5 Tax evasion and the psychological tax contract

Lars P. Feld and Bruno S. Frey

Introduction

Tax compliance has many facets. Tax evasion by wealthy people not declaring their capital incomes received in foreign tax heavens may nurture particular prejudices regarding what is involved, but is far from providing a comprehensive picture. Tax non-compliance also comprises the taxes evaded when individuals are working in the shadow economy; or tax avoidance by multinational firms becoming illegal when a (financial) court reaches a final verdict on particular tax saving schemes; or the sophisticated trading schemes which allow evasion of commodity taxes; or donations by family members to their supposed heirs to evade inheritance taxes; and so on. Tax compliance is, moreover, related to the broader concept of tax morale, which also includes the attitudes of honest taxpayers, who have never under-reported their true incomes, towards potential tax non-compliance by their dishonest fellow citizens. Is cheating on the tax code partly accepted as a minor disobedience, and which part of it is? Is tax non-compliance seen as undermining the functioning of a state in general? Or is it even accepted as a kind of popular gaming activity in which the state sometimes loses, sometimes wins? All these issues matter for tax compliance.

In spite of the implied need to cope with tax non-compliance in a differentiated way, economic policy reactions to this complex phenomenon not infrequently appear to be uni-dimensionally focused on deterrence measures or incentives in general. For example, in Germany, just to give a flavor, the recent efforts comprise:

- increases in deterrence – for example, the so called "Black Activities' Act" or, more exactly, the "Law to intensify the fight against black activities and accompanying tax evasion" (SchwarzArbG, Bundesrats-Drucksache 155/04a) in 2004, aiming at both raising fines and the intensity of control;
- measures to coordinate capital and corporate income taxation in the EU – for example, the European Savings Directive in 2005, which implements a (partial) system of information exchange, or the still ongoing negotiations regarding a Common Consolidated Corporate Income Tax Base;

- several measures to intensify auditing by increasing the transparency of monetary transactions between individual bank accounts that in sum almost abolish the German bank secrecy laws;
- tax rate reductions in the case of personal and corporate income taxation in 2000 and, in particular, as of 2008 onwards, including a new source tax on capital income and capital gains to be implemented in 2009;
- a tax amnesty in 2003.

Overall, this will have amounted to a decade of tax policy changes targeted at increasing tax compliance, or, as a former German finance minister put it, fighting tax evasion from cleansing services in households to the international capital markets.

Such policy efforts are in line with the traditional economic approach, which has relied heavily on deterrence as the most important determinant of tax compliance (Allingham and Sandmo, 1972; Sandmo, 2006). However, modern research from different fields, including economics and psychology, raises doubts as to the validity of this approach (see, extensively, Torgler, 2007, with many references to the literature).

Feld and Frey (2007) therefore analyze tax compliance following the approach of a psychological tax contract. They start from the Wicksellian perspective of voluntary exchange between citizens that implies a contractual justification of the state (Wicksell, 1896). Individuals subject themselves to the coercion inherent in collective action because the underlying constitutional exchange is in their well-understood long-term interest (Buchanan, 1987). With respect to fiscal issues, the psychological tax contract pushes the idea of taxation as fiscal exchange (Buchanan, 1976)[1] beyond narrow direct incentives, such as deterrence, but also beyond narrow monetary benefits as they could be provided by public goods and services following the benefit principle of taxation. For such a contract to be upheld, loyalties and emotional ties must also be considered. These bonds between taxpayers and the state shape individual tax morale and thus positively affect tax compliance. Incentives are an important ingredient of the psychological tax contract, but their role is assessed in a much more differentiated fashion than in the traditional economic approach. More importantly, the psychological tax contract is influenced by government policy, tax authorities' behavior, and state institutions.

In a related interdisciplinary analysis, Kirchler (2007) supports this approach by concluding that tax morale, and subsequently tax compliance, depends on tax knowledge, attitudes, norms, perceived opportunity, fairness considerations, and motivational postures.[2] Tax morale thus implies an intrinsic motivation to comply with the tax laws. Deterrence contributes to some of these factors, but does not always do so in the same qualitative fashion. It may on the one hand have the standard effect expected by the traditional economic approach, that the anticipated fine serves as a price on tax non-compliance and thus negatively affects it (Gneezy and Rusticchini, 2000). On the other hand, the intrinsic motivation to pay taxes may be crowded out by the state's intrusion into individuals' privacy (Frey, 1997a, 1997b).

Following this broader research strategy, Kirchler's (2007: 188) suggestion for tax compliance research is the shift from a perspective of compliance enforced by authorities' power (the "cops and robbers approach") to voluntary compliance driven by trust in authorities (the "service and client approach"). He shapes this suggestion by a slippery slope model according to which deterrence and trust as two equally valid ways of achieving compliance could dynamically interact with each other. This interaction would finally evolve into a system of responsive regulation. These conclusions and suggestions are rather cautious, and leave much room for continuous reinterpretations.

