offers by the taxpayers. We do not observe substantial differences between the four treatment groups.

"Insert figure 6 and table 12 here"

However, as shown in figure 7 and table 13, final offers after bargaining indicate that high trust in government is related to higher offers from taxpayers (F=8.05, p=0.0052, two-tailed).

"Insert figure 7 and table 13 here"

Figure 8 and table 14 show that during tax bargaining, high trust in government leads to a greater increase from the initial offer (F=4.19, p=0.0424, two-tailed), suggesting that taxpayers show higher concessionary behaviors during tax bargaining when their trust in government is high.

¹² This interpretation is supported by evidence is the chat and in the post-experiment questionnaire.

"Insert figure 8 and table 14 here"

Collectively, we observe that taxpayers with high trust in government make more concessions during bargaining and make higher offers, consistent with H2b. However, we neither observe a significant effect of interpersonal trust on taxpayers' bargaining behavior (H1b), nor show the interaction of interpersonal trust and trust in government has any statistical significance (H3b). On average, interpersonal trust seems to be more important during tax bargaining if trust in government is low. This finding is consistent with the literature that weak institutions make personal ties more significant (Lin et al., 2013).

4.4 Supplementary Analysis

Table 15 reports the results for the deal reached. Both high trust in government and high interpersonal trust are associated with a higher propensity to reach a deal, which is statistically significant for trust in government.

"Insert table 15 here"

The untabulated results show that these relationships do not occur when pairs lack an interpersonal trust (distrust) relationship. This manipulation check alleviates the concern that general trust, not interpersonal trust, is driving the result.

5. Conclusion

Building on behavioral theory, we conduct an incentivized laboratory experiment to test how trust influences bargained tax payments. We explore two types of trust: interpersonal trust between taxpayers and tax auditors, and trust of taxpayers and tax auditors in government. Therefore, we induce different levels of interpersonal trust (through a trust game after priming) and trust in government (through positive or negative information) among the participants. We generate four groups according to the level (high/low) of interpersonal trust and trust in government, and compare the different responses in a tax bargaining game.

Our main conclusion is that trust in government and interpersonal trust influence the bargaining behavior of taxpayers and tax auditors. Taxpayers seem to be influenced more by trust in government:

high levels of trust in government lead to more concessions during bargaining and higher actual offers of tax payment after bargaining. The patterns of tax auditors' behavior are more complex. With a high level of trust in government, a low level of interpersonal trust leads to higher initial demand from tax auditors. Notably, when trust in government is high, tax auditors with both high and low levels of interpersonal trust adjust their actual demand to reach a deal in the middle with the taxpayer after bargaining, although their monetary incentives differ from those of taxpayers. Conversely, when there is a low level of trust in government, tax auditors with a high level of interpersonal trust make more concessions (greater decrease in demands) during bargaining. These results together indicate that a low level of interpersonal trust decreases the propensity to favorable deals from tax auditor behavior, while a high level of trust in government decreases the propensity to favorable deals through taxpayer behavior.

Our study is subject to some limitations. First, we test the bargaining behavior of taxpayers/tax auditors through three variables: initial offer/demand before bargaining; actual offer/demand after bargaining; and the difference between initial and actual demand/offer. Further research is needed to explore what, in detail, drives the initial non-binding offer/demand before the bargaining process, and what the drivers of the change of offer/demand in the bargaining process are, both of which are fundamental for a deal to form. In addition, our research design allows for separate analysis of the tax auditor and taxpayer, but the combined effect of mutual trust on bargaining outcome needs further analysis. Second, for experimental control, the scenarios used were simpler than situations in practice, and abstract from some aspects that could affect tax bargaining, such as the tax history of the taxpayer. Future research could incorporate such aspects. Third, we let participants bargain only through a text chat. Future research could expand the setting accordingly and could further explore whether other ways of bargaining affect our findings. Fourth, the role of intermediaries such as tax advisors could be included in the dynamic, as they play a vital role in all tax systems (OECD, 2008). A four-party relationship could be explored in the future, namely involving taxpayer, government, tax auditor, and tax advisor.

Despite these limitations, our experiment offers useful insights by contributing to the literature in several ways. First, we add the perspective of interpersonal trust and trust in government to the tax

bargaining literature (Doyle and van Wijnbergen, 1994; Bond and Samuelson, 1989; Egger et al., 2020; Mills et al., 2013; Franzoni, 2004), and thus complement the economic factors in previous studies. Second, we enrich the audit literature, as the behavior of tax auditors is under-researched (Roberts, 1995; Toma and Toma, 1992; Blaufus et al., 2020; Khan et al., 2016; Alissa et al., 2014). We contribute to the literature by examining how trust (both interpersonal trust and trust in government) affects tax auditors' concessionary behaviors in bargaining. Third, our study contributes to the scarce literature on the interaction between taxpayers and tax auditors (Pentland and Carlile, 1996) by providing evidence on how variations in different types of trust affects the interactive behavior of taxpayers and tax auditors. Fourth, we contribute to the tax psychology literature (e.g., Kirchler et al. 2008) by extending the application of the trust concept to a three-party relationship between the taxpayer, the tax auditor, and the government, and do so in a tax bargaining context.

Our findings are relevant to policymakers as they indicate that less trusted governments may experience a higher likelihood of concessionary deals than more trusted governments, which underscores the importance of good governance within tax authorities, as discussed by the OECD. Recent tax policy programs, such as permanent audit and cooperative compliance, may suffer from unintended effects without good governance by tax authorities. Especially in cooperative compliance programs, a trustful relationship between taxpayer and tax auditor is key. Our results suggest that trust of both, tax auditor and taxpayer, in the government is essential for the functioning of the program. High interpersonal trust, however, may result in concessionary behavior from the tax auditor, and impede (perceived) fairness. Policy implications of our study may also extend to non-tax settings, where a government agency and its representatives encounter bargaining situations with citizens, firms, and their representatives, such as the health, energy, or financial sectors.

References

- Alissa, W., Capkun, V., Jeanjean, T., and Suca, N. (2014), An empirical investigation of the impact of audit and auditor characteristics on auditor performance, Accounting, Organizations and Society, 39, 495–510.
- Alm, J. (2012), Measuring, explaining, and controlling tax evasion: Lessons from theory, experiments, and field studies, International Tax and Public Finance, 19, 54–77.
- Alm, J. (2019), What Motivates Tax Compliance?, Journal of Economic Surveys, 33, 353–388.
- Alm, J., and McKee, M. (1998), Extending the lessons of laboratory experiments on tax compliance to managerial and decision economics, Managerial and Decision Economics, 19, 259–275.
- Alm, J., and Torgler, B. (2011), Do Ethics Matter? Tax Compliance and Morality, Journal of Business Ethics, 101, 635–651.
- Anderson, E., and Weitz, B. (1989), Determinants of Continuity in Industrial Channels, Marketing Science, 8, 310–323.
- Anderson, J.C., and Narus, J.A. (1990), A Model of Distributor Firm and Manufacturer Firm Working Partnerships, Journal of Marketing, 54, 42.
- Aschauer, E., Fink, M., Moro, A., van Bakel-Auer, K., and Warming-Rasmussen, B. (2017), Trust and professional skepticism in the relationship between auditors and clients: Overcoming the dichotomy myth, Behavioral Research in Accounting, 29, 19–42.
- Bamber, E.M., and Iyer, V.M. (2007), Auditors' identification with their clients and its effect on auditors' objectivity, Auditing, 26, 1–24.
- Bame-Aldred, C.W., and Kida, T. (2007), A comparison of auditor and client initial negotiation positions and tactics, Accounting, Organizations and Society, 32, 497–511.
- Berg, J., Dickhaut, J., and McCabe, K. (1995), Trust, reciprocity, and social history.
- Björklund Larsen, L. (2016), SWEDEN : Failure of a cooperative compliance project ?, FairTax WP-Series No.7.

