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TRUST BREEDS TRUST: HOW TAXPAYERS ARE TREATED

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Abstract

Tax compliance has been studied in economics by analysing the individual decision of a representative person between paying and evading taxes. A neglected aspect of tax compliance is the interaction of taxpayers and tax authorities. The relationship between the two actors can be understood as an implicit or "psychological" contract. The more strongly the political participation rights are developed, the more important this contract is, and the higher tax morale is. In this paper, empirical evidence based on a survey of tax authorities of the 26 Swiss states (cantons) is presented, indicating that the differences in the treatment of taxpayers by tax authorities can be explained by differences in political participation rights.

Keywords: Tax evasion, tax authority, tax compliance, direct democracy

JEL Classification: H26, H73, D73, D78

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Trust Breeds Trust: How Taxpayers Are Treated

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I. A Neglected Aspect

Tax compliance has been studied in economics by analysing the individual decision of a representative person between paying and evading taxes. The literature has been shaped by the pathbreaking contribution by ALLINGHAM and SANDMO (1972), with the consequent extensions by, among others, KOLM (1973) and SRINIVASAN (1973). They are all a specific, and particularly important, application of BECKER'S (1968) economic theory of crime. The present state of the art has been summarised and critically discussed by ANDREONI, ERARD and FEINSTEIN (1998) in their extensive survey on "Tax Compliance".¹

The approach is, however, faced with various problems, even when the models are extended to include endogenous labour supply, or consider the repeated nature of the reporting decision: "... complex and confounding effects are not limited to complicated models – even within the simple approach ... we cannot predict the effects of all policy parameters. Moreover, when such predictions can be obtained, they often depend on the thin reed of the third derivative of utility functions and on

1. Other surveys on the subject are e.g. POMMEREHNE (1985), HESSING, KINSEY, ELFFERS and WEIGEL (1988), ROTH, SCHOLZ and WITTE (1989), PYLE (1990a), COWELL (1990) or SLEMROD (1992). The extensive literature on the hidden, shadow or underground economy is closely related and starts with the same theoretical premises. See e.g. TANZI (1982), FREY and POMMEREHNE (1984), GAERTNER and WENIG (1985), FEIGE (1989), PYLE (1990b), POZO (1996), SCHNEIDER and ENSTE (2000) or FREY and SCHNEIDER (2000).

inelastic labor supply" (ANDREONI ET AL. 1998: 824). In particular, an increase in the tax rate has a theoretically ambiguous effect in most models (but see YITZHAKI 1974), yet both experimental, as well as econometric, research consistently finds that higher tax rates are associated with greater evasion. Even more importantly, an increase in fines discourages evasion. This corresponds to the thrust of the economics of crime and offers an important avenue for tax policy. But this effect becomes theoretically ambiguous with elastic labour supply. Empirically, studies find that expected punishment is rarely statistically significant and, if it is, the effect is of quite a small magnitude.²

A major puzzle is that most theoretical approaches greatly overpredict non-compliance (ANDREONI ET AL. 1998: 855). In their article with the revealing title "Why do people pay taxes?", ALM, MCCLELLAND and SCHULZE (1992: 22) state: "A purely economic analysis of the evasion gamble implies that most individuals would evade if they are "rational", because it is unlikely that cheaters will be caught and penalised." Indeed, under the prevailing magnitudes obtained in the United States for the probability of being caught and the size of the fines imposed, individuals optimally declare no income. Arrow-Pratt measures of risk aversion of more than 30 (!) must exist in order to account for the present compliance rate, but existing field evidence suggests a range of between one and two. The same has been found for Switzerland.³ One of the solutions to this puzzle or anomaly has been to accept the existence of an intrinsic motivation to pay taxes, which has sometimes been called "tax morale".⁴

This paper looks at tax compliance from a different perspective and therewith attempts to overcome some of the shortcomings mentioned. It focuses on how the tax authorities treat taxpayers. The relationship between the two actors is taken to involve an implicit or "psychological" contract. The more strongly the political participation rights are developed, the more important this contract is, and the

2. For laboratory experiments, see ALM, JACKSON and MCKEE (1992), for statistical studies e.g. WITTE and WOODBURY (1985), DUBIN and WILDE (1988), BERON, TAUCHEN and WITTE (1992), DUBIN, GRAETZ and WILDE (1990) for American data, and POMMEREHNE and FREY (1992) for Swiss data.

3. For the U.S., see GRAETZ and WILDE (1985), SKINNER and SLEMROD (1985) or ALM ET AL. (1992), for Switzerland POMMEREHNE and FREY (1992).

4. Thus, for example, GRAETZ and WILDE conclude on the basis of the Internal Revenue Service's Taxpayer Compliance Maintenance Programme (1985: 358) that "...the high compliance rate can only be explained in a satisfactory way either by taxpayer's (...) commitment to the responsibilities of citizenship and respect for the law or lack of opportunity for tax evasion". Accordingly, the observed falling tax compliance has been attributed to the erosion of tax ethics by GRAETZ, REINGANUM and WILDE (1986) and many other authors (see e.g. SCHWARTZ and ORLEANS 1967, LEWIS 1982, ROTH, SCHOLZ and WITTE 1989, PYLE 1990a, SLEMROD 1992).

higher tax morale is. The existence and survival of this tax contract requires certain behaviour on the part of the two parties concerned. In particular, the tax authorities must acknowledge and support the contract with the taxpayers by acting in a respectful way towards them, but also by preventing honest taxpayers from being exploited in the process. The need to act in such a way is stronger in democracies with institutions of popular initiatives and referenda than in purely representative democracies. Thus, the paper considers some completely different instruments of tax policy compared to the more traditional analysis.

Our empirical analysis employs a unique data set of tax authorities' behaviour in Switzerland, allowing cross-section estimates across the 26 cantons with widely varying tax systems and tax rates.⁵ The remainder of the paper is organised as follows. *Section II* discusses the theoretical background. *Section III* presents the data collected by us and empirical evidence on the relationship between the respectful treatment of taxpayers by tax authorities and the extent of voter participation rights. In *Section IV*, evidence on differences between the punishment of basic rule violations in direct and representative cantons is discussed, while *Section V* contains some empirical results on the different treatment of minor violations of the tax code by the tax authorities in direct and representative democratic cantons. A synthesis is offered in *Section VI*.

II. Theoretical Background

The relationship between taxpayers and tax authorities can be modelled as an implicit or relational contract (see e.g. AKERLOF 1982). It thus involves strong emotional ties and loyalties, and goes well beyond transactional exchanges (see e.g. WILLIAMSON 1985). Social psychologists (SCHEIN 1965, ROUSSEAU and MCLEAN PARKS 1993) have been using this concept for a long time, calling it a "psychological" contract to set it clearly apart from formal contracts, which are obeyed because the parties respond to the explicit and material sanction previously agreed upon. Psychological contracts have been successfully used to analyse relationships within the firm (e.g. OSTERLOH and FREY 2000).

A psychological contract aptly captures the relationship between taxpayers and the tax authority. As has been pointed out above, careful empirical research has established that it is impossible to ac-

5. We thus also respond to the "need" identified by ANDREONI ET AL. (1998: 856) "for more empirical and institutional research within jurisdictions outside the U.S.".

count for tax compliance in terms of expected punishment. Rather, the payment of taxes is, as LEVI (1988) calls it, a "quasi-voluntary" act, which is not solely undertaken because one fears explicit governmental sanctions. ALM ET AL. (1992: 23) refer to an extensive economic literature⁶, suggesting that "individuals pay taxes voluntarily." This does not mean, of course, that threats of explicit punishment play no role, but it draws attention to other aspects of taxpayers' compliance decisions than those normally considered in the economics literature.

Many conditions determine the extent to which a psychological contract between taxpayers and tax authorities exists. An important element is certainly tradition. But when one asks how such a tradition may have arisen, the amount of trust in the citizens implied by the constitution is crucial. The more strongly a constitution extends participation rights to its citizens, the more likely such a psychological tax contract is to emerge.⁷ A democracy is an institution in which the citizens are trusted, in the sense that they are given the right to choose their government in free elections. (Semi-)direct democracies, as they mainly exist in some American states and at all government levels in Switzerland, go a decisive step further. They trust their citizens to be able to take reasonable decisions on matters of content.⁸ As a consequence, the psychological tax contract, and thus tax morale, is the higher, the more developed the institutions of direct citizen participation are. This has been empirically shown using an econometric cross section/time series analysis of 25 Swiss cantons for 1965, 1970 and 1978 (POMMERHNE and WECK-HANNEMANN 1996, FREY 1997a).⁹

The breach of a psychological contract puts the reciprocal good faith into question. In this case, empirical evidence (ROBINSON, KRAATZ and ROUSSEAU 1994) clearly indicates that the parties to the contract perceive that the relationship is transformed into a purely extrinsically motivated contract.