Alm and Martinez-Vazquez (2003) similarly argue that two paradigms emerge from tax compliance research. The first paradigm considers taxpayers as potential criminals putting exclusive emphasis on deterrence. The second paradigm acknowledges the importance of social norms to shape tax compliance, and of tax administrations to provide services to citizens. Governments could therefore affect tax compliance by also influencing social norms. In the same vein, Kristina Murphy (see Chapter 10 of this volume) argues (and provides evidence) that a process-based model of regulation as one which emphasizes fair treatment is particularly promising in the regulation of taxpayers. According to her view, procedural justice is the most crucial motivational force to shape taxpayer behavior.

In this chapter, we push the analytics of a psychological tax contract developed in our earlier work a bit further. Our analysis results in similar conclusions to those mentioned before, but we are more radical in leaving aside those approaches which are not captured by this contractual thinking and, moreover, we continuously ask what deterrence does at the different stages of state–taxpayer interaction. In the following section, the theoretical basis of the psychological tax contract is provided by discussing the interactions between incentives and the intrinsic motivation to pay taxes. Positive (rewards) or negative incentives (deterrence) play a role, but it cannot be taken for granted that they induce tax compliance, because they may also crowd out tax morale. Thoughts on the impact of deterrence and rewards on tax compliance highlight the importance of a differentiated approach.

A contractual relationship implies duties and rights for each contract partner. This is looked at from an exchange perspective, according to which the government should provide public services to citizens in exchange for their tax payments. If the benefit principle of taxation that implies a fiscal equivalence between public goods and tax prices is violated by setting those prices too high, citizens think they have a justification for evading taxes. However, citizens may perceive their tax payments as contributions to the "*bonum commune*" such that they are willing to honestly declare their income even if they do not receive a full public good equivalent to their tax payments. Income redistribution is more accepted by affluent citizens the more the political process is perceived to be fair and the more policy outcomes are legitimate: the psychological tax contract has elements of gain (or distributive justice) and participation (or procedural justice).

The contractual relationship has additional implications at the procedural level: the way the tax office treats taxpayers in auditing processes plays a role. As Frey and Feld (2002) argue, the psychological tax contract presupposes that taxpayers and the tax authority treat each other like partners – i.e. with mutual respect and honesty. If tax administrations instead treat taxpayers as inferiors in a hierarchical relationship, the psychological tax contract is violated and citizens have good reason not to stick to their part of the contract, and to evade taxes. The psychological tax contract also has elements of respect (or interactional justice). The notion of a psychological tax contract also helps to highlight the difficulties of upholding tax compliance when tax amnesties are offered.

In the final section, we draw some conclusions regarding the policy implications of such a contractual view of tax compliance. It implies that simple policy proposals are inadequate to shape the psychological tax contract successfully. The right mixture of incentives and of respectful treatment of taxpayers by tax officials needs to be found.

The psychological tax contract

Nobody likes paying taxes, not least because it involves a public good and there are incentives to free-ride. Therefore, incentives are needed to enforce taxation. This is the central insight of Allingham and Sandmo's (1972) deterrence approach to tax evasion. However, several scholars have empirically shown that for selfish individuals it would be rational not to pay taxes, because the probability of being detected is so low and the size of the fines so small in many countries that it is advantageous to evade.[3] Tax payment is taken to be a "quasi-voluntary" act (see Levi, 1988), and the tax authority must acknowledge that external interventions in the form of rewards or sanctions may crowd out that intrinsic motivation to pay taxes. The idea of intrinsic motivation is largely attached to psychology. A group of cognitive social psychologists has identified that, under particular conditions, monetary (external) rewards undermine intrinsic motivation.[4] Giving of rewards for undertaking an activity has indirect negative consequences, as rewards lead to the expectation of future rewards such that desired behavior is undertaken only if rewards are provided. Frey (1997a) generalizes this basic idea in three ways:

1. All types of external interventions may negatively affect intrinsic motivation – i.e., not only offering rewardsm but also issuing commands, imposing rules and regulations as well as punishments. Thus, *deterrence* imposed by the tax authority may undermine individuals' intrinsic willingness to conform to tax laws.
2. The intrinsic motivation affected by external intervention is broadly conceived. It comprises actions undertaken for their own sake – i.e., without expectation of external reward – as well as *internalized norm guided behavior*. The latter is the relevant concept as far as tax paying is concerned.

3 External interventions undermine intrinsic motivation when they are perceived to be intrusive by the individuals concerned (the "crowding-out"), and they maintain or raise intrinsic motivation when they are perceived to be supportive. The underlying psychological processes depend on how self-determination and self-esteem are affected (Deci and Ryan, 1985; Deci and Flaste, 1995). Tax audