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CESIFO WORKING PAPER NO. 6186
CATEGORY 1: PUBLIC FINANCE
NOVEMBER 2016

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ISSN 2364-1428

CESifo
Center for Economic Studies & Ifo Institute

CESifo *Working Paper No. 6186*

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Abstract

The ability of a tax authority to successfully collect taxes depends critically on both its relationship with the taxpayers and how strongly these taxpayers are committed to contributing to the common good. We present evidence on a new non-intrusive approach aimed at fostering the commitment to pay taxes. Using a between-subject design in a unique field setting, we experimentally test whether tax compliance can be increased by linking a voluntary promise of timely payment to a reward. We measure the change induced by an additional compliance promise through identifying the pure reward effect. We find that although previously compliant taxpayers are more likely to make a promise, the commitment to do so can improve payment behaviour. This effect, however, is strongly dependent on the type of reward to which the promise is linked. Compliance only increases when the reward is non-financial. No compliance effect is observed if cash is offered in return for promise fulfilment.

JEL-Codes: H260, C930, A130, D030.

Keywords: tax compliance, field experiment, commitment, promise, supportive incentives, psychological contract.

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We are grateful to the municipality Trimbach and in particular Adolf Müller who helped to make this field experiment possible. We thank Thiess Buettner, Uwe Dulleck, Jonas Fooken, Benedikt Herrmann, Daniel Müller, Mathias Sinning, Kurt Schmidheiny, Alois Stutzer and Joachim Wilde for their valuable comments.

1. INTRODUCTION

Research in the area of tax compliance has convincingly argued that successful tax collection is not only the exercise of power[5]; tax compliance, like all human behaviour, is comprised of a mixture of "love" and "fear". Early models of tax compliance were influenced by Becker's (1968) crime theory, which emphasizes the element of fear elicited via threat, including the probability of detection and the punishment for non-compliance (Allingham and Sandmo 1972). More recently, however, researchers and tax administrations have placed more emphasis on integrating the "love" aspect. In particular, citizen consent to pay taxes seems to reflect an identification with the tax authority's objectives (Boulding 1981). Braithwaite (2001) characterizes this taxpayer-authority relation in terms of five motivational postures or sets of beliefs and values: (a) commitment, (b) capitulation, (c) resistance, (d) disengagement and (e) game playing. Our study will take a closer look at the first motivational posture, namely commitment.

In general, the literature provides a solid basis for believing that loyalty is sensitive to external influences (Feld 1997, Torgler 2007, 2006, 2005). For instance, non-compliance is often explained by the perception of having received disrespectful treatment from the tax administration (Kirchler 2007, Feld and Frey 2002). Thus, there is substantial evidence that taxpayers *react* to tax administration behaviour. Exchange relationships and reciprocity matter. However, because commitment "reflects beliefs about the desirability of a tax system and feelings of moral obligation to act in the interest of the collective and pay one's tax with good will" (Braithwaite 2001, p.6), it has different dimensions. Yet too little is still known about how to enhance a *pro-active* commitment to pay taxes.

[5] For an overview, see, for example, Alm et al. (2010), Kirchler (2007) and Torgler (2007).

We employ a field experiment to explore whether pre-commitment in the form of a specific promise can increase tax compliance. According to psychological commitment theory (Cialdini 1989, Kiesler 1971, Festinger 1957), a promise has a binding function because of an individual's need to behave consistently. In our setting, we assume that the promise strengthens the psychological contract between the taxpayer and the tax authority (Feld and Frey 2007, Feld et al. 2006) and emphasizes the moral obligation to comply with tax payment. Thanks to the support of a Swiss tax authority, we were able to conduct this experimental research project in a field setting, which offers a different perspective than the many experimental studies conducted in laboratories. In our treatment groups, taxpayers were given the option of promising to pay their taxes on time. Those who made a promise and complied were entered into a lottery with the chance of winning either a financial reward or a non-financial reward. In additional treatments, the rewards were offered in response to compliance only (i.e., without the possibility of the formal promise), allowing us to measure any pure reward effect disentangled from the commitment effect.

The experiment was conducted during the 2013 financial year in a Swiss municipality whose taxpayers must pay their pre-taxes[6]. The analysis identifies behavioural changes in the pre-tax payments of more than 2,000 taxpayers before and during the field experiment. The treatments were manipulated through a letter to all taxpayers that included a reminder about the due dates for the three instalments of the pre-tax. In the treatment groups, the letter stipulated that those who paid their pre-taxes on time would receive a reward. In the promise treatments, a postcard was

[6] The tax payment amounts to the municipality tax (Gemeindesteuer) plus the church tax (Kirchensteuer) plus the fire brigade tax (Feuerwehrsteuer). The tax amount for the municipality is based on the cantonal tax. The municipality levies 104% of the amount charged by the canton, although this rate can vary according to the municipality's outlays for the following year (e.g., infrastructure projects). Tax is based on income. In mid-February (around the 15th) taxpayers receive an invoice declaring their tax liability for the current year, which is estimated based on previous years. This tax amount must be paid in three instalments throughout the year (at the end of March, June, and November 2013). For more detailed descriptions of the Swiss tax system see Feld (2000) or Feld and Kirchgässner (2003).

enclosed with the letter, on which the taxpayer could promise to pay all rates on time. This enclosure introduced a novel element exploring the consequences of holding participants to a moral commitment; in this case, the promise to be compliant.

The article proceeds as follows: Section 2 gives a brief overview of psychological commitment theory and its applications. Section 3 summarizes our general findings on the effect of offering rewards and links them to recent developments in the literature on intrinsic motivation to pay taxes. Section 4 describes the experimental setting and design and outlines the treatment selection. Section 5 reports results and relates them to findings in the literature. Section 6 concludes the paper by discussing the limitations of the study and suggests directions for future research.

2. PROMISES AS A COMMITMENT DEVICE

Economists are increasingly interested in the relevance of promises, which are usually made with the intent of influencing the beliefs of an interaction partner and creating trust so that an exchange can be relied upon. Empirical studies confirm the efficiency of such messages, especially in settings characterized by anonymous one-shot interactions. In particular, promises change the expectations of interaction partners and thus improve coordination between actors. The promise-makers, for their part, assume that their message will be taken for granted by the receivers and live up to their word, even when the promisor has to forego material benefits in order to keep the promise (Hurkens and Kartik 2009, Bicchieri and Lev-On 2007, Charness and Dufwenberg 2006, Ellingsen and Johannesson 2004, Kerr and Kaufman-Gilliland 1994, Ostrom et al. 1992). Hence, the second effect of promises is through changed beliefs. A related concept is expectation-based guilt aversion (Charness and Dufwenberg 2006), the fact that individuals feel guilty when letting others down. Because a promise raises others' expectations, promise-makers want to live up to their word in order to avoid inner conflict. On the other hand, cognitive dissonance theory (Festinger 1957)

interprets promise-keeping in terms of an inner urge for consistency: behaving against stated intentions creates a feeling of discomfort. Behavioural economists, in contrast, suggest that promises are kept because of a preference for keeping one's word (Ismayilov and Potters 2012, Ellingsen et al. 2010, Vanberg 2008, Ellingsen and Johannesson 2004) or the desire to conform to the social norm of truth-telling (Binmore 2006). Thus, in general, once a promise is made, the probability of its being fulfilled increases. Most of these findings, however, have been generated in the laboratory, raising the question of how far they apply in the real world[7]. Our field experiment examines how promises work in a natural setting by observing real citizens in their actual routine of paying taxes. The fact that the taxpayers are unaware of their participation reduces the risk of an experimental demand effect[8].

In general, tax compliance can be characterized as a principal-agent problem (Andreoni et al. 1998). The principal (the tax administration) wants the agent (citizen) to comply (to pay taxes) but has only limited control over the effort invested by the agent (how honest the agent is). This setting is analogous to the relationship between employers and employees and thus can be related to the question of how to maintain employee motivation. Nevertheless, to avoid reductions in self-determination and intrinsic motivation, it is essential for any principal-agent relationship that the rewards are perceived as acknowledgement for good work and not in any way as compensation (Frey 1997a, Deci 1971). In our setting, the willingness to make a promise is rewarded by the possibility of winning a prize when full compliance is achieved. This situation is compared to a

[7] Belot et al. (2010) is an exception to this generalization. Using data from a television game show, the authors provide evidence for the external validity of promises as an effective coordination device. In their study, 50% of the players were more willing to cooperate when the interaction partner voluntarily made a promise to share. When the promise was elicited by the show's presenter, however, the promise had no effect.

[8] See Feld et al. (2006) for a discussion of field experiments in the area of tax compliance. There is an increasing trend towards using this method to better understand tax compliance (for an overview, see Hallsworth 2014).

treatment that offers a reward with no promise required. In this case, the function of the reward is to recognize that a good job has been done. We communicate the possibility of a reward *ex ante* to see whether rewards help to promote loyal compliance.

The underlying aim of such an incentive is to be supportive and improve citizens' attitude towards tax payment by acknowledging compliance. According to anecdotal evidence, some tax agencies are seriously considering the implementation of such supportive incentives. For example, in 2005, Uganda's Revenue Authority introduced a Taxpayers' Appreciation Day, on which it presents the so-called Vantage Award to compliant taxpayers from different regions, dubbed Taxations Rising Star[9]. Asian countries have also implemented reward systems, with Japan offering the opportunity to have a picture taken with the Emperor and the Philippines placing the names of compliant taxpayers into a lottery (Feld et al. 2006). There is also experimental evidence that the possibility of rewards communicated *ex ante* enhance compliance (Bazart and Pickhard 2011, Torgler 2003, Alm et al. 1992). For example, in a recent field experiment using a local church tax (up to 100 euros) in Germany, Dwenger et al. (2014) find that the effects of rewards are dependent on past compliance behaviour.

FIELD EXPERIMENT

BACKGROUND

Our study focuses on the third of three aspects of tax compliance – accurate reporting, timely filing, and timely payment (Slemrod et al. 2001), thereby avoiding measurement errors. The payment data are taken from the tax administration database, which records the total tax amount owed and the

[9] See http://www.observer.ug/component/content/article?id=27845:kenyas-chris-kirubi-to-grace-ura-taxpayers-awards.

amount and date of all payments. Although the information in the data set is anonymous, individual taxpayers can be matched over the years by their addresses and identification numbers. We therefore know not only the payments in the treatment year but also those from the five previous years (2008–2012). This allows us to measure the extent of taxpayer compliance in previous years. One shortcoming is that accurate reporting requires close monitoring of the auditing process and is thus dependent on the quality and frequency of audits.

The field experiment was conducted during the 2013 financial year in collaboration with one of Switzerland's many municipalities, Trimbach. Switzerland provides an interesting setting for field experiments on tax compliance because municipalities are fully responsible for the tax collection process. Thus, our field experiment considers the local tax regulated and collected by this municipality. Because Swiss taxes are collected in the form of pre-taxes, in mid-February of each year, taxpayers receive an invoice asking them to declare their tax liability for the current year, which is estimated based on taxes in the previous year. These taxes must be paid in three instalments: at the end of March, June and November. In the past, the municipality studied has had to deal with missing pre-taxes of around 20% of the taxes owed[10]. As a result, it has had difficulty budgeting its expenses over the course of the year. Hence, to better predict pre-tax funds, the tax and communal administrations announced at the end of 2012 that from 2013 onward, those who miss pre-tax payments will be dunned (see Appendix Figure A1 for the timeline). All taxpayers were informed about this institutional change with the invoice sent in mid-February.

[10] Around 2.5 million CHF were missing during the 2012 year. When taxpayers missed their payment of pre-taxes during the current year, a default interest rate was charged when the tax debt was defrayed in the final accounting process. The default interest rate is based on what the canton charges for default. In 2013 this interest rate amounted to 3%. Interest on an ordinary Swiss saving account was around 2% in 2013. Hence it was not rational and neither was it financially beneficial to delay the payment of the pre-taxes. This is particularly the case since 2013 when the additional dunning costs were introduced.

METHODOLOGICAL DESIGN

Our sample comprises 2,201 taxpayers (excluding firms) randomly assigned to four treatment groups and one control group. Taxpayers not having a tax debt the previous year were excluded, as were two additional taxpayers with exceptionally high tax debts[11]. By the end of the experiment, a further 244 taxpayers had been lost because of either migration or a change in civil status. Shortly *after* receiving the tax invoice for the current year (i.e., within two days), taxpayers received a second letter reminding them about the payment due date, and the incentive was introduced in the treatment groups. This letter was easy to read and to comprehend (see the Appendix for the letter). All tax administration employees and local council members were given a list of standardized answers to use in the case of taxpayer queries.

The promise treatments introduce a moral commitment by asking taxpayers to return a pre-paid postcard to the tax administration promising to pay all rates on time. Promise-making was thus voluntary, and 32% of the sample decided to make the commitment. The text of the promise, illustrated in Figure 1, is as follows; the taxpayers confirmed their pledge with a signature:

"I, (first name, last name), tax identification number XXX, promise as an honest taxpayer of the Trimbach municipality to pay all instalments of the pre-tax on time during 2013".

The promise commitment was a pre-requisite for entry into a lottery to win either a cash prize of 1,000 CHF[12] (cash promise treatment, CASH PRO) or a wellness weekend for two valued at 1,000 CHF (wellness promise treatment, WELL PRO). Whereas cash payments allow for more flexible

[11] These two observations had tax debts of CHF 85,400 and 90,000, respectively, twice the amount of the next highest tax debts (see *Table A1*).
[12] One thousand Swiss francs are roughly equal to 1,000 USD and this is a reasonable amount for a wellness weekend for two in Switzerland.

spending than a wellness weekend, the latter may be perceived more as a prize (Frey 2007). In the two other reward treatments (CASH and WELLNESS) the same rewards were offered without the promise. In all treatment groups, only the compliant taxpayers were eligible for the lottery at the end of the year. The average tax debt in 2013 was 4,459 CHF, but no significant between-treatment group differences are observable in the distribution of tax amounts owed.

Figure 1: Declaration of Promise

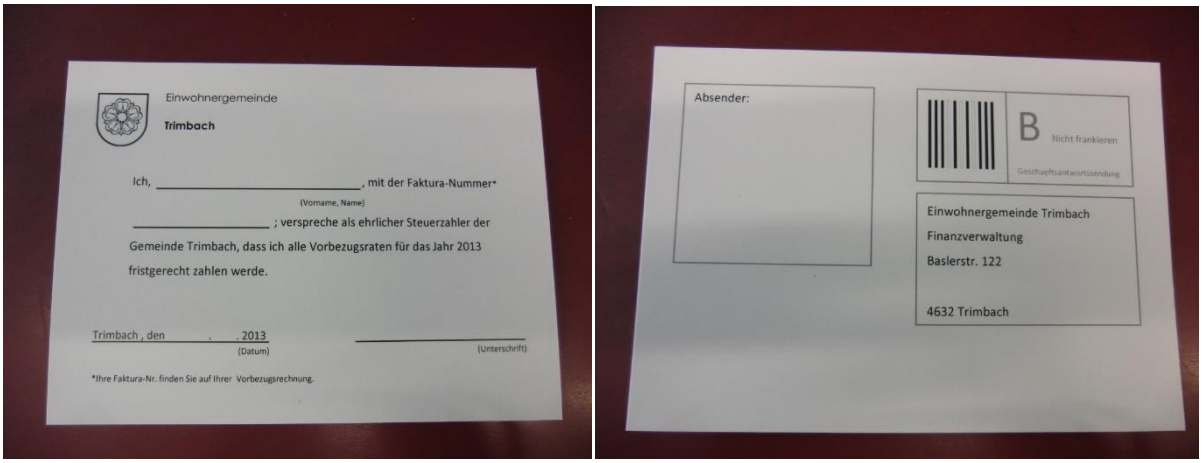


Table 1 shows the results of a Tukey range test, which compares the means between treatment groups. There is no significant difference in the average tax debt owed between any of the treatment groups. Table A1 in the Appendix lists the corresponding average tax debt in each group. Table A2 performs the same test for the average past level of compliance between the treatment groups. Again, no statistically significant difference is found.

Table 1: Pairwise Tax Debt Comparison in 2013

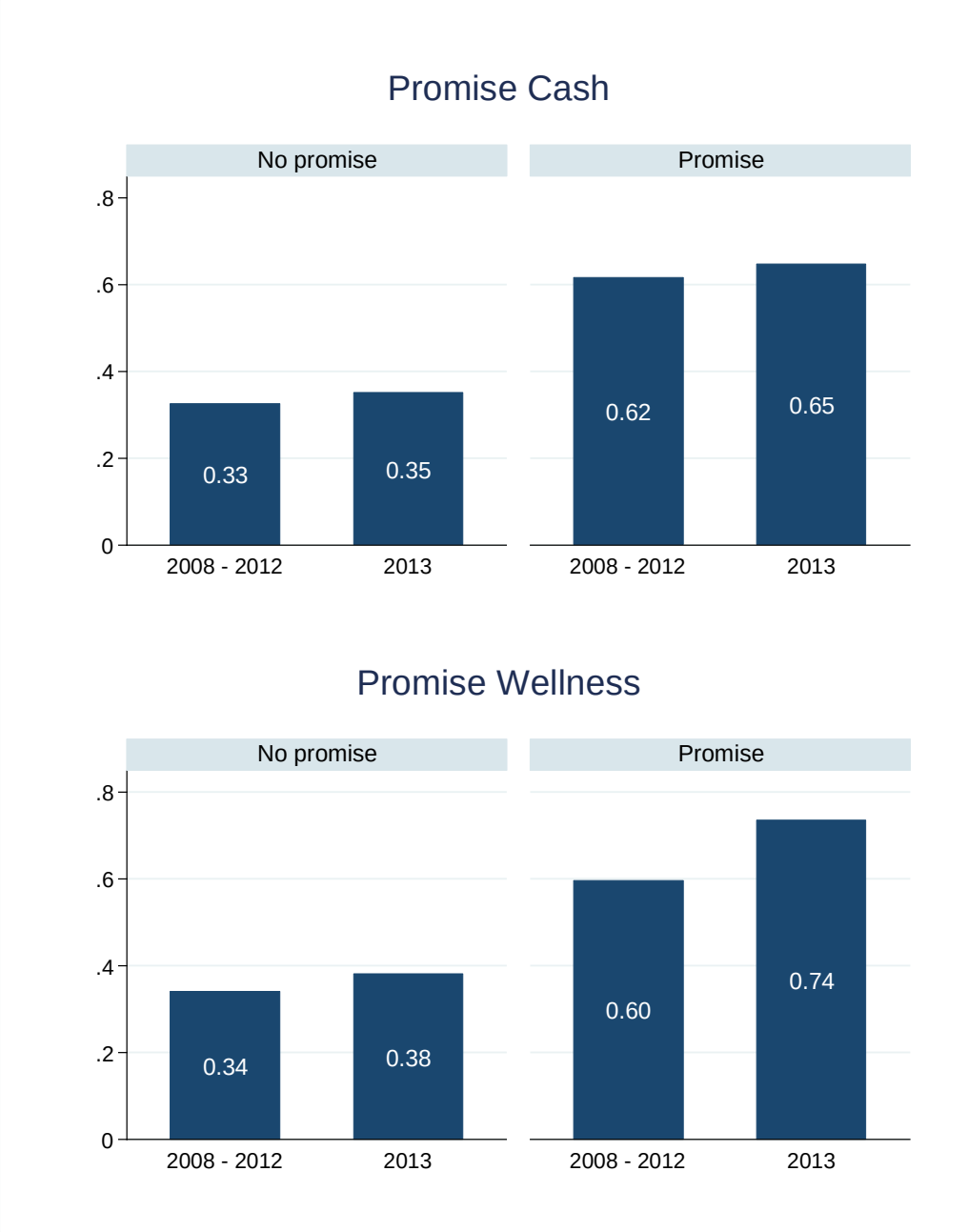
Tax Debt	Tukey Test					
	Contrast	*Std. Err.*	*t*	*P>t*	*95% Conf. Interval*	
WELLNESS vs CONTROL	0.00	281.04	0.00	1.00	-767.24	767.25
CASH vs CONTROL	-62.70	280.08	-0.22	1.00	-827.33	701.92
CASH PRO vs CONTROL	-207.12	288.84	-0.72	0.95	-995.67	581.43
WELL PRO vs CONTROL	-219.70	282.69	-0.78	0.94	-991.46	552.06
CASH vs WELLNESS	-62.70	283.76	-0.22	1.00	-837.37	711.96
CASH PRO vs WELLNESS	-207.12	292.41	-0.71	0.96	-1005.41	591.17
WELL PRO vs WELLNESS	-219.70	286.34	-0.77	0.94	-1001.41	562.01
CASH PRO vs CASH	-144.42	291.49	-0.50	0.99	-940.19	651.35
WELL PRO vs CASH	-157.00	285.39	-0.55	0.98	-936.13	622.14
WELL PRO vs CASH PRO	-12.58	294.00	-0.04	1.00	-815.21	790.05
Observations:		*CONTROL*	*WELLNESS*	*CASH*	*CASH PRO*	*WELL PRO*
		469	*445*	*451*	*401*	*435*

3. RESULTS

In the promise treatment groups, taxpayers who made the promise are more likely to have complied and paid all three rates on time than those who did not make the promise. The compliance rates for promise-makers are 65% in the cash treatment (CASH PRO) and 74% in the wellness treatment (WELL PRO), while compliance rates for non-promise-makers are 35% and 38%, respectively (Figure 2). Both differences are statistically significant at the 1% level in a two-sample test of proportions (Prtest) or a chi-square test (Chi2). Nevertheless, we recognize the possible effect of a selection process among those willing to make a promise. Thus, we also examine pre-intervention compliance behaviour by analysing a five-year average of tax compliance (2008–2012).

For simplicity and ease of interpretation, we base our analysis in the main text on non-parametric tests and simple Probit models. However, in the Appendix we present an instrumental variable regression, which addresses the selection dynamics and conducts robustness test. The analysis indicates that the results in the main text are largely robust to the selection problem.

Figure 2: Compliance Rates Promise-makers



The differences identified between taxpayers who made a promise in 2013 and those who did not are statistically significant at the 1% level in both treatments (CASH PRO and WELL PRO). Our results thus provide evidence for a strong selection effect: taxpayers who paid their taxes punctually in the past are more likely to promise future compliancy.

Having identified the selection effect, we also observe a notable increase in compliance for the promise-makers in the WELL PRO treatment, with a non-parametric test comparing the average 2008–2012 and 2013 compliance rates revealing a significant difference (Prtest: z=--2.9878, p=0.028 / Chi2: Pearson chi2= 8.9271, p=0.003). In the CASH PRO treatment, on the other hand, compliance increases only slightly without being statistically significant (Prtest: z=-0.667, 9=0.5048 Chi2: chi2=0.445, p=0.505). Similar evidence of a selection and commitment effect is also provided by Koessler et al.'s (2015) laboratory experiment on public goods, whereby in the present study the strength of the commitment effect differs with the incentive provided for commitment making.

We further control for both individual differences and the policy change that took place in 2013 by conducting an additional multivariate analysis (Table 2), while also probing for a potential reward effect of the promise itself. To do so, we first estimate the difference in compliance behaviour between promise- and non-promise-makers in 2013, pooled over the two available treatment groups (specification (1)). Being a promise-maker as opposed to a non-promise-maker (reference group) increases the probability of being compliant by 33.4 percent ($p<0.001$). We then increase the number of observations, adding in a no-intervention control group as the reference group (specification (2)). Compared to those in the control group, promise-makers are 26.3 percent more likely to comply ($p<0.001$), while non-promise-makers have a 7 percent lower compliance probability. In specification (3), we distinguish between the two types of promise-makers and measure the behavioural changes in comparison to the control group. Relative to the latter, promise-makers in the wellness treatment have a higher probability of compliance than promise-makers in the cash treatment (31.5 percent as opposed to 21.4 percent). On the other hand, non-promise-makers in the wellness treatment report on average lower compliance rates than the reference

group, although the difference is not statistically significant, while non-promise-makers in the cash treatment have an 8.7 percent lower probability of compliance than those in the control group.

To explore and control for a selection effect, as well as for the 2013 policy change, in specification (4) we include the data from the three pre-experimental years, with standard errors clustered on the individual level to take taxpayers' heterogeneity into account. The 2013 coefficient extracts the effect of the new dunning policy and records a significant increase of 4.25 percent ($p=0.042$). In particular, promise-makers in 2013 were 22.1 percent (CASH PRO) and 20.1 percent (WELL PRO) more likely to have paid their tax bill on time in the past (both $p<0.001$), whereas individuals who decided not to pledge had a past history of paying their taxes 7.0% and 5.5 % less frequently ($p=0.03$ for CASH PRO and $p=0.07$ for WELL PRO).

For the promise-makers in the WELL PRO treatment, compliance improves by an additional 10.8 percentage points when all the previous factors are considered ($p=0.02$). This behavioural change is significantly different to the behaviour of the non-promise-makers within the same group ($p=0.003$ for compliance of promise-makers in 2013 vs. non-promise-makers in 2013) and also significantly different to the behavioural change of promise-makers in the CASH PRO group ($p=0.0448$ for WELL PRO promise-makers in 2013 vs. CASH promise-makers in 2013). Finally, specification (5) controls for robustness by including demographic characteristics as explanatory variables[13]. The results do not change. Our data thus provide not only empirical support for distinct selection and commitment effects associated with promises (cf. Koessler et al.'s 2015 public good laboratory experiment) but also indicates that the promise effects differ depending on the reward offered for compliance.

[13] Specifically, we control for level of tax debt; gender; marital status; children; age (65 + dummy) and for how many years the taxpayer has lived in the municipality, whether the registered taxpayer owns a property in the municipality, is registered as a church member of one of the three local churches and holds Swiss citizenship (dummy).

Table 2: Probit Models- Commitment and Selection

	(1)	(2)	(3)	(4)	(5)
		Compliance 2013		Compliance 2008-2013	
	Promise	**Promise vs. Control**	**Promise vs. Control**	**Promise vs. Control**	**Promise vs. Control**
	pooled	*pooled*	*individual*	*individual*	*individual*
Promise-makers	0.334***	0.263***			
	(0.0384)	(0.0393)			
No Promise		-0.0700**			
		(0.0314)			
Promise-makers Cash			0.214***	-0.0103	-0.0230
			(0.0499)	(0.0484)	(0.0539)
Promise-makers Well			0.315***	0.108**	0.108**
			(0.0514)	(0.0448)	(0.0510)
No Promise Cash			-0.0871**	-0.0158	0.0239
			(0.0388)	(0.0351)	(0.0397)
No Promise Well			-0.0549	0.000576	-0.000121
			(0.0373)	(0.0351)	(0.0393)
2013				0.0425**	0.0718***
				(0.0209)	(0.0232)
Promise-makers Cash (past)				0.221***	0.190***
				(0.0366)	(0.0383)
Promise-makers Well (past)				0.201***	0.181***
				(0.0370)	(0.0393)
No Promise Cash (past)				-0.0699**	-0.0820**
				(0.0325)	(0.0353)
No Promise Well (past)				-0.0546*	-0.0659**
				(0.0305)	(0.0319)
Demographics	no	no	no	no	yes
Observations	836	1,305	1,305	6,698	5,734
Clustered on ind. Level	*no*	*no*	*no*	*yes*	*yes*

Marginal effects, Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Note: The models controlling for demographics include gender; marital status; children; age (65 + dummy) (***), for how many years the taxpayer is living in the municipality(**) and whether the registered taxpayer owns a property in the municipality, is registered as a church member of one of the three local churches and holds Swiss citizenship (dummy)(***) as explanatory variables.

To investigate this reward-dependent difference in more detail and control for the pure incentive effect of rewards, we conduct an additional step using only the pure reward treatment groups (Table 3). First, we compare the behavioural changes of the CASH PRO group in 2013 with the CASH only group as the reference group (see specifications (6) and (7)). On an aggregate level, the CASH PRO and CASH treatments show no significant differences ($p=0.50$) (see specification 6). However, promise-makers have a 17.2 percent higher probability of being compliant than those in the CASH reward treatment ($p<0.001$), while non-promise-makers have a 12 percent lower probability ($p=0.001$).

Similarly, in the next two specifications ((8) and (9)), we explore the difference between the WELLNESS PRO and WELLNESS only treatment. Again, no differences emerge between the two treatment groups on an aggregate level ($p=0.18$), but promise-makers and non-promise-makers demonstrate significantly different compliance behaviours than the taxpayers in the reward only group. More specifically, promise-makers have a 28.9 percent higher probability of paying on time ($p<0.001$), while non-promise-makers are 6.4 % less likely to pay on time than the reward only group ($p=0.072$).

The final two specifications adjust for selection effects, policy change and individual characteristics ((10) and (11)). In line with the previous results, the coefficients of past compliance indicate a selection effect: the past compliance behaviour in the reward only groups (reward CASH and reward WELLNESS) is not significantly different from past compliance in the control group. According to the 2013 coefficient, which extracts the behavioural changes triggered by the policy change, there is no significant change in payment behaviour between taxpayers in the CASH only group and taxpayers who made a promise in the CASH PRO group ($p=0.356$). While for the CASH only group, the payment behaviour improves slightly, the change for the CASH promise makers

is in fact negative. Offering cash rewards for compliance had a positive incentive effect, but the combination of a promise and a cash reward is less powerful than the cash reward alone. The incentive effect of cash may be crowded out by the additional request. However, the difference is not statistically significant (p=0.356).

In the wellness groups, the promise-makers improve their payment behaviour by an additional 11 percent (p=0.016). This commitment effect is robust and persists when demographic factors are taken into account (specification (11); p=0.033)). We compare the behaviour of the promise-makers in WELL PRO with the behaviour of taxpayers who were only exposed to the reward in WELLNESS, finding that the difference in significance remains (p=0.040 for specification (10) and p=0.102 for specification (11)). In sum, eliciting the intention for compliance is powerful when combined with a non-financial reward. However, when a financial reward was offered, we could only observe a selection effect, but not a change in payment behaviour. Our result is in line with previous research: offering financial rewards can backfire when the recipient perceives them as compensation rather than acknowledgement (Frey and Jegen 2001, Deci 1971).

These results are particularly interesting for the commitment literature and provide a valuable insight into promises as a commitment device through road-testing the scheme in the field. However, from a policy perspective, the impact of the intervention overall is also of interest. Thus, in the following, we analyse the effect of an option to make a promise, rather than focusing on how behaviour changes when a promise is made. We compare compliance rates along the original assignment of treatments and ignore whether an individual has taken up a promise. In other words, we identify the impact of the intention to treat (ITT). Figure 3 shows the average compliance frequencies for the random treatment groups, both before and after the intervention.

Contrasting the compliance in 2008-2012 with the payment behaviour in 2013 reveals a positive compliance trend. However, since compliance levels in the past differ (although not on a statistically significant level (Table A2 in the appendix)), we compare the compliance changes only within a treatment group. We find strong payment improvements when the Wellness reward was offered alone (WELLNESS, Pr-test: z= -2.2515, p=0.0244) or in combination with the promise (WELL PRO, Pr-test: z= -2.8506, p=0.0044). Also in the cash reward group payment behaviour was significantly better than in the past (CASH, Pr-test: z= -3.0027, p=0.0027). In the CONTROL group we find a weakly significant improvement in the payment behaviour (Pr-test: z= -1.6829, p=0.0924). We attribute this change to the introduction of the new dunning system for unpaid pre-taxes in 2013. The comparison between these groups reveals that the new deterrence produces a slight increase in the payment morale, but only the combination with our rewards leads to a powerful improvement. After all, the change of payment behaviour in the CASH PRO group is smaller than in the other groups and not statistically significant (Pr-test: z= -0.7517, z=0.4523).

Figure 3: Compliance Rates ITT

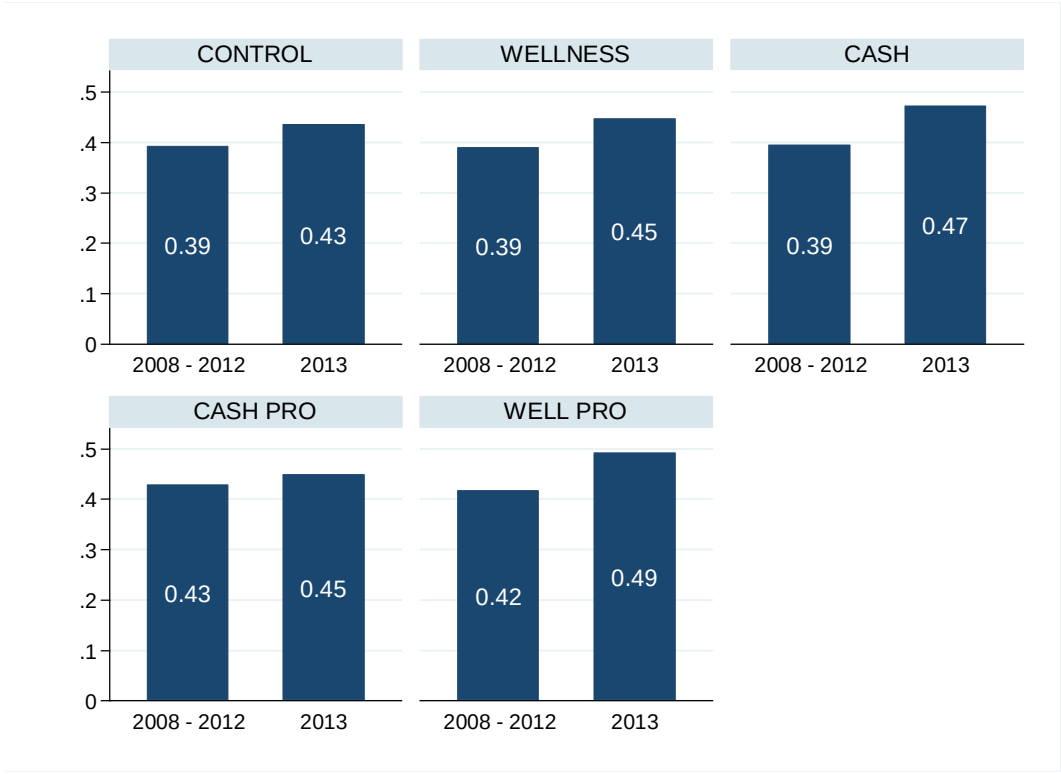


Table 3: Probit Models - Promise Reward vs. Reward

	(6)	(7)	(8)	(9)	(10)	(11)
	Compliance 2013				Compliance 2010-2013	
	Cash vs. Cash Pro		*Well vs. Well Pro*		*Control vs. Treat*	
Cash Promise	-0.0234					
	(0.0342)					
Cash Promise-maker		0.172***			-0.0102	-0.0225
		(0.0475)			(0.0482)	(0.0538)
Cash No Promise		-0.121***			-0.0158	0.0237
		(0.0372)			(0.0350)	(0.0396)
Reward cash					0.0157	0.0248
					(0.0298)	(0.0330)
Wellness Promise			0.0447			
			(0.0335)			
Well Promise-maker				0.289***	0.108**	0.109**
				(0.0464)	(0.0447)	(0.0511)
Well No promise				-0.0644*	0.000574	0.000145
				(0.0358)	(0.0349)	(0.0393)
Reward Wellness					0.0343	0.0251
					(0.0296)	(0.0327)
2013					0.0424**	0.0727***
					(0.0209)	(0.0231)
Cash Promise-maker (past)					0.220***	0.182***
					(0.0365)	(0.0379)
Cash No Promise (past)					-0.0697**	-0.0814**
					(0.0324)	(0.0355)
Reward Cash (past)					-0.00362	-0.0149
					(0.0272)	(0.0289)
Well Promise-maker(past)					0.201***	0.175***
					(0.0369)	(0.0393)
Well No Promise (past)					-0.0544*	-0.0658**
					(0.0304)	(0.0319)
Reward Wellness (past)					0.00239	-0.00515
					(0.0270)	(0.0286)
Demographics	no	no	no	no	no	yes
Observations	852	852	880	880	11,382	9,832
Clustered on ind. level	no	no	no	no	yes	yes

Marginal effects, Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Note: The models controlling for demographics include gender; marital status; children; age (65 + dummy) (***), for how many years the taxpayer is living in the municipality (***) and whether the taxpayer owns a property, is registered as a church member of one of the three local churches (**) and holds Swiss citizenship (dummy) (***) as explanatory variables.

4. CONCLUSIONS

Our understanding of the relevance of promise is quite preliminary. The limited available evidence comes mostly from laboratory experiments, which are faced with the problem of external validity. In a novel approach we conduct a field experiment on the importance of promise as it relates to commitment to tax compliance. This issue lies at the core of any country's system of government. Exploring the relevance of a promise is a challenging problem. Fortunately, because of the highly decentralized and autonomous structure of tax administrations in Switzerland, we were able to convince a tax administration to implement such an experiment. As its conceptual framework, this field experiment draws on the extant tax compliance literature, which not only stresses the importance of commitment but focuses its attention on reciprocity, the rewarding of positive actions by government and tax authorities with a higher level of taxpayer compliance. Taxpayers thus *react* to a perceived situation they experience. Yet, politicians and tax administrators remain unsure of how to promote a pro-active commitment to pay taxes.

A first key observation from our results is a strong selection effect: more compliant taxpayers are more likely to make a pledge. Promise-makers have around 24 percent more past compliance than those in the control group, while taxpayers uninterested in pledging are significantly less compliant than the reference group. As pledges are voluntary the policy options of tax administrations are restricted.

A second key observation is that the type of reward affects the impact of a given promise: the option of a non-financial reward is more likely to generate a positive commitment effect than a financial reward, probably because the willingness to be compliant is crowded out. One interpretation is that while the in-kind reward is understood as acknowledgement and supports the promise, the financial incentives trigger the perception of a trade relationship and the additional request to make a promise strains the taxpayer's willingness to comply with a new practice.

The study is subject to several limitations, including the possibility that individual taxpayers within the community may have discussed aspects of the intervention. However, this is unlikely because in Switzerland it is culturally discourteous to talk about income or taxes. The intervention in the context of our field experiment does not seem to have been perceived as problematic. Official institutions were seldom approached. The tax administration received only 7 written reactions and 12 phone enquiries. Nor was there any media or social media coverage that could have contaminated the field experiment. Given that one study objective was to compare different types of incentives, any possible communication (if randomly distributed among treatments) is not necessarily a major shortcoming. Nevertheless, future studies might employ more widespread stratification of treatments to ensure identification of the unique effect of each incentive. Conversely, it is also possible that some taxpayers did not properly read the letters used to introduce the different treatments, although here again we assume no systematic differences between the treatment groups.

It should also be noted that Switzerland is highly decentralized and grants its citizens the right to direct democratic participation, which may directly impact the closeness between taxpayers and the tax administration and thus affect tax morale (Pommerehne and Weck-Hannemann 1996, Frey 1997b, Frey und Feld 2002). On the one hand, our experiment was carried out in an environment of considerable social control and identification with the community, leading to a high level of general compliance and a particularly high tax compliance rate. As a result there could be a ceiling effect in which additional supportive incentives are only small. On the other hand, encouraging individuals to pro-actively pledge to be compliant can be problematic if government institutions work poorly. Thus, a certain level of reciprocity or government quality may be required to introduce an oath or pledge. Further research is therefore needed to determine how such instruments shape tax compliance in other countries where tax compliance is lower and the setting is more anonymous.

Finally, an issue may be that the tax administration offers rewards for fulfilling a civic duty and statutory obligation. To take this concern into account and strengthen the tax administration's credibility, future field experiments might offer local community rewards such as free access to public swimming pools or other public infrastructures, which carry no additional costs and are directly related to pre-tax revenues.

The instrument of promise is an interesting avenue to consider because it aims to strengthen the psychological contract between taxpayers and the tax authority. Moreover, our society is already familiar with many professional examples of compulsory promise statements, including the Hippocratic Oath taken by physicians. Indeed, following the financial crises, there have been calls for similar ethical declarations by managers or bankers (Boatright 2013, DeMartino 2010). The question is whether it makes sense to require compulsory promises or whether individuals can choose to make or not to make a promise. Our study suggests that tax administrations can to some extent rely on promises made voluntarily by its citizens.

REFERENCES

Allingham, M. G. and Sandmo, A. (1972). Income tax evasion: A theoretical analysis. Journal of Public Economics, 1(3): 323-338.

Alm, J., Jackson, B. R., and McKee, M. (1992). Estimating the determinants of taxpayer compliance with experimental data. National Tax Journal, 45(1): 107-114.

Alm, J., Martinez-Vazquez, J., and Torgler, B. (eds.) (2010). Developing Alternative Frameworks for Explaining Tax Compliance. London: Routledge.

Andreoni, J., Erard, B., and Feinstein, J. (1998). Tax compliance. Journal of Economic Literature, 36(2): 818-860.

Bazart, C. and Pickhardt, M. (2011). Fighting income tax evasion with positive rewards. Public Finance Review, 39(1): 124-149.

Becker, C. (1968). Punishment: An economic approach. Journal of Political Economy, 76(2): 169-217.

Belot, M., Bhaskar, V., and van de Ven, J. (2010). Promises and cooperation: Evidence from a TV game show. Journal of Economic Behavior & Organization, 73(3): 396-405.

Binmore, K. (2006). Why do people cooperate? Politics, Philosophy & Economics, 5(1): 81-96.

Bicchieri, C. and Lev-On, A. (2007). Computer-mediated communication and cooperation in social dilemmas: An experimental analysis. Politics, Philosophy & Economics, 6(2): 139-168.

Boatright, J. R. (2013). Swearing to be virtuous: The prospects of a banker's oath. *Review of Social Economy*, 71(2): 140-165.

Boulding, K. E. (1981). A Preface to Grant Economics: The Economy of Love and Fear. Praeger

Braithwaite, V. (2001). Tensions between the Citizen Taxpaying Role and Compliance Practices, Regulatory Institutions Network (RegNet) Working Paper 12, July, ANU, Canberra.

Charness, G. and Dufwenberg, M. (2006). Promises and partnership. Econometrica, 74(6): 1579-1601.

Cialdini, R. B. (1989). Social motivations to comply: Norms, values and principles, in: J. A. Roth and J. T. Scholz (Eds.), Taxpayer Compliance, Vol 2. Philadelphia: University of Pennsylvania Press, pp. 200-227.

Deci, E. L. (1971). Effects of externally mediated rewards on intrinsic motivation. Journal of Personality and Social Psychology, 18(1): 105-115.

DeMartino, G. F. (2010). The Economist's Oath: On the Need for and Content of Professional Economic Ethics. Oxford University Press.

Dwenger, N., Kleven, H., Rasul, I., and Rincke, J. (2014). Extrinsic and intrinsic motivations for tax compliance: Evidence from a field experiment in Germany. Mimeo, Max Planck Institute.

Ellingsen, T. and Johannesson, M. (2004). Promises, threats and fairness. Economic Journal, 114(495): 397-420.

Ellingsen, T., Johannesson, M., Tjøtta, S., and Torsvik, G. (2010). Testing guilt aversion. Games and Economic Behavior, 68(1): 95-107.