- Blackwell, C. (2007), A Meta-Analysis of Tax Compliance Experiments Calvin Blackwell, International Studies Program Working Paper 07-24.
- Blaufus, K., Schöndube, J.R., and Wielenberg, S. (2020), Strategic interactions between tax and statutory auditors and different information regimes: implications for tax audit efficiency, arque Discussion Paper No. 249.
- Bond, E.W., and Samuelson, L. (1989), Bargaining with commitment, choice of techniques, and direct foreign investment, Journal of International Economics, 26, 77–97.
- Bouckenooghe, D., Zafar, A., and Raja, U. (2015), How Ethical Leadership Shapes Employees' Job Performance: The Mediating Roles of Goal Congruence and Psychological Capital, Journal of Business Ethics, 129, 251–264.
- Bradach, J.L., and Eccles, R.G. (1989), Price, Authority, and Trust: From Ideal Types to Plural Forms, Annual Review of Sociology, 15, 97–118.
- Braithwaite, V., and Braithwaite, J. (2001), An evolving compliance model for tax enforcement, in: Crimes of Privilege: Readings in White-Collar Crime, Oxford University Press.
- Burnham, T., McCabe, K., and Smith, V.L. (2000), Friend-or-foe intentionality priming in an extensive form trust game, Journal of Economic Behavior and Organization, 43, 57–73.
- Camerer, C.F. (2003), Behavioral game theory: Experiments in strategic interaction, Princeton University Press.
- Carnahan, S., Agarwal, R., and Campbell, B. (2010), The Effect of Firm Compensation Structures on the Mobility and Entrepreneurship of Extreme Performers, Business, 1–43.
- Coleman, R., and Fraser, C.R.P. (2005), Integrative Versus Distributive Bargaining: Choosing a Problem Resolution Process, Relations industrielles, 34, 546–562.
- De Dreu, C.K.W., Weingart, L.R., and Kwon, S. (2000), Influence of social motives on integrative negotiation: A meta-analytic review and test of two theories, Journal of Personality and Social Psychology, 78, 889–905.

Dekker, H.C. (2004), Control of inter-organizational relationships: Evidence on appropriation concerns

and coordination requirements, Accounting, Organizations and Society, 29, 27-49.

- Doney, P.M., and Cannon, J.P. (1997), An examination of the nature of trust in buyer-seller relationships, Journal of Marketing, 61, 35–51.
- Doyle, C., and van Wijnbergen, S. (1994), Taxation of foreign multinationals: A sequential bargaining approach to tax holidays, International Tax and Public Finance, 1, 211–225.
- Edwards, J.R., and Cable, D.M. (2009), The Value of Value Congruence, Journal of Applied Psychology, 94, 654–677.
- Egger, P.H., Strecker, N.M., and Zoller-Rydzek, B. (2020), Estimating bargaining-related tax advantages of multinational firms, Journal of International Economics, 122, 103258.
- Farrar, J., Hausserman, C., and Pinto, O. (2020a), Trust and compliance effects of taxpayer identity theft: A moderated mediation analysis, Journal of the American Taxation Association, 42, 57–77.
- Farrar, J., Massey, D.W., Osecki, E., and Thorne, L. (2020b), Tax Fairness: Conceptual Foundations and Empirical Measurement, Journal of Business Ethics, 162, 487–503.
- Feld, L.P., and Frey, B.S. (2002), Trust breeds trust: How taxpayers are treated, Economics of Governance, 3, 87–99.
- Fischbacher, U. (2007), Z-Tree: Zurich toolbox for ready-made economic experiments, Experimental Economics, 10, 171–178.
- Franzoni, L.A. (2004), Discretion in tax enforcement, Economica, 71, 369–389.
- Freedman, J., Loomer, G., and Vella, J. (2009), Corporate Tax Risk and Tax Avoidance : New Approaches, Management, 74–116.
- Gangl, K., Hofmann, E., and Kirchler, E. (2015), Tax authorities' interaction with taxpayers: A conception of compliance in social dilemmas by power and trust, New Ideas in Psychology, 37, 13– 23.
- Gargiulo, M., and Ertug, G. (2006), The dark side of trust, in: Bachmann, R., Akbar Zaheer (Eds.), Handbook Of Trust Research, Edward Elgar Publishing, 165–186.

- Greiner, B. (2015), Subject pool recruitment procedures: organizing experiments with ORSEE, Journal of the Economic Science Association, 1, 114–125.
- Ho, T.H., and Weigelt, K. (2005), Trust building among strangers, Management Science, 51, 519–530.
- Hobson, J.L., Stern, M.T., and Zimbelman, A.F. (2020), The Benefit of Mean Auditors: The Influence of Social Interaction and the Dark Triad on Unjustified Auditor Trust, Contemporary Accounting Research, 37, 1217–1247.
- Hofmann, E., Hoelzl, E., and Kirchler, E. (2008), Preconditions of voluntary tax compliance: Knowledge and evaluation of taxation, norms, fairness, and motivation to cooperate, Journal of Psychology, 216, 209–217.
- James, S., and Edwards, A. (2008), Developing tax policy in a complex and changing world, Economic Analysis and Policy, 38, 35–53.
- Kachelmeier, S.J. (2020), Financial Accounting and Auditing Experiments in the Journal of Accounting Research: Historical Background and Recent Advances Steven, Journal of Accounting Research Virtual.
- Kachelmeier, S.J., and Van Landuyt, B.W. (2017), Prompting the Benefit of the Doubt: The Joint Effect of Auditor-Client Social Bonds and Measurement Uncertainty on Audit Adjustments, Journal of Accounting Research, 55, 963–994.
- Kadous, K., and Zhou, Y. (Daniel) (2019), How Does Intrinsic Motivation Improve Auditor Judgment in Complex Audit Tasks?, Contemporary Accounting Research, 36, 108–131.
- Khan, A.Q., Khwaja, A.I., and Olken, B.A. (2016), TAX FARMING REDUX: EXPERIMENTAL EVIDENCE ON PERFORMANCE PAY FOR TAX COLLECTORS, The Quarterly Journal of Economics, 219–271.
- Kimmel, M.J., and et al (1980), Effects of trust, aspiration, and gender on negotiation tactics., Journal of Personality and Social Psychology, 38, 9–22.
- King, R.R. (2002), An experimental investigation of self-serving biases in an auditing trust game: The effect of group affiliation, The Accounting Review, 77, 265–284.

- Kirchler, E., Hoelzl, E., and Wahl, I. (2008), Enforced versus voluntary tax compliance: The "slippery slope" framework, Journal of Economic Psychology, 29, 210–225.
- Koch, C., and Salterio, S.E. (2017), The effects of auditor affinity for client and perceived client pressure on auditor proposed adjustments, The Accounting Review, 92, 117–142.
- Komorita, S.S., and Parks, C.D. (1995), Interpersonal relations: Mixed-motive interaction, Annual Review of Psychology, 46, 183–207.
- Kong, D.T., Dirks, K.T., and Ferrin, D.L. (2014), Interpersonal trust within negotiations: Metaanalytic evidence, critical contingencies, and directions for future research, Academy of Management Journal, 57, 1235–1255.
- Lewis, J.D., and Weigert, A. (1985), Trust as a social reality, Social Forces, 63, 967–985.
- Libby, R., Bloomfield, R., and Nelson, M.W. (2002), Experimental research in financial accounting, Accounting, Organizations and Society, 27, 775–810.
- Lin, N., Fu, Y.C., and Jay Chen, C.J. (2013), Social capital and its institutional contingency: A study of the United States, China and Taiwan, Routledge.
- Markle, K., and Robinson, L. (2019), Negotiated Tax Havens, Tuck School of Busines No. Working paper No. 3280683.
- Mascagni, G. (2018), From the Lab To the Field: a Review of Tax Experiments, Journal of Economic Surveys, 32, 273–301.
- McAllister, D.J. (1995), Affect- and Cognition-Based Trust as Foundations for Interpersonal Cooperation in Organizations, Academy of Management Journal, 38, 24–59.
- Mendoza, J.P., Wielhouwer, J.L., and Kirchler, E. (2017), The backfiring effect of auditing on tax compliance, Journal of Economic Psychology, 62, 284–294.
- Mills, L.F., Nutter, S.E., and Schwab, C.M. (2013), The effect of political sensitivity and bargaining power on taxes: Evidence from federal contractors, The Accounting Review, 88, 977–1005.

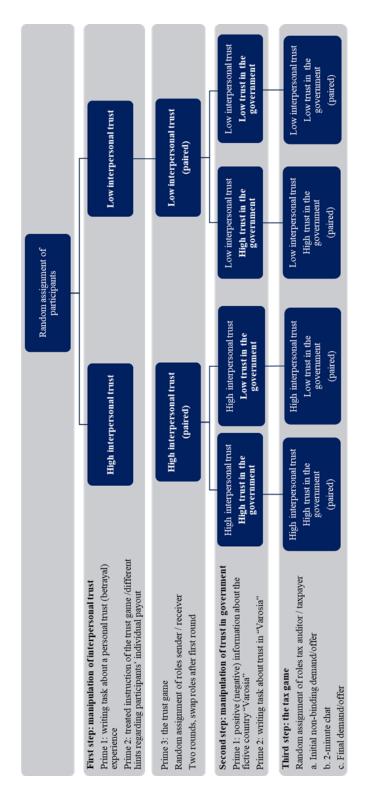
Naquin, C.E., and Paulson, G.D. (2003), Online bargaining and interpersonal trust, Journal of Applied

Psychology, 88, 113–120.

- Nelson, M., and Tan, H.T. (2005), Judgment and Decision Making Research in Auditing: A Task, Person, and Interpersonal Interaction Perspective, Auditing: A Journal of Practice & Theory, 24, 41–71.
- OECD (2006), Strengthening tax audit capabilities: auditor workforce management survey findings and observations.
- OECD (2008), Study into the role of tax intermediaries.
- OECD (2013), Co-operative compliance: a framework from enhanced relationship to co-operative compliance.
- Pentland, B.T., and Carlile, P. (1996), Audit the taxpayer, not the return: Tax auditing as an expression game, Accounting, Organizations and Society, 21, 269–287.
- Porta, R. La, Lopez-de-Silanes, F., Shleifer, A., and Vishny, R.W. (1997), Trust in Large Organizations, American Economic Review, 87, 333–38.
- Pruitt, D.G. (1983), Negotiation Behavior., Academic Press.
- Quadackers, L., Groot, T., and Wright, A. (2014), Auditors' Professional Skepticism: Neutrality versus Presumptive Doubt, Contemporary Accounting Research, 31, 639–657.
- Reichers, A.E. (1985), A review and reconceptualization of organizational commitment., Academy of management review. Academy of Management, 10, 465–476.
- Roberts, M.L. (1995), The Influence of Contextual Factors on IRS Agents' Assessments of Taxpayer Negligence., Journal of the American Taxation Association, 17, 62–77.
- Ross, W., and Chen, J.-C. (2004), Negotiator's Trust and Distrust Perceptions and Mediation Strategies, Journal of Organizational Culture, Communications and Conflict, 8, 11.
- Ross, W.H., and Wieland, C. (1996), Effects of interpersonal trust and time pressure on managerial mediation strategy in a simulated organizational dispute, Journal of Applied Psychology, 81, 228– 248.

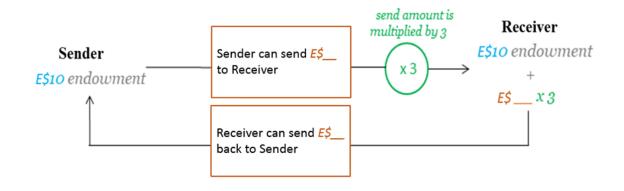
- Rousseau, D.M., Sitkin, S.B., Burt, R.S., and Camerer, C. (1998), Not so different after all: A crossdiscipline view of trust, Academy of Management Review, 23, 393–404.
- Schoorman, F.D., Mayer, R.C., and Davis, J.H. (2007), An integrative model of organizational trust: Past, present, and future, Academy of Management Review, 32, 344–354.
- Slemrod, J. (2007), Cheating ourselves: The economics of tax evasion, Journal of Economic Perspectives, 21, 25–48.
- Smith, K.W., and Stalans, L.J. (1994), Negotiating Strategies for Tax Disputes: Preferences of Taxpayers and Auditors, Law & Social Inquiry, 19, 337–368.
- Stojanovic, S. (2016), Changing the relationship between tax administration and taxpayers: Horizontal monitoring in the Netherlands, Megatrend revija, 13, 203–216.
- Toma, E.F., and Toma, M. (1992), Tax Collection with Agency Costs: Private Contracting or Government Bureaucrats?, Economica, 59, 107.
- Torgler, B. (2007), Tax compliance and tax morale: A theoretical and empirical analysis, Edward Elgar Publishing.
- Uzzi, B. (2000), Running Head: Embeddedness and the Economic Performance of Organizations, American Sociological Review, 1–35.
- Viana, A.F., and Alves, M.J.G. (2020), Compromising towards a futuristic tax model.
- Wright, B.E. (2007), Public service and motivation: Does mission matter?, Public Administration Review, 67, 54–64.

Experimental Design



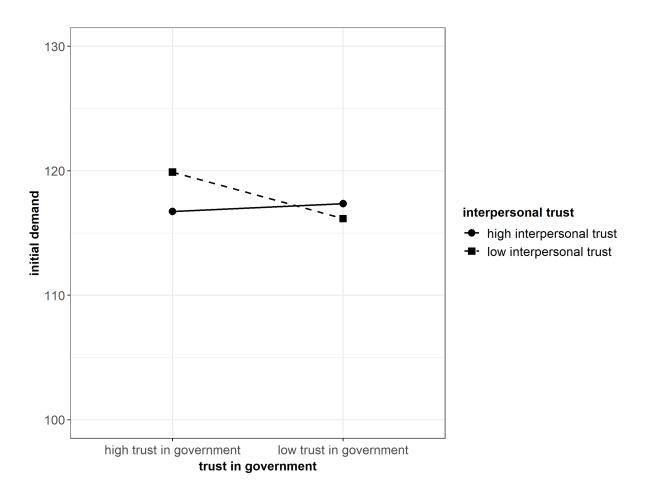
Notes. This figure provides an overview of all the steps of our experiment

Trust Game



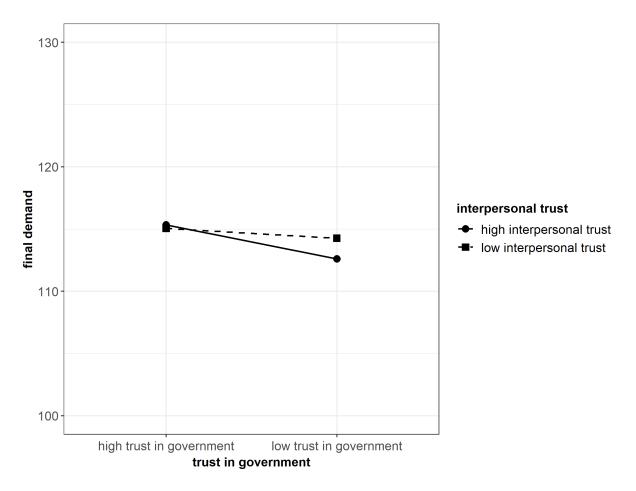
Notes. This figure presents the process of the trust game (adapted from OECD trustlab) based on Berg, Dickhaut, and McCabe (1995). Both roles, sender and receiver, are randomly assigned and participants start with an endowment of E\$ 10. In Round 1 of the trust game, the sender can send any amount of her initial endowment (E\$ 0-10) to the receiver. The amount sent to the receiver is multiplied by 3. The receiver then decides how much of this (tripled) amount she sends back to the original sender. Round 2 of this game applies identical rules, but now the participants swap roles, i.e., participants with the role of sender in Round 1 now become the receiver in Round 2.

Initial Demands of the Tax Auditors



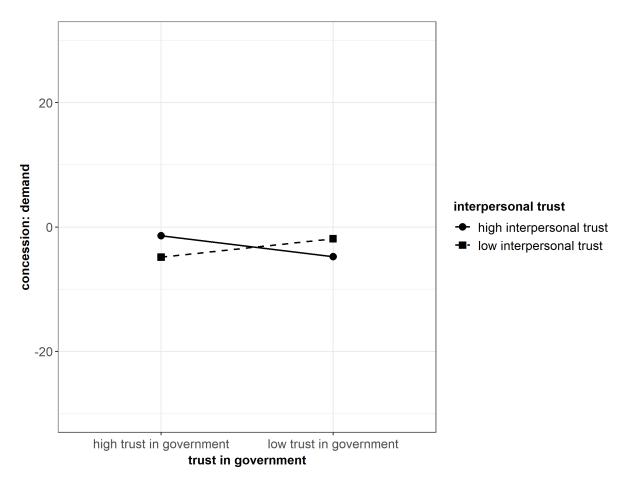
Notes. This figure presents a graph of the interaction of interpersonal trust (high or low) and trust in government (high or low) on tax auditor's non-binding initial demand (the demand would-be if the taxpayer had to pay any demand). The initial demand ranges from E\$ 100-130 and is shown on the vertical. The horizontal shows tax auditors with high trust or low trust in government.

Final Demands of the Tax Auditors



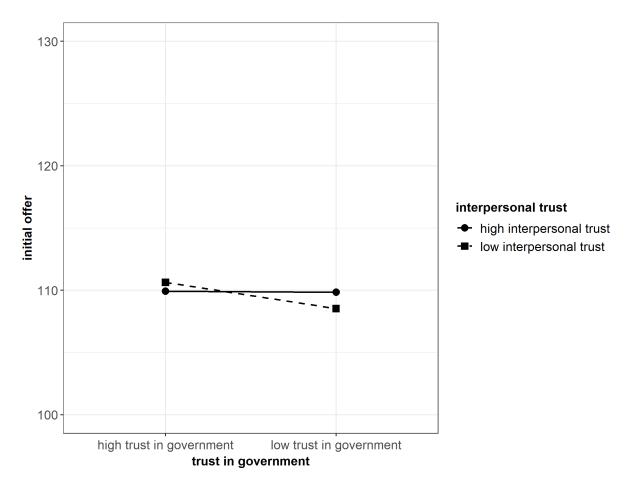
Notes. This figure presents a graph of the interaction of interpersonal trust (high or low) and trust tin government (high or low) on tax auditor's demand (the demand after bargaining). The final demand ranges from E\$ 100-130 and is shown on the vertical. The horizontal shows tax auditors with high trust or low trust in government.

Concessions by Tax Auditors During Bargaining



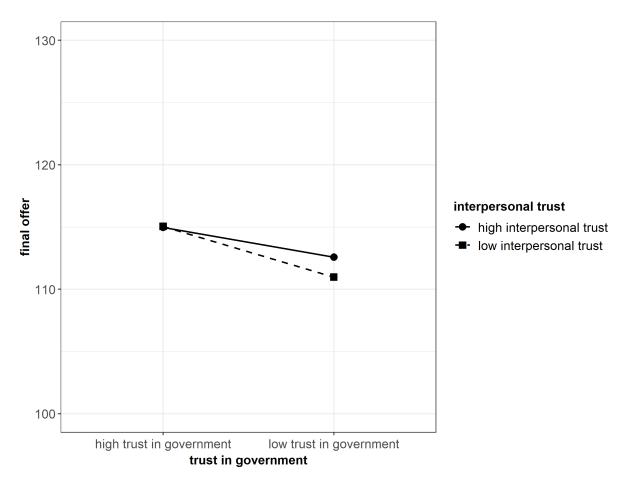
Notes. This figure presents a graph of the interaction of interpersonal trust (high or low) and trust in government (high or low) on tax auditor's concessions made during bargaining (the difference between initial demand and final demand). The concessions made during bargaining are shown on the vertical. The horizontal shows tax auditors with high trust or low trust in government.

Initial Offers of Taxpayers



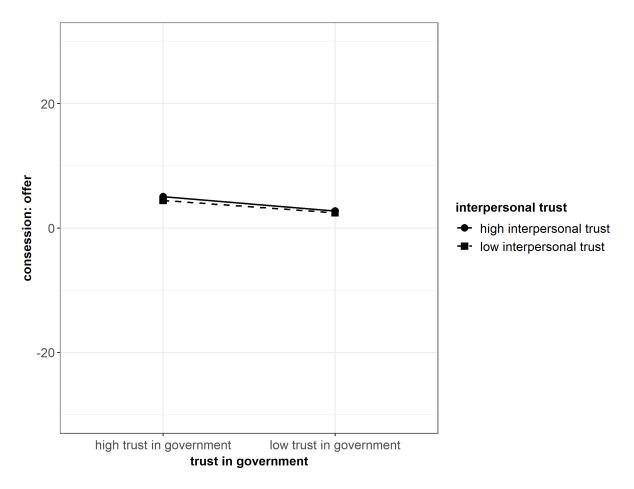
Notes. This figure presents a graph of the interaction of interpersonal trust (high or low) and trust in government (high or low) on the taxpayer's non-binding initial offer (the offer would-be if the auditor had to accept any offer). The initial offer ranges from E\$ 100-130 and is shown on the vertical. The horizontal shows taxpayers with high trust or low trust in government.

Final Offers of Taxpayers



Notes. This figure presents a graph of the interaction of interpersonal trust (high or low) and trust tin government (high or low) on taxpayer's final offer (the offer after bargaining). The final offer ranges from E\$ 100-130 and is shown on the vertical. The horizontal shows tax auditors with high trust or low trust in government.

Concessions by Taxpayers During Bargaining



Notes. This figure presents a graph of the interaction of interpersonal trust (high or low) and trust in government (high or low) on taxpayer's concessions made during bargaining (the difference between initial offer and final offer). The concessions made during bargaining are shown on the vertical. The horizontal shows taxpayers with high trust or low trust in government.