6. E.g. SPICER and LUNDSTEDT (1976), KIM and WALKER (1984), ISAAC, WALKER and THOMAS (1984), ISAAC, MCCUE and PLOTT (1985), FALKINGER (1991), CULLIS and LEWIS (1997).

7. See more fully FREY (1997a). Related works comprise e.g. ELSTER (1989), ETZIONI (1988), FUKUYAMA (1995), GAMBETTA (1988), KELMAN (1992), KRAMER and TYLER (1995), MANSBRIDGE (1994), PUTNAM (1993), SUNSTEIN (1990), TAYLOR (1987), WILSON (1993).

8. Facts are provided in BUTLER and RANNEY (1994). Analytical discussions are provided in e.g. BUDGE (1996), CRONIN (1989) or FREY (1994). KIRCHGÄSSNER, FELD and SAVIOZ (1999) give an extensive account of the consequences of direct democracy on economic and social variables.

9. Switzerland consists of 26 cantons. The 26th canton, the canton of Jura, was established in 1977 by secession from the canton of Berne. Since the data used by POMMERHNE and WECK-HANNEMANN (1996) and FREY (1997a) cover the period up to 1978, they could not include data on the canton of Jura in the data set.

Citizens' tax morale is crowded out¹⁰, and individuals take a purely rationalistic attitude towards tax payment. If the breach of contract results in a complete crowding out of tax morale, the citizens behave exactly as predicted by the conventional theory discussed above. Essentially, they refuse to pay taxes (at least under the probability of being audited and the size of punishment currently administered in countries such as the U.S. or Switzerland). It follows that particular care must be taken to maintain and protect the psychological tax contract in a democracy with more extensive formal participation rights. If the taxpayers feel that the tax authority does not honour the psychological contract, the resulting change in behaviour towards a purely rationalist attitude is larger than in a purely representative democracy. In the extreme, in a political system without participation rights, the psychological contract does not exist at all, and thus there is no scope for any crowding out effect. Under this condition, the tax authority does not have to treat the citizens respectfully, but can rely solely on deterrence.

III. The Respectful Treatment of Taxpayers

To maintain the psychological tax contract, the tax authority must take positive actions to support it, and negative actions to prevent breach of contract. The basis of any contractual relationship that relies on trust is the prior belief that the partner in the contract behaves honestly. The same applies to the psychological contract between tax authorities and taxpayers: tax authorities suppose that taxpayers will honestly report their true income on the tax declaration. On the other hand, taxpayers expect to be treated respectfully, as if they are honestly reporting their true income. A strategy of tax authorities to suspect taxpayers of being evaders right from the beginning would undermine the psychological contract between taxpayers and tax authorities. Treating citizens respectfully can be expected to be more pronounced in politics with constitutional provisions for direct voter participation, like referenda and initiatives, because both taxpayers and tax authorities know that voters support public policies, which clearly sustain the public good. In such systems of direct democracy, taxpayers know that the public services they consume are worth the taxes they pay. Taxpayers therefore feel obliged to pay their taxes honestly. Tax authorities know that voters could change tax laws in the political process. Citizens thus have much better possibilities of expressing their discontent with the tax policy than a quiet and secret violation of the psychological contract with tax authorities. Even if

10. Crowding theory is more fully developed in FREY (1997b). The experimental and field evidence, including econometric studies, is summarised in FREY and JEGEN (1999).

some groups of voters lose in a referendum, they comply with tax laws as long as they perceive political outcomes to be the results of fair procedures. This aspect should be less pronounced in representative democracies where the influence of taxpayers on political outcomes is less direct. These considerations lead us to the following propositions for direct democracies:

- (1) More trust is placed in taxpayers. In particular, when the individual tax returns contain a mistake, the tax people do not automatically suspect any intention of cheating, but give the contract partner the benefit of the doubt;
- (2) Taxpayers are more respectfully treated as partners in a contract rather than as inferiors in a hierarchical and bureaucratic relationship;
- (3) Taxpayers are less intensely controlled if a "psychological" contract between tax authorities and taxpayers exists, in order not to undermine the relationship of mutual trust by distrustful action.

These actions and the corresponding empirically testable propositions should not be understood in any absolute sense. Rather, it is proposed that they are the more pronounced, the more extensive the direct participation rights of the citizens are. Differences in the administration of taxes between the cantons are thus expected to be the result of constitutional differences. The cantonal constitutions of Switzerland offer different possibilities for direct voter participation in political decision making. In some cantons, only an obligatory constitutional referendum is laid down in the constitution. In other cantons, all kinds of statutory and constitutional referenda and initiatives are possible. Moreover, requirements on collecting signatures for initiatives and optional (statutory and constitutional) referenda, as well as the number of days allowed to collect them, vary between cantons. The extent to which voters may directly participate in the different cantons is measured by an index, compiled by Stutzer (1999), that varies on a continuum from 1 to 6.¹¹

In order to investigate the relationship between taxpayers and tax authorities, we sent out a survey to the tax authorities of the 26 Swiss cantons.¹² The survey asked detailed questions on the legal back-

11. FREY and STUTZER (2000) have successfully used this index of direct democracy to account for differences in subjective well-being between cantons.

12. It should be noted that the Swiss cantons have the basic power to tax personal and corporate income, while the local jurisdictions levy a surcharge on cantonal income taxes. Cantons can, with few restrictions, set tax rates and define tax bases. Both lead to a strong variation in (effective) tax rates among cantons and among local jurisdictions. The federal level mainly raises indirect taxes, but also a highly progressive federal income

ground of tax evasion, like the use and size of fines, whether an explicit link of tax payments to the provision of public services is established, the perceived feedback effect of tax evasion on the level of public services, the intensity of control by tax authorities, the existence of tax amnesties, whether the tax register is published in a jurisdiction and the extent of tax indexation. Finally, the survey includes questions on the treatment of taxpayers by tax authorities in day-to-day audits, in particular when a taxpayer is suspected of not declaring his or her true taxable income. These questions go into considerable detail. The legally oriented part of the questionnaire, for example, stresses the differences according to how severe the tax evasion is, the punishment in case of tax fraud, the period considered and so on. Similarly detailed questions apply to other parts of the survey.¹³

The way taxpayers are treated by tax authorities reveals interesting differences between the Swiss cantons. Only 58 per cent of Swiss cantonal tax authorities believe that mistakes in reported incomes are, on average, in favour of taxpayers. 31 per cent believe that mistakes are neither to the advantage nor to the disadvantage of taxpayers, and 12 per cent believe that mistakes are to the disadvantage of taxpayers. This evidence indicates the lack of general distrust towards taxpayers.

If a taxpayer does not report his or her true taxable income, tax authorities can contact this person in several ways. 54 per cent of the cantons call this person on the phone and ask how the mistake(s) occurred in the declaration of income and what explanation the particular taxpayer has. All of the cantons send a letter to the taxpayer, half of them with a standard formulation. Nearly 85 per cent ask the taxpayer to visit the tax administration office, but only half of the cantons mention the possibility of punishment. Thus, tax authorities rarely adopt the strategy of explicit deterrence, but rather seek to gain additional information.

96 per cent of the cantonal tax authorities correct reported incomes that are too high, i.e. reduce taxable incomes in case taxpayers commit mistakes that are to their disadvantage. 27 per cent of the cantonal tax authorities correct reported taxable income even if they fail to profit from legal tax savings.

tax. See FELD (2000) for a more detailed description of the Swiss fiscal system. Tax evasion laws therefore form part of the legal power of the Swiss cantons as well.

13. An English translation of the questionnaire can be obtained from the authors upon request.

Table 1: Respectful Treatment of Taxpayers in Direct and Representative Democratic Cantons

Dependent Variables	Constant	Index of Direct Democracy	Regional Dummy	Population	R ²
Mistakes in favour of taxpayers	1.961	-0.406* (-2.30)	-0.613 (-1.44)	0.001 (0.90)	0.142
Invitation to a Tax Audit	4.301	-0.694(*) (-1.77)	-1.287 (-1.07)	0.000 (0.21)	0.158
Opening Up the Tax Register	1.328	-1.033* (-1.99)	0.190 (0.15)	0.002 (1.29)	0.289

The estimation method is Maximum Likelihood using the QML (Huber/ White) standard errors and covariances. The numbers in parentheses are the t-statistics of the estimated parameters. ‘(*)’, ‘*’, or ‘***’ denotes significance at the 90, 95, or 99 percent confidence level, respectively. McFadden’s R² are reported in the last column.

There are remarkable differences between direct and representative democratic cantons in the treatment of taxpayers. The results are reported in *Table 1*. Tax authorities in cantons with stronger elements of direct democracy show less distrust towards taxpayers that commit mistakes in their declarations of taxable income. More directly democratic cantons have a significantly lower probability of automatically suspecting that mistakes are in general in favour of taxpayers than more representative democratic cantons.¹⁴ This evidence supports *Proposition 1*.

Taxpayers declaring too low taxable income have a lower probability of being invited to the tax administration for a formal tax audit in more directly democratic than in less directly democratic cantons. This result supports the notion that taxpayers declaring a lower than the true taxable income are more respectfully treated if a psychological contract exists, something that is more probable in jurisdictions with higher voter participation rights. This finding is consistent with *Proposition 2*.

14. The empirical tests are performed employing the GLS regression method for continuous variables, and using the square root of the cantonal population in the case of average variables and the inverse of the square root of the cantonal population in the case of sums as a weight. If the dependent variable is a discrete variable (binary or ordered) Logit estimates are used. In all cases, the robustness of the tests is checked by additionally introducing a dummy variable, which takes the value one if the canton is a French or Italian speaking canton and zero otherwise. This is done to check whether observed differences in tax authorities' treatment of taxpayers between more and less directly democratic cantons simply reflect the differences between the culturally different language areas. In addition, the size of the cantonal population is introduced in the model.

Does the intensity of control vary among cantons with different constitutional systems? The intensity of control, as measured by the number of tax investigators to the number of tax evasion cases varies from 0.02 to 0.78, with a mean of 0.30 and a standard deviation of 0.19. Interestingly enough, there are no differences in the probability of detection of tax evasion between more and less directly democratic cantons, whether this control intensity is measured by the number of tax commissioners per taxpayer, or the number of tax commissioners per average number of tax evasion or fraud proceedings during recent years. However, control intensity differs with respect to the possibilities for self-control of the taxpayers by opening up the tax register. The probability that the tax register is opened up is significantly lower in direct democratic cantons (when the differences between the language regions are controlled for). This result is consistent with *Proposition 3*.

IV. Violation of Basic Rules

A basic trust of tax authorities with respect to the honesty of taxpayers and a respectful treatment of taxpayers by the tax authorities must be accompanied by incentives for taxpayers to observe the rules of the game. If honest taxpayers reporting their true incomes realise that other persons report too little income, they may feel sucked by those people neglecting the basic rules of citizen duty. These considerations particularly hold in polities with direct democracy, since those voters who are frustrated about the uncooperative behaviour of a number of their fellow citizens will express this discontent strongly at the polls. This leads us to *Proposition 4*:

- (4) Violations of basic rules of the tax code are punished more severely in directly democratic cantons in order to make clear that the psychological contract is at stake;¹⁵

Our survey contains several questions about the treatment of taxpayers by the tax authorities with respect to the quality of personal interactions. The results are reported in the upper part of *Table 2*. Taxpayers who do not submit their tax declarations are fined more heavily in more directly democratic cantons than in less directly democratic ones. Such persons do not comply with the basic obligation of taxpaying and are more severely fined in order to deter them from showing no interest in maintaining the public good. On the other hand, more directly democratic cantons have a higher probability than less directly democratic cantons of offering the same legal objection possibilities to

15. Experimental research has clearly established that the willingness to contribute to a public good breaks down when people feel taken advantage of. See FELD, HART and OSTMANN (1996). In the case of taxation, see SPICER (1988).

those people with no declaration of taxable income as those with self-declaration of incomes. This again indicates that even taxpayers who do not submit a declaration of their taxable income are treated more respectfully in more directly democratic jurisdictions than in less directly democratic ones.