Feld, L. P. (1997). Exit, voice and income taxes: The loyalty of voters. European Journal of Political Economy, 13(3): 455-478.

Feld, L. P. (2000). Tax competition and income redistribution: An empirical analysis for Switzerland. Public Choice, 105(1–2): 125-164

Feld, L. P. and Frey, B. S. (2002). Trust breeds trust: How taxpayers are treated. Economics of Governance, 3(2): 87-99.

Feld, L. P. and Frey, B. S. (2007). Tax compliance as the result of a psychological tax contract: The role of incentives and responsive regulation. Law and Policy, 29(1): 102-120.

Feld, L. P. and Kirchgässner, G. (2003). The impact of corporate and personal income taxes on the location of firms and on employment: Some panel evidence for the Swiss cantons. Journal of Public Economics, 87(1): 129-155.

Feld, L. P., Frey, B. S. and Torgler, B. (2006). Rewarding honest taxpayers, in: H. Elffers, P. Verboon and W. Huisman (Eds.), Managing and Maintaining Compliance. The Hague: Boom Legal Publishers, pp. 45-61.

Festinger, L. (1957). A Theory of Cognitive Dissonance. Stanford University Press.

Frey, B. S. (1997a). Not Just for Money. An Economic Theory of Personal Motivation. Edward Elgar.

Frey, B. S. (1997b). A constitution for knaves crowds out civic virtues. Economic Journal 107: 1043-1053.

Frey, B. S. and Feld, Lars P. (2002). Deterrence and morale in taxation: An empirical analysis, CESifo Working Paper No. 760, August 2002.

Frey, B. S. and Jegen, R. (2001). Motivation crowding theory. Journal of Economic Surveys, 15(5): 589-611.

Hallsworth, M. (2014). The use of field experiments to increase tax compliance. Oxford Review of Economic Policy, 30(4): 658-679.

Hurkens, S. and Kartik, N. (2009). Would I lie to you? On social preferences and lying aversion. Experimental Economics, 12(2): 180-192.

Ismayilov, H. and Potters, J. (2012). Promises as commitments. Discussion paper 2012-064, Tilburg University, Center for Economic Research.

Kerr, N. L. and Kaufman-Gilliland, C. M. (1994). Communication, commitment, and cooperation in social dilemma. Journal of Personality and Social Psychology, 66(3): 513-529.

Kiesler, C. A. (1971). The Psychology of Commitment: Experiments Linking Behavior to Belief. Academic Press New York.

Kirchler, E. (2007). The Economic Psychology of Tax Behaviour. Cambridge University Press.

Koessler, A.-K., Dulleck, U., and Page, L. (2015). Imposing codes of good conduct promotes social behaviour, mimeo, Queensland University of Technology.

Ostrom, E.,Walker, J., and Gardner, R. (1992). Covenants with and without a sword: Self-governance is possible. American Political Science Review, 86(02): 404-417.

Pommerehne, W. W. and Weck-Hannemann, H. (1996). Tax rates, tax administration and income tax evasion in Switzerland. Public Choice 88: 161-170.

Slemrod, J., Blumenthal, M., and Christian, C. (2001). Taxpayer response to an increased probability of audit: Evidence from a controlled experiment in Minnesota. Journal of Public Economics, 79(3): 455-483.

Torgler, B. (2003). Beyond punishment: A tax compliance experiment with taxpayers in Costa Rica. Revista de Analisis Economico-Economic Analysis Review, 18(1): 27-56.

Torgler, B. (2005). Tax morale and direct democracy. European Journal of Political Economy, 21(2): 525-531.

Torgler, B. (2006). The importance of faith: Tax morale and religiosity. Journal of Economic Behavior & Organization, 61(1): 81-109.

Torgler, B. (2007). Tax compliance and tax morale: A theoretical and empirical analysis. Edward Elgar.

Torgler, B., Schneider, F., and Schaltegger, C. A. (2010). Local autonomy, tax morale, and the shadow economy. Public Choice, 144(1-2): 293-321.

Vanberg, C. (2008). Why do people keep their promises? An experimental test of two explanations. Econometrica, 76(6): 1467-1480.

APPENDIX

Table A1: Tax debt in 2013 (in CHF)

Treatment	Mean	Sd	Min	Max	N
Control	4,553	4,591	91	57,011	469
Wellness	4,553	4,054	111	47,937	445
Cash	4,490	4,127	97	51,300	451
Cash Pro	4,346	4,513	95	52,203	401
Wellness Pro	4,333	3,909	101	44,203	435
Total	4,459	4,244	91	57,011	2201

Table A2: Pairwise Comparison of Past Compliance

Mean Compliance in Past	Tukey Test					
	Contrast	*Std. Err.*	*t*	*P>t*	*95% Conf. Interval*	
WELLNESS vs CONTROL	-0.004	0.016	-0.23	1.00	-0.047	0.040
CASH vs CONTROL	0.002	0.016	0.15	1.00	-0.041	0.045
CASH PRO vs CONTROL	0.036	0.016	2.17	0.19	-0.009	0.080
WELL PRO vs CONTROL	0.024	0.016	1.49	0.57	-0.020	0.068
CASH vs WELLNESS	0.006	0.016	0.37	1.00	-0.038	0.049
CASH PRO vs WELLNESS[14]	0.039	0.017	2.36	0.13	-0.006	0.084
WELL PRO vs WELLNESS	0.027	0.016	1.69	0.44	-0.017	0.072
CASH PRO vs CASH	0.033	0.017	2.01	0.26	-0.012	0.078
WELL PRO vs CASH	0.021	0.016	1.33	0.67	-0.023	0.066
WELL PRO vs CASH PRO	-0.012	0.016	-0.70	0.96	-0.058	0.034

[14] The difference in past compliance between CASH PRO and WELLNESS is close to being statistically significant at the 10% level (p=0.13). This cross-comparison is, however, not relevant for our study since we never compare treatment groups with a pure incentive from one kind (cash) with the promise combination of another kind (wellness).

ECONOMETRIC ANALYSIS SPECIFICALLY ADDRESSING ENDOGENEITY

To deal with endogeneity in econometric terms we analyse the effect of our interventions, followed by an instrumental variable analysis.

Table A3 corresponds to the standard probit model in Table 2 of the main text. Given the divergence between the assignment to and the receipt of treatment, we distinguish in the following between subjects to whom the promise has been offered (Promise offer) and subjects who decided voluntarily to make the promise (Promise-makers). Since the exposure to the Promise offer was randomized over all taxpayers, we will use the exposure to the Promise offer (treatment groups CASH PRO and WELL PRO) as an instrument in the following estimations.

Model 1 contrasts payment behaviour in the two promise treatment groups (CASH PRO and WELL PRO) with the CONTROL group and estimates the likelihood a taxpayer pays all 2013 rates in time. A Durbin-Wu Hausman test is performed to test for endogeneity. The null hypothesis stating that OLS and TSLS estimates are identical can be rejected (W-Hausman F = 5.096, p=0.024) providing statistical support for the IV approach outlined. Following the first stage regression, 32% of the subjects decide to make a promise when offered. For this subgroup of promise-makers, timely payments are 11 percentage points more likely than for the remaining taxpayers. This behavioural difference is not statistically significant for the aggregated promise-makers (p=0.198).

Models 2 and 3 distinguish under which incentive scheme the tax-payer decided to make the promise. In Model 2 the estimations are performed on promise-makers to whom a financial reward has been held out in prospect. Payment behaviour in 2013 is slightly, but not statistically significantly, better than for taxpayers to which no promise and reward was offered (CONTROL group). This observation changes dramatically when looking at the payment behaviour of promise-makers to whom an in-kind reward was offered for fulfilling the promise. In Model 3 promise-makers in WELL PRO are significantly more compliant than subjects in the control group (p=0.079). Timely payments are 18% more likely for this sub-group. The effect of a promise varies significantly with the reward offered for compliance. The CASH promise leads to a pure selection effect, while the wellness reward leads to an additional improvement in payment behaviour of the promise-makers. Promise take up, on the other hand, is similar

in the two treatment groups, being 33 % in CASH PRO and 31 % in WELL PRO. In Models 4 -6 we offer additional robustness checks for our results. These estimations take the average past compliance of the individuals into account. Past compliance is coded as the sum of compliant years from 2008-2012 and is evidently a strong predictor for compliance in 2013 ($p<0.001$) as well as for promise take up ($p<0.001$). However, the additional improvement for the promise-makers in WELL PRO is robust.

To distinguish between the incentive effect of the rewards and the promise's commitment effect we estimate in Table A4 the behavioural changes in CASH PRO and WELL PRO in contrast to the pure reward treatment groups. In CASH and WELLNESS taxpayers only needed to be compliant in 2013 to be eligible for the reward lottery. Estimations are structured in the same way as in Table A3, and also apply an IV approach.

Model 7 offers an estimation contrasting the payment behaviour of promise-makers (pooled from both promise treatment groups) with the payments of taxpayers in the pure reward treatment groups. For promise-makers, timely payments are more frequent, although not in a statistically significant manner ($p= 0.631$). We should keep in mind that a specific group in the PRO treatments, i.e. the promise-makers, are compared here with the entire population in the REWARD ONLY treatments, for which compliance was the only requirement to be eligible for a reward.

Models 8 and 9 distinguish between the kinds of incentives offered. Starting from the pure reward situation, behavioural reactions differ when a promise is additionally required in order to be eligible for a financial or non-financial reward. Model 8 contrasts payment behaviour of promise-makers in CASH PRO with payments in the CASH treatment group, in which all compliant taxpayers were eligible for the cash reward. Requesting a promise did not lead to an additional improvement in payment behaviour ($p=0.498$). In Model 9 timely payments of promise-makers in WELL PRO, to whom a wellness weekend was offered for fulfilling the promise, are respectively compared with the payments of all taxpayers in WELLNESS, who could receive the wellness reward for pure compliance. Contrary to Model 8, in which a negative coefficient was observed, it seems that the promise leads to an additional improvement in payment behaviour. This behavioural change is however not statistically significant ($p=0.175$).

Table A3: Instrumental Variable Regressions- Selection and Commitment

	(1)		(2)		(3)		(4)		(5)		(6)	
	Compliance 2013						Compliance 2013					
VARIABLES	**Promise vs. Control**		**Cash Pro vs. Control**		**Well Pro vs. Control**		**Promise vs. Control**		**Cash Pro vs. Control**		**Well Pro vs. Control**	
Y_i =	*Compliance*	*Promise*	*Compliance*	*Promise*	*Compliance*	*Promise*	*Compliance*	*Promise*	*Compliance*	*Promise*	*Compliance*	*Promise*
Promise-makers	0.113		0.042		0.182*		0.101		0.05		0.152*	
	0.0877		0.1013		0.104		0.0781		0.0874		0.093	
Promise offer (Instrument)		0.322***		0.332***		0.313***		0.321***		0.341***		0.308***
		0.0216		0.0218		0.0215		0.022		0.023		0.022
Past compliance							0.666***	0.252***	0.668***	0.190***	0.684***	0.182***
							0.0372	0.027	0.042	0.0284	0.041	0.028
Constant	0.435		0.435		0.435		0.173		0.172		0.166	
	0.088		0.023		0.023		0.019		0.022		0.022	
Test of endogenity	*Hausman*		*Hausman*		*Hausman*		*Hausman*		*Hausman*		*Hausman*	
p-value		*0.024*		*0.024*		*0.135*		*0.681*		*0.657*		*0.836*
F-stat		*5.096*		*5.075*		*2.237*		*0.169*		*0.196*		*0.0427*
Observations	1,305		870		904		1,192		797		823	

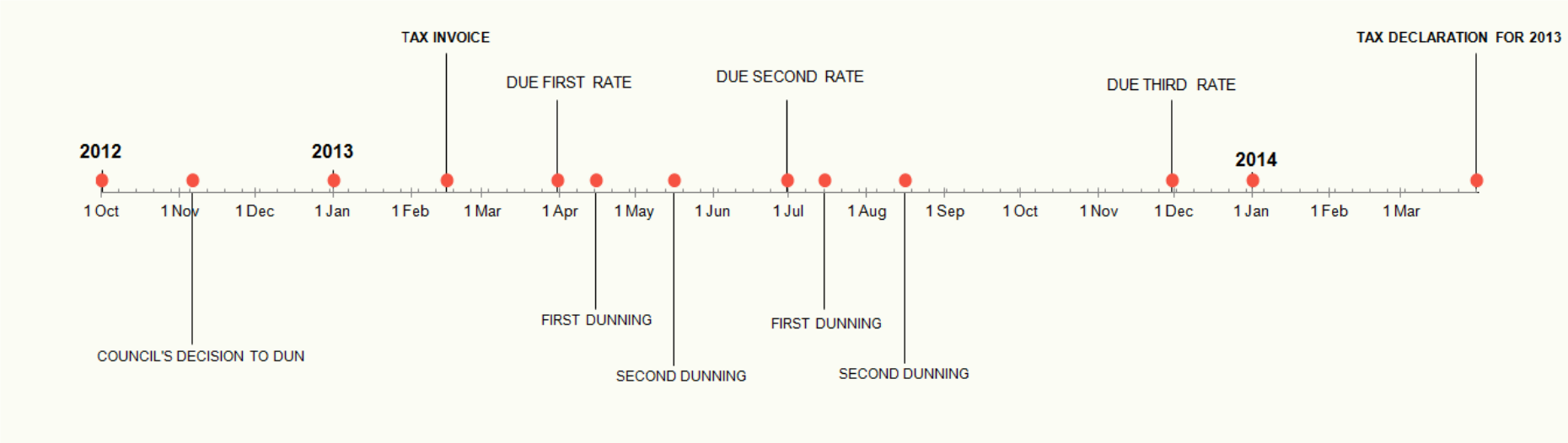
Standard errors, clustered on the individual level, are in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Table A4: Instrumental Variable Regressions- Reward only vs Reward Pro

	1		2		3	
			Compliance 2013			
VARIABLES	**Promise vs. Reward**		**Cash Pro vs. Cash**		**Well Pro vs. Well**	
Y_i =	*Compliance*	*Promise*	*Compliance*	*Promise*	*Compliance*	*Promise*
Promise-makers	0.036		-0.071		0.143	
	0.0742		0.104		0.106	
Promise offer (Instrument)		0.322***		0.332***		0.313***
		0.156		0.022		0.022
Constant	0.46		0.472		0.447	
	0.017		0.024		0.023	
Test of endogenity	*Hausman*		*Hausman*		*Hausman*	
p-value		*<0.001*		*0.001*		*0.07*
F-stat		*12.609*		*10.343*		*3.291*
Observations	1,732		852		880	

Standard errors, clustered on the individual level, are in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Figure A1: Timeline



Notes: Although the payment of pre-taxes is a legal obligation in Switzerland, in our study 30-40% of the taxpayers failed to make the pre-tax payments on time, and 18% did not make any payment during the corresponding year. Prior to 2013, no enforcement took place: the missing amount was simply charged a default interest rate when the final tax calculation was made in the following year. In November 2012, however, in a public council meeting, the tax administration proposed its plan to implement a dunning system to highlight the statutory tax obligation. All taxpayers were informed about the change in practice by the following announcement: "Non-paid pre-taxes will be dunned after expiration of the payment deadline. This new practice was adopted by the Council because of diminishing payments". According to this new policy, non-compliant taxpayers receive a first dunning letter two weeks after the payment date due. If the tax administration receives no pre-tax payment after four weeks, it sends out a second letter notifying the taxpayer that a penalty of 50 CHF has been added to the current tax debt. As in previous years, owed amounts are also charged default interest of 3% once the final tax calculation has been made. The moral cost of non-compliance were raised by justifying the penalty as follows: "Reason: The municipality is paying current expenditures with tax revenues. If the necessary money has not been received, it must borrow money, incurring interest and fees" (see Figure A4 and its translation).

ANNOUNCEMENT LETTERS

FIGURE A2: CONTROL GROUP

Einwohnergemeinde
Trimbach

Finanzverwaltung
Baslerstrasse 122, 4632 Trimbach
Telefon 062 289 23 10 / Fax 062 289 23 30
E-Mail finanzverwaltung@trimbach.ch

4632 Trimbach im Februar 2013

Provisorische Steuern 2013, Vorbezugsraten

Sehr geehrte Damen und Herren,

Die provisorischen Steuern sind innerhalb der Steuerperiode in 3 Raten zu je einem Drittel fällig. In den nächsten Tagen erhalten Sie die Rechnung für die erste Rate der provisorischen Steuern 2013. Bitte überweisen Sie die Vorbezugsraten fristgerecht mit dem Einzahlungsschein an der Rechnung.
Die erste Rate muss wie gewohnt bis am 31. März , die zweite Rate bis am 30. Juni und die dritte bis am 30. November 2013 bezahlt sein.

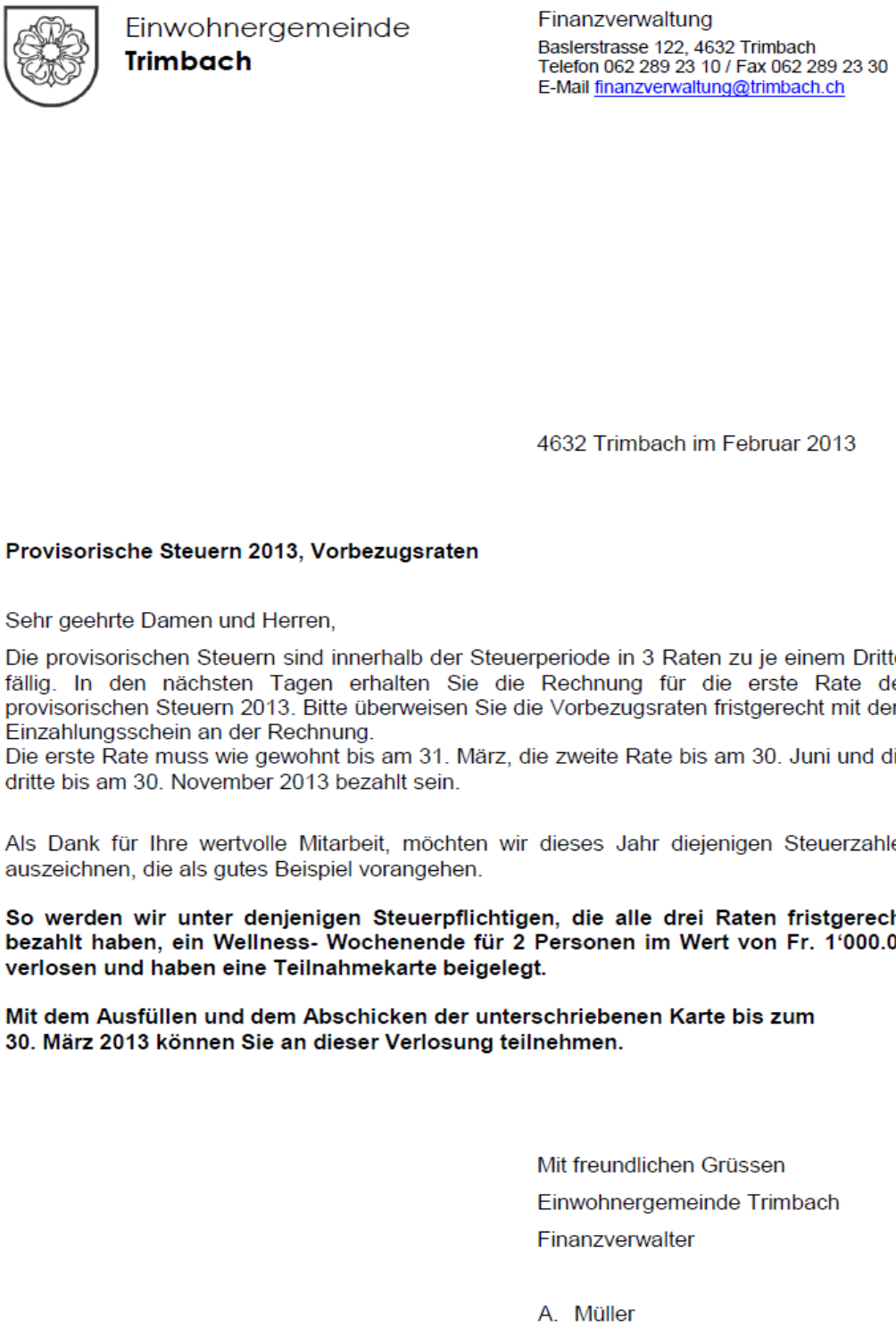
Mit freundlichen Grüssen

Einwohnergemeinde Trimbach

Finanzverwalter

A. Müller

FIGURE A3: WELLNESS PRO TREATMENT



Einwohnergemeinde
Trimbach

Finanzverwaltung
Baslerstrasse 122, 4632 Trimbach
Telefon 062 289 23 10 / Fax 062 289 23 30
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4632 Trimbach im Februar 2013

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Sehr geehrte Damen und Herren,

Die provisorischen Steuern sind innerhalb der Steuerperiode in 3 Raten zu je einem Drittel fällig. In den nächsten Tagen erhalten Sie die Rechnung für die erste Rate der provisorischen Steuern 2013. Bitte überweisen Sie die Vorbezugsraten fristgerecht mit dem Einzahlungsschein an der Rechnung.
Die erste Rate muss wie gewohnt bis am 31. März, die zweite Rate bis am 30. Juni und die dritte bis am 30. November 2013 bezahlt sein.

Als Dank für Ihre wertvolle Mitarbeit, möchten wir dieses Jahr diejenigen Steuerzahler auszeichnen, die als gutes Beispiel vorangehen.

So werden wir unter denjenigen Steuerpflichtigen, die alle drei Raten fristgerecht bezahlt haben, ein Wellness- Wochenende für 2 Personen im Wert von Fr. 1'000.00 verlosen und haben eine Teilnahmekarte beigelegt.

Mit dem Ausfüllen und dem Abschicken der unterschriebenen Karte bis zum 30. März 2013 können Sie an dieser Verlosung teilnehmen.

Mit freundlichen Grüssen
Einwohnergemeinde Trimbach
Finanzverwalter

A. Müller

Note: In the WELLNESS treatment the last sentence was deleted.

TRANSLATION

Provisional Taxes 2013, pre tax rates

Dear Sir or Madam,

The provisory taxes are due during the tax period in three instalments, with a third of the tax liability each. In the next few days, you will receive an invoice for the first pre-tax instalment. Please transfer the pre-tax amount on time using the form attached to the invoice.

As usual, the first instalment must be paid by March 31, the second by June 30, and the last by November 30.

To thank you for your valuable help, this year we will honour those tax payers who lead by good example.

As a reward for their valuable collaboration, all taxpayers that pay all three pre-tax instalments on time will

[be entered into a lottery to win a cash prize of 1,000 CHF.] [15]

[be entered into a lottery to win a wellness weekend for two valued at 1,000 CHF.]

Addendum for the promise treatments:

To be eligible for the lottery, please also sign the attached card and return it to the tax administration by March 31.

Yours sincerely

Tax administrator

[15] Original text: "So werden wir unter denjenigen Steuerpflichtigen, die alle drei Raten fristgerecht bezahlt haben, eine Bargeld-Prämie von Fr. 1'000.00 verlosen".

INFORMATION ON PRE-TAX BILL

Important Amendment:

Non-paid pre-taxes will get dunned after expiration of the payment deadline.

This new procedure was determined by the local council due to the diminishing payments as of November 6, 2012.

Reason:

The municipality is paying current expenditures with the tax revenues. If the needed money is missing, the municipality has to borrow money and needs to pay interest and fees. Hence, in the municipal assembly , the citizens set the following regulations and gave the tax administration the following instructions:

Extract from the tax regulation, 2010, 01.01.2008:

§ 11, Passage 2:

As a general rule , taxes are paid in 3 *instalments at a third of the pre-tax liability.*

The due dates are

- *First instalment: March 1, payable up until March 31*
- *Second rate: May 31. payable up until June 30*
- *Third rate: October 31, payable up until November 30*

§ 12, Passage 1:

Tax payments must be made within 30 days of the due date.

Missed payments will be dunned. *For each dunning, a fee will be charged based on the fee regulations.*

Payment problems:

At the explicit request of the taxpayer, the tax administration can split the annual tax liability into monthly instalments. Nevertheless, interest may be owed as a default penalty according to tax regulation § 12, Passage 1.

Figure A4: Original Text

Wichtige Änderung:

Nicht bezahlte Vorbezugsrechnungen werden nach Ablauf der Zahlungsfrist gemahnt ! Dies hat der Gemeinderat aufgrund einer schlechter werdenden Zahlungsdisziplin am 6.11.2012 beschlossen.

Warum:

Mit den Steuereinnahmen werden die laufenden Ausgaben der Gemeinde bezahlt. Fehlt das benötigte Geld, müssen Kredite aufgenommen und dafür Zinsen und Gebühren bezahlt werden. Die Einwohner haben deshalb an der Gemeindeversammlung das Steuerreglement beschlossen und damit der Verwaltung den Auftrag wie folgt erteilt:

Auszug aus dem Steuerreglement 2001, Stand 01.01.2008:

§ 11, Abs. 2
Die Steuern sind in der Regel **in der Steuerperiode** in 3 Raten zu je einem Drittel fällig (Vorbezug).

Die Fälligkeiten sind:

1. Rate: 1. März,	zahlbar bis 31. März
2. Rate: 31.. Mai,	zahlbar bis 30. Juni
3. Rate: 31. Oktober,	zahlbar bis 30. November

§ 12, Abs 1
Die Steuer muss innert 30 Tage seit der Fälligkeit entrichtet werden. **Säumige Steuerpflichtige sind zu mahnen**. Für jede Mahnung wird eine Gebühr gemäss Gebührenreglement erhoben.

Bei Zahlungsproblemen:

Auf ausdrücklichen Wunsch einer steuerpflichtigen Person kann die Finanzverwaltung die Jahressteuer auf Monatsraten aufteilen. Ein allfällig daraus entstehender Verzugszins bleibt gemäss Steuerreglement § 12 Abs. 2, geschuldet.