Hypotheses and Theory

Panel A:

Tax auditor

		Trust in go	overnment
		High	Low
	High	 more concessionary behavior increase the propensity to favorable deals (more likely to be complacent and accept less satisfactory outcomes) less concessionary behavior 	 more concessionary behavior increase the propensity to favorable deals (more likely to be complacent and accept less satisfactory outcomes) more concessionary behavior
		decrease the propensity to favorable deals (higher goal congruence, higher internal motivation)	increase the propensity to favorable deals (lower goal congruence, lower internal motivation)
Interpersonal trust	Low	less concessionary behavior decrease the propensity to favorable deals (less likely to be complacent and accept less satisfactory outcomes)	less concessionary behavior decrease the propensity to favorable deals (less likely to be complacent and accept less satisfactory outcomes)
		less concessionary behavior decrease the propensity to favorable deals (higher goal congruence, higher internal motivation)	more concessionary behavior increase the propensity to favorable deals (lower goal congruence, lower internal motivation)

Panel B

Taxpayer

		Trust in go	overnment
		High	Low
	High	more concessionary behavior decrease the propensity to favorable deals (more likely to be complacent and accept less satisfactory outcomes)	more concessionary behavior decrease the propensity to favorable deals (less likely to be complacent and accept less satisfactory outcomes)
Interpersonal		more concessionary behavior decrease the propensity to favorable deals (slippery slope framework: more willing to pay taxes)	less concessionary behavior increase the propensity to favorable deals (slippery slope framework: less willing to pay taxes)
trust	Low	less concessionary behavior increase the propensity to favorable deals (less likely to be complacent and accept less satisfactory outcomes)	less concessionary behavior increase the propensity to favorable deals (less likely to be complacent and accept less satisfactory outcomes)
		more concessionary behavior decrease the propensity to favorable deals (slippery slope framework: more willing to pay taxes)	less concessionary behavior increase the propensity to favorable deals (slippery slope framework: less willing to pay taxes)

Notes. This table shows our prediction of bargaining behavior of tax auditors (Panel A) and taxpayers (Panel B) the theoretical underpinning.

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Incentive Structure

1. Show up fee	
All participants	E\$ 5
2. Income from tasks:	
Randomly choose one round of one tax	sk to pay (currency E\$, E\$ $1.8 = \in 1$)
Task 1: Trust Game: if sender sends	X and receiver sends back Y
Sender	E\$ 10-X+Y
Receiver	E\$ 10+3X-Y
Task 2: Tax Game	
Deal : If taxpayer's offer \geq auditor's de	emand, consensus amount is X
Taxpayer	E\$ 130-X
Tax auditor	fixed salary of E\$ 15
No deal : If taxpayer's offer < auditor'	s demand
Taxpayer	0
Tax auditor	0

Notes. This table provides an overview of the incentive for participants. Only one round of one task will be selected randomly for variable payout. The final payout also includes E\$ 5 show up fee. X-E\$100 in case of deal is equally donated to five tax-funded institutions.

Panel A: Round 1						
	Mean	Std. Dev.	n	df	F	p-value
low interpersonal trust	5.16	3.15	76			
high interpersonal trust	6.29	2.74	76	151	5.57	0.0195
total	5.72	3.00	152			
Panel B: Round 2						
	Mean	Std. Dev.	n	df	F	p-value
low interpersonal trust	5.17	3.38	76			
high interpersonal trust	7.05	2.91	76	151	13.54	0.0003
total	6.11	3.28	152			
Panel C: Round 1 + Round	d 2					
	Mean	Std. Dev.	n	df	F	p-value
high interpersonal trust	5.16	3.26	152			
low interpersonal trust	6.67	2.84	152	303	18.46	0.0000
total	5.92	3.14	304			

Trust Game, Interpersonal Trust

Notes. This table provides the means (standard deviation) of the amount E\$ sent by the sender. A high amount indicates high trust. The results compare the high interpersonal trust group with the low interpersonal trust group after our manipulation of interpersonal trust. Panel A and Panel B summarize Round 1 and Round 2 respectively and Panel C summarizes Round 1 and Round 2 pooled together.

Trust in Government

	Mean	Std. Dev.	n	df	t-statistic	p-value
high trust in government	7.75	1.90	152			
low trust in government	1.13	1.25	152	303	1289.16	0.0000
total	4.4	3.68	304			

Notes. This table provides the means (standard deviation) of our measure of trust in government. We ask participants how much they trust Varosia's government, including its tax authority, on a scale from 0 to 10 (0 is not at all and 10 is very much), and compare between low trust in government and high trust in government group after our manipulation of trust in government.

Efficiency Figures

	High	High	Low	Low
	interpersonal	interpersonal	interpersonal	interpersonal
	trust, High	trust, Low	trust, High	trust, Low
	trust in	trust in	trust in	trust in
	government	government	government	government
Deal	0.8421	0.8158	0.8684	0.6316
Average tax payment	116.13	113.19	115.24	112.29
Average offer	114.97	112.58	115.05	110.97
Average demand	115.34	112.61	115.05	114.26
Average initial offer	109.92	109.84	110.63	108.53
Average initial demand	116.74	117.34	119.90	116.76

Notes. This table shows the mean efficiency figures of our four manipulation groups: high interpersonal trust & high trust in government; high interpersonal trust & low trust in government; low interpersonal trust & high trust in government; and low interpersonal trust & low trust in government. *Deal* is the percentage of deal reached in the tax game. *Average tax payment* is the mean of the deal amount of tax payments after bargaining (exclude no deals). *Average offer* is the mean of taxpayers' offers after bargaining made by taxpayers regardless of deal or no deal. *Average demand* is the mean of tax auditors' demands amount after bargaining regardless of deal or no deal. *Average initial offer* is the offer would-be if the auditor had to accept any offer and is non-binding. Taxpayers provide this amount before bargaining. *Average initial demand* is the demand would-be if the taxpayer had to pay any demand and is non-binding. Tax auditors provide this amount before bargaining.

Panel A: Mean (Std. De	v.)				
	high trust in gover	nment	low trust in	government	row means
high interpersonal trust	116.74		117.37		117.05
	(7.36)		(7.48)		(7.38)
	n=38		n=38		n=76
low interpersonal trust	119.90		116.16		118.02
	(6.35)		(7.67)		(7.24)
	n=38		n=38		n=76
column means	118.32		116.76		
	(7.01)		(7.55)		
	n=76		n=76		
Panel B: Analysis of Var	riance				
source		df	M.S.	F-statistic	p-value
interpersonal trust		1	36.03	0.69	0.4082
trust in the government		1	91.61	1.75	0.1880
interpersonal trust * trust	in government	1	181.29	3.46	0.0648
error		148	52.36		

Initial Demand by Tax Auditors

Notes. Panel A reports the means (standard deviation) of tax auditor's initial demand (the demand would-be if the taxpayer had to pay any demand, and is non-binding) across four manipulation groups. Panel B reports the result of 2×2 ANOVA, with interpersonal trust (high or low) and trust in government (high or low) as the independent variables and tax auditor's initial demand as the dependent variable.

Panel A: Mean (Std. De	v.)					
	high trust in government		low trust in	government	row means	
high interpersonal trust	115.34		112.61		113.97	
	(6.77)		(6.56)		(6.76)	
	n=38		n=38		n=76	
low interpersonal trust	115.05		114.26		114.66	
	(6.92)		(7.59)		(7.23)	
	n=38		n=38		n=76	
column means	115.20		113.43			
	(6.80)		(7.10)			
	n=76		n=76			
Panel B: Analysis of Var	riance					
source		df	M.S.	F-statistic	p-value	
interpersonal trust		1	17.79	1.18	0.5462	
trust in the government		1	118.13	2.43	0.1212	
interpersonal trust * trust	in the government	1	36.03	0.74	0.3907	
error		148	48.61			

Final Demand by Tax Auditors

Notes. Panel A reports the means (standard deviation) of tax auditor's final demand after bargaining across four manipulation groups. Panel B reports the result of 2×2 ANOVA, with interpersonal trust (high or low) and trust in government (high or low) as the independent variables and tax auditor's final demand as the dependent variable.

Panel A: Mean (Std. De	v.)				
	high trust in gover	nment	low trust in	n government	row means
high interpersonal trust	-1.89		-4.76		-3.08
	(5.21)		(7.96)		(7.58)
	n=38		n=38		n=76
low interpersonal trust	-4.84		-1.39		-3.37
	(7.67)		(6.88)		(6.68)
	n=38		n=38		n=76
column means	-3.12		-3.33		
	(7.44)		(6.84)		
	n=76		n=76		
Panel B: Analysis of Va	riance				
source		df	M.S.	F-statistic	p-value
interpersonal trust		1	3.18	0.06	0.7995
trust in the government		1	1.68	0.03	0.8535
interpersonal trust * trust in the government		1	378.95	7.70	0.0062
error		148	49.19		

Concessions by Tax Auditors

Notes. Panel A reports the means (standard deviation) of the difference between tax auditor's demand after bargaining and initial demand (the demand would-be if the taxpayer had to pay any demand and is non-binding) before bargaining across four manipulation groups. Panel B reports the result of 2×2 ANOVA, with interpersonal trust (high or low) and trust in government (high or low) as the independent variables and the difference between tax auditor's demand after bargaining and initial demand as the dependent variable.

Panel A: High Trust in Government								
	Mean	Std. Dev.	n	df	F	p-value		
high interpersonal trust	117.74	7.36	38					
low interpersonal trust	119.89	6.35	38	75	4.01	0.0490		
total	118.32	7.01	76					
Panel B: Low Trust in Go	vernment							
	Mean	Std. Dev.	n	df	F	p-value		
high interpersonal trust	117.37	7.48	38					
low interpersonal trust	116.15	7.67	38	75	0.48	0.4884		
total	116.76	7.55	76					

Split Sample, Initial Demand by Tax Auditors

Notes. This table compares the initial demand (the demand would-be if the taxpayer had to pay any demand and is non-binding) by tax auditors between high and low interpersonal trust group within two subgroups: high trust in government group and low trust in government group. Panel A and Panel B report the means (standard deviation) of tax auditor's initial demand of high trust in government group and low trust in government group respectively.

Panel A: High Trust in Government								
	Mean	Std. Dev.	n	df	F	p-value		
high interpersonal trust	-1.39	6.88	38					
low interpersonal trust	-4.84	7.67	38	75	4.25	0.0427		
total	-3.12	7.44	76					
Panel B: Low Trust in Go	vernment							
	Mean	Std. Dev.	n	df	F	p-value		
high interpersonal trust	-4.76	7.96	38					
low interpersonal trust	-1.89	5.21	38	75	3.45	0.0672		
total	-3.33	6.83	76					

Split Sample, Concessions Made by Tax Auditors During Bargaining

Notes. This table compares the difference between tax auditor's demand after bargaining and initial demand (the demand wouldbe if the taxpayer had to pay any demand and is non-binding) before bargaining between two subgroups: high trust in government group and low trust in government group. Panel A and Panel B report the means (standard deviation) of the difference between tax auditor's demand after bargaining and initial demand (the demand would-be if the taxpayer had to pay any demand and is non-binding) before bargaining of high trust in government group and low trust in government group, respectively.

Panel A: High Trust in Government								
	Mean	Std. Dev.	n	df	F	p-value		
high interpersonal trust	115.34	6.56	38					
low interpersonal trust	115.05	7.59	38	75	1.04	0.3117		
total	115.20	7.10	76					
Panel B: Low Trust in Go	vernment							
	Mean	Std. Dev.	n	df	F	p-value		
high interpersonal trust	112.61	7.48	38					
low interpersonal trust	114.26	7.67	38	75	0.48	0.4884		
total	113.43	7.55	76					

Split Sample, Final Demand by Tax Auditors

Notes. This table compares final demand by tax auditors between high and low interpersonal trust group within two subgroups: high trust in government group and low trust in government group. Panel A and Panel B report the means (standard deviation) of tax auditor's final demand of high trust in government group and low trust in government group respectively.

Initial Offer by Taxpayers

Panel A: Mean (Std. Dev	v.)				
	high trust in govern	ment	low trust in gov	renment	row means
high interpersonal trust	109.92		109.84		109.88
_	(6.68)		(6.29)		(6.44)
	n=38	1	n=38		n=76
low interpersonal trust	110.63		108.53		109.58
	(7.87)		(7.97)		(7.94)
	n=38	1	n=38		n=76
column means	110.28		109.18		
	(7.25)		(7.16)		
	n=76	1	n=76		
Panel B: Analysis of var	iance				
source		df	M.S.	F-statistic	p-value
interpersonal trust		1	3.48	0.07	0.7969
trust in the government		1	45.32	0.87	0.3536
interpersonal trust * trust	in the government	1	39.01	0.75	0.3894
error		148	52.34		

Notes. Panel A reports the means (standard deviation) of taxpayer's initial offer (the offer would-be if the auditor had to accept any offer and is non-binding) across four manipulation groups. Panel B reports the result of 2×2 ANOVA, with interpersonal trust (high or low) and trust in government (high or low) as the independent variables and taxpayer's initial offer as the dependent variable.

Final	Offer	by	Taxpayers
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Panel A: Mean (Std. De	v.)				
	high trust in gover	rnment	low trust in	government	row means
high interpersonal trust	114.97		112.58		113.78
	(7.39)		(6.54)		(7.04)
	n=38		n=38		n=76
low interpersonal trust	115.05		110.97		113.01
	(6.30)		(7.80)		(7.33)
	n=38		n=38		n=76
column means	115.01		111.78		
	(6.82)		(7.20)		
	n=76		n=76		
Panel B: Analysis of Va	riance				
source		df	M.S.	F-statistic	p-value
interpersonal trust		1	22.13	0.45	0.5047
trust in the government		1	398.13	8.05	0.0052
interpersonal trust * trust in the government		1	26.95	0.54	0.4617
error		148	49.48		

Notes. Panel A reports the means (standard deviation) of taxpayer's final offer after bargaining across four manipulation groups. Panel B reports the result of 2×2 ANOVA, with interpersonal trust (high or low) and trust in government (high or low) as the independent variables and taxpayer's final offer as the dependent variable.

Panel A: Mean (Std. De	v.)				
	high trust in gover	rnment	low trust in	n government	row means
high interpersonal trust	5.05		2.74		3.89
	(5.40)		(6.15)		(7.23)
	n=38		n=38		n=76
low interpersonal trust	4.42		2.45		3.43
	(5.87)		(8.09)		(5.69)
	n=38		n=38		n=76
column means	4.74		2.59		
	(7.03)		(5.75)		
	n=76		n=76		
Panel B: Analysis of var	iance				
source		df	M.S.	F-statistic	p-value
interpersonal trust		1	8.06	0.19	0.6609
trust in the government		1	174.80	4.19	0.0424
interpersonal trust * trust	in the government	1	1.11	0.03	0.8705
error		148	41.72		

Concessions by Taxpayers

Notes. Panel A reports the means (standard deviation) of the difference between taxpayer's offer after bargaining and initial offer (is the offer would-be if the auditor had to accept any offer and is non-binding) before bargaining across four manipulation groups. Panel B reports the result of 2×2 ANOVA, with interpersonal trust (high or low) and trust in government (high or low) as the independent variables and the difference between taxpayer's offer after bargaining and initial offer as the dependent variable.

Deal Reached

Panel A: Mean (Std. Dev.)					
	high trust in gover	nment	low trust in g	government	row means
high interpersonal trust	0.84		0.82		0.83
	(0.37)		(0.39)		(0.38)
	n=38		n=38		n=76
low interpersonal trust	0.87		0.63		0.75
	(0.34)		(0.49)		(0.44)
	n=38		n=38		n=76
column means	0.86		0.72		
	(0.35)		(0.45)		
	n=76		n=76		
Panel B: Analysis of Va	riance				
source		df	M.S.	F-statistic	p-value
interpersonal trust		1	0.23684211	1.46	0.2283
trust in the government		1	0.65789474	4.07	0.0456
interpersonal trust * trust in the government		1	0.42105263	2.60	0.1088
error		148	0.16180654		

Notes. Panel A reports the means (standard deviation) of the deal reached across four manipulation groups. Panel B reports the result of 2×2 ANOVA, with interpersonal trust (high or low) and trust in government (high or low) as the independent variables and the deal reached as the dependent variable.

Appendix: Experiment Instructions

Introduction

Welcome to this experiment. Please read these instructions carefully. You can earn a significant amount of money in this experiment which depends on your decisions and the decisions of other participants. All tasks are carried out on the computer. Please do not use the computer for any other activities and follow the instructions.

The instructions for this experiment should be self-explanatory. However, if you have a question, please raise your hand, and one of the experimenters will come to your place and answer your question privately.

During this experiment you will have to complete several tasks. In **two** of these **tasks**, with **two rounds** in each task you will earn Experiment-Dollars (E\$). At the end of the experiment, the computer will randomly select one round in one of the tasks for payoff. The earnings of that round in E\$ will be converted to Euros at the exchange rate of E\$ $1.8 = \notin 1.00$, and will be paid to you in cash. In addition, you receive a fixed show up fee of E\$ 5.00.

Please note that in all parts of this experiment, your identity (under which you make your decisions) will not be revealed to any other participant, and no other participant's identity will be revealed to you. Also, the experimenter cannot connect your decisions to your identity. In this sense, **your decisions are anonymous**.

Priming Trust – Writing task

High Interpersonal Trust Group

Below, please describe in detail one situation that has made you experience trust in another person. This

could be something you are currently experiencing or something from the past. Begin by writing down what you remember from the trust event, and continue by writing a description of the event as detailed as possible. If you can, please write your description in a way that someone reading this might even feel the trust you experienced just from learning about the situation. Please note that your writings will be treated anonymously and will be deleted after the experiment. Write about 50 words.

Low Interpersonal Trust Group

Below, please describe in detail one situation that has made you experience betrayal from another person. This could be something you are currently experiencing or something from the past. Begin by writing down what you remember from the betrayal event, and continue by writing a description of the event as detailed as possible. If you can, please write your description in a way that someone reading this might even feel the betrayal you experienced just from learning about the situation. Please note that your writings will be treated anonymously and will be deleted after the experiment. Write about 50 words.

Task 1: Sender-Receiver-Task

Trust Game Instructions (based on Berg, Dickhaut and McCabe 1995; Burnham, McCabe and Smith 2000)

High Interpersonal Trust Group

In this sender-receiver-task you will be randomly paired with a partner in the room. You will not be told who this person is. You will interact with that same person in both rounds of this sender-receiver-task.

In this task you will be randomly assigned to either the role sender or the role receiver. Both the receiver and sender will receive an upfront endowment of 10 E\$. Persons with the role sender will have the opportunity to send some, all, or none of their endowment of 10 E\$ to their partner (receiver). The amount sent to the receiver will be tripled.

For instance, if the sender sends 5 E\$ of his/her 10 E\$ endowment, the receiver will receive 15 E\$. The receiver will then decide how much money to send back to their partner (sender). For example, when the receiver sends back 10 E\$, the sender will end up with 10-5+10=15 E\$; and the receiver will end up with 10+15-10=15 E\$.

In the first round of this task, you will be the sender/receiver, and your partner will be the receiver/sender. In the second round, you will then be the receiver/sender, and your partner (the same person as in the first round) will be the sender/receiver.

Note that you can make the most money when you trust your partner and your partner trust you. Some previous experimental research studies have found high levels of trust and trustworthiness in settings like this.

Low Interpersonal Trust Group

In this sender-receiver-task you will be randomly paired with an opponent in the room. You will not be told who this person is. You will interact with that same person in both rounds of this sender-receiver-task.

In this task you will be randomly assigned to either the role sender or the role receiver. Both the receiver and sender will receive an upfront endowment of 10 E\$. Persons with the role sender will have the opportunity to send some, all, or none of their endowment of 10 E\$ to their opponent (receiver). The amount sent to the receiver will be tripled.

For instance, if the sender sends 5 E\$ of his/her 10 E\$ endowment, the receiver will receive 15 E\$. The receiver will then decide how much money to send back to their opponent (sender). For example, when the receiver sends back 10 E\$, the sender will end up with 10-5+10=15 E\$; and the receiver will end up

with 10+15-10=15 E\$.

In the first round of this task, you will be the sender/receiver, and your opponent will be the receiver/sender. In the second round, you will then be the receiver/sender, and your opponent (the same person as in the first round) will be the sender/receiver.

Note that the receiver does not have to send back any money, so the sender might not send anything order not to end up with nothing. Some previous experimental research studies have found low levels of trust and trustworthiness in settings like this.

Priming Trust in Government

Description of fictitious country Varosia (based on Kirchler and Wahl 2010)

High Trust in the Government Group

Please read the following description of a country. Imagine yourself to be a citizen of this country.

Varosia is located in Europe and the territory of Varosia occupies approximately 83,000 km². According to the last census, conducted in August 2018, Varosia had approximately 16,000,000 inhabitants. There are no large differences in income across the citizens of Varosia. Since Varosia's autonomy in 1949 it has been characterized by high political stability and a democratic government. Referenda are regularly held, in which the citizens of Varosia can co-decide on legislation.

The government enjoys a good reputation among the population. Opinion polls indicate that 70% of the citizens are satisfied with the current government. The tax burden is equitably distributed among the different occupational groups and income groups. Varosia's citizens believe that everyone has to contribute his/her share of taxes. Varosia's legislation is transparent and the government offers the

opportunity of free counsel on judicial participants and tax issues in information centers. Furthermore, Varosia's public authorities are very service-oriented and interested in supporting Varosia's citizens. The budget expenditures of the state are traceable for Varosia's citizens, because they are regularly informed by means of a clear official gazette about the use of their tax money. In an opinion poll in October 2018, 78% of Varosia's citizens reported having the impression that their tax money is used reasonably. In addition, little tax money is embezzled by politicians. According to an international corruption index (CPI) Varosia is one of the European countries with the lowest perceived corruption. Because of all these factors, the citizens of Varosia trust their country a lot.

How much would you trust Varosia's government including its tax authority on a scale from 0 to 10 (0 is not at all and 10 is very much)?

Please justify you answer briefly. Write about 50 words.

Low Trust in the Government Group

Please read the following description of a country. Imagine yourself to be a citizen of this country.

Varosia is located in Europe and the territory of Varosia occupies approximately 83,000 km². According to the last census, conducted in August 2018, Varosia had approximately 16,000,000 inhabitants. There are no large differences in income across the citizens of Varosia. Since Varosia's autonomy in 1949 it has been characterized by low political stability and an oligarchic (authority of few) government. Referenda are seldom held and, thus, the citizens of Varosia cannot co-decide on legislation.

The government has a bad reputation among the population. Opinion polls indicate that 70% of the citizens are not satisfied with the current government. The tax burden is not equitably distributed among the different occupational groups and income groups. Varosia's citizens do not believe that everyone has

to contribute his/her share of taxes. Varosia's legislation is not transparent and the government does not offer any opportunity for free counsel on judicial participants and tax issues in information centers. Furthermore, Varosia's public authorities are not service-oriented and are not interested in supporting Varosia's citizens. The budget expenditures of the state are not traceable for Varosia's citizens, because they are not regularly informed by means of a clear official gazette about the use of their tax money. In an opinion poll in October 2018, 78% of Varosia's citizens reported having the impression that their tax money is not used reasonably. In addition, a lot of tax money is embezzled by politicians. According to an international corruption index (CPI) Varosia is one of the European countries with the highest perceived corruption. Because of all these factors, the citizens of Varosia have little trust in their country.

How much would you trust Varosia's government including its tax authority on a scale from 0 to 10 (0 is not at all and 10 is very much)?

Please justify your answer briefly. Write about 50 words.

Task 2: Tax Game

Tax Game Instructions (Assign roles)

First round - taxpayer

This tax bargaining task has two rounds. In the first round you will be paired with the same person with whom you interacted in the two rounds of the sender-receiver-task.

You have been randomly assigned to the role taxpayer (resident in Varosia), while the other person has been assigned to the role of tax auditor (employed by Varosia's tax authority).

The taxpayer and the tax auditor bargain about the tax payment of the taxpayer. The legally determined

total tax owed by the taxpayer is somewhere between 100 E\$ and 130 E\$ under Varosia's tax law. Tax payments lower than 100 E\$ are not allowed. The exact amount within the interval of 100 E\$ and 130 E\$ however will have to be bargained with the tax auditor.

You will receive an endowment of 30 E\$. Any tax that you pay above 100E\$ will be deducted from your personal endowment of 30 E\$. For example, if you make a tax payment of 115 E\$, your personal payoff will be 30-15 E\$= 15 E\$. If you do not reach a deal with the tax auditor, then you will lose your endowment and your personal payoff will be 0 E\$.

The tax auditor is paid a fixed salary of 15 E\$ if he/she reaches a deal with you (no matter how high the actual tax payments are). If he/she does not reach a deal with you, his/her payoff will be 0 E\$.

In addition to your personal payoff described above, WULABS will donate (we will really donate!) the deal amount reached in excess of 100 E\$ to the following five Austrian, tax-funded institutions, in equal shares: Österreichische Nationalbibliothek, Universitätsklinik für Kinder- und Jugendheilkunde, Kunsthistorisches Museum Wien, Kinderbüro Universität Wien, Volkshilfe Österreich.

The taxpayer and the tax auditor can bargain the tax payment using a computer chat for two minutes.

(separate screen, when participants enter the number)

Procedure and payment:

When bargaining, the taxpayer will make an offer of the total tax payment to the tax auditor ("Offer"). This offer can take any value between 100E\$ and 130 E\$. At the same time, the tax auditor sets his/her minimum expected tax payment from the taxpayer ("Demand").

• If the "Offer" is larger or equal to the "Demand", then the tax payment will equal the amount as proposed

by the "taxpayer".

• If the "Offer" is smaller than the "Demand", then there is no deal.

The legal amount of the total tax payment ranges from 100 E\$ to 130 E\$. You (taxpayer) and the tax auditor bargain about the amount to be paid by the taxpayer.

Before the chat starts, please indicate what your offer would be if the auditor had to accept any offer you make. Please note this is non-binding, will not be disclosed to the tax auditor and does not influence your personal payoff.

(chat screen)

(separate screen, when participants enter the number)

Procedure and payment:

When bargaining, the taxpayer will make an offer of the total tax payment to the tax auditor ("Offer"). This offer can take any value between 100E\$ and 130 E\$. At the same time, the tax auditor sets his/her minimum expected tax payment from the taxpayer ("Demand").

- If the "Offer" is larger or equal to the "Demand", then the tax payment will equal the amount as proposed by the "taxpayer".
- If the "Offer" is smaller than the "Demand", then there is no deal.

The legal amount of the total tax payment ranges from 100 E\$ to 130 E. You (taxpayer) and the tax auditor bargain about the amount to be paid by the taxpayer.

What is your offer of tax payment?

<u>First round – tax auditor</u>

In the first round you will be paired with the same person with whom you interacted in the two rounds of the sender-receiver-task.

You have been randomly assigned to the role tax auditor (employed by Varosia's tax authority), while the other person has been assigned to the role of taxpayer (resident in Varosia).

The taxpayer and the tax auditor bargain about the tax payment of the taxpayer. The legally determined total tax owed by the taxpayer is somewhere between 100 E\$ and 130 E\$ under Varosia's tax law. Tax payments lower than 100 E\$ are not allowed. The exact amount within the interval of 100 E\$ and 130 E\$ however will have to be bargained with the taxpayer.

It is your job to collect as much tax as you can in order to fund public goods, such as education and health care. Your employer, Varosia's tax authority, expects you to collect at least *120E\$* as a tax payment from the taxpayer.

You are paid a fixed salary of 15 E\$ if you reach a deal with the taxpayer (no matter how high the actual tax payments are). If you do not reach a deal with the taxpayer, your personal payoff will be 0 E\$.

The taxpayer receives an endowment of 30 E\$. Any tax that the taxpayer pays above 100E\$ will be deducted from his/her personal endowment of 30 E\$. For example, if he/she makes a tax payment of 115 E\$, his/her personal payoff will be 30-15 E\$= 15 E\$. If he/she does not reach a deal with you, then he/she will lose his/her endowment and his/her personal payoff will be 0 E\$.

In addition to your personal payoff described above, WULABS will donate (we will really donate!) the deal amount reached in excess of 100 E\$ to the following five Austrian, tax-funded institutions, in equal shares: Österreichische Nationalbibliothek, Universitätsklinik für Kinder- und Jugendheilkunde, Kunsthistorisches Museum Wien, Kinderbüro Universität Wien, Volkshilfe

Österreich.

The taxpayer and the tax auditor can bargain the tax payment using a computer chat for two minutes.

(separate screen, when participants enter the number)

Procedure and payment:

When bargaining, the taxpayer will make an offer of the total tax payment to the tax auditor ("Offer"). This offer can take any value between 100E\$ and 130 E\$. At the same time, the tax auditor sets his/her minimum expected tax payment from the taxpayer ("Demand").

- If the "Offer" is larger or equal to the "Demand", then the tax payment will equal the amount as proposed by the "taxpayer".
- If the "Offer" is smaller than the "Demand", then there is no deal.

The legal amount of the total tax payment ranges from 100 E\$ to 130 E. You (tax auditor) and the taxpayer bargain about the amount to be paid by the taxpayer.

Before the chat starts, please indicate what your demand would be if the taxpayer had to pay any demand you make. Please note this is non-binding, will not be disclosed to the taxpayer and does not influence your personal payoff.

(chat screen)

(separate screen, when participants enter the number)

Procedure and payment:

When bargaining, the taxpayer will make an offer of the total tax payment to the tax auditor ("Offer").

This offer can take any value between 100E\$ and 130 E\$. At the same time, the tax auditor sets his/her minimum expected tax payment from the taxpayer ("Demand").

- If the "Offer" is larger or equal to the "Demand", then the tax payment will equal the amount as proposed by the "taxpayer".
- If the "Offer" is smaller than the "Demand", then there is no deal.

The legal amount of the total tax payment ranges from 100 E\$ to 130 E. You (tax auditor) and the taxpayer bargain about the amount to be paid by the taxpayer.

What is your demand of tax payment?

Tax Game Instructions (Assign partner)

Second round

You will now engage in a second round of the same task, with the same rules. However, in this round you will be randomly paired with a new person with whom you did not interact in any previous stage of the experiment.

<REPEAT OTHER INSTRUCTIONS FROM FIRST ROUND>

TRR 266 Accounting for Transparency

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