Table 2: The Treatment of Violations of the Tax Code in Direct and Representative Democratic Cantons

Dependent Variables	Constant	Index of Direct Democracy	Regional Dummy	Population	R^2
Fine for Lack of Submission of Tax Declaration	-4216.89	1942.74* (2.70)	3733.31(*) (2.00)	-0.881 (0.17)	0.378
Legal Objection Possibilities in the Case of No Declaration	-9.183	1.949* (2.25)	2.582 (1.38)	0.001 (0.86)	0.300
Maximum Fines	653.87	-79.144(*) (-1.85)	53.424 (0.61)	-0.011 (-0.17)	0.122
Fines in the Case of Self-Denunciation	52.425	-8.969(*) (-1.80)	-18.023 (-1.33)	0.030 (1.02)	0.251

With the exception of legal objection possibilities in which Maximum Likelihood estimates are reported again using QML (Huber/ White) standard errors and covariances, the remaining estimates are derived by GLS. The numbers in parentheses are the t-statistics of the estimated parameters. ‘(*)’, ‘**’, or ‘***’ denotes significance at the 90, 95, or 99 percent confidence level, respectively. The last column reports adjusted R^2 (corrected by the degrees of freedom) and in the case of legal objection possibilities McFadden’s R^2 .

V. Minor Violations of the Tax Code

Nobody is perfect, and to cheat a little bit on taxes is a common and minor human weakness, and should be considered as such. Such minor violations should not be interpreted as an action intended to breach the psychological contract. An exaggerated punishment of minor violations of the tax code is interpreted as an inadequate reaction by the public authorities. The tolerance for such minor human weaknesses is indeed reflected in political systems with direct voter participation in the political process. Taxpayers vote for low punishment of minor violations of the tax code, acknowledging that nobody is perfect and that everyone is liable to commit small mistakes. This reasoning leads us to *Proposition (5)*:

(5) Minor violations of the tax code are punished less severely in direct democratic cantons.

The Swiss cantonal tax authorities' answers reveal quite a strong variation in their treatment of tax evasion. For example, the minimum fine in the case of tax evasion varies between zero and 100 per cent of true tax payment, with a mean of 28 per cent and a standard deviation of 21, while the maximum rate varies from 100 per cent to 1000 per cent of the true tax payment, with a mean of 344 per cent and a standard deviation of 163. The fines in the case of tax fraud vary accordingly. The corresponding estimates are reported in the lower part of *Table 2*. With respect to fines, we obtain significantly lower maximum fines for tax evasion in more direct democratic cantons (while French and Italian speaking cantons do not have significantly different maximum fines). In the case of self-denunciation, the fines are lower in cantons with more voter participation possibilities. All in all, tax evasion tends to be less heavily fined in direct democratic cantons. These tests thus provide (limited) empirical support for *Proposition 5*.

VI. A Synthesis

Tax compliance is not simply the result of opportunities to evade tax and the deterrence and prevention strategies of tax authorities. Tax compliance to a considerable extent has to be attributed to tax morale of taxpayers. If that were not so, given the current deterrence measures in most countries, in particular the U.S. and Switzerland, a rational taxpayer would not have any incentive to abstain from tax evasion. Tax morale, on the other hand, is not simply the result of one's upbringing. It depends on the interaction of taxpayers with tax authorities, on the legal framework, and on the constitutional environment. In this paper, the interaction of taxpayers with tax authorities is analysed and linked to constitutional differences between Swiss cantons, in particular the opportunities the cantonal constitutions offer to the voters to directly participate in referenda and initiatives.

On the basis of the political process via results of a survey among the 26 cantonal tax authorities, it turns out that the tax authorities of cantons with more direct participation rights, compared to cantons with less direct democracy, are less suspicious if taxpayers report too low incomes. They treat taxpayers more respectfully. Persons who do not submit their tax declarations, indicating that they do not comply with the basic rules of the game, are more heavily fined in direct democratic cantons. Tax evasion is fined with lower rates. Thus, in direct democracy, minor violations of the tax code are punished less severely than major violations. All in all, respectful treatment and trust are accompanied by generosity in the case of minor human weaknesses, but strong deterrence if the psychological

tax contract is at stake. The analysis suggests that there is an implicit psychological contract between taxpayers and tax authorities in Switzerland. This holds in particular if voters are directly involved in political decision-making. Psychological contract is based on a relationship of trust.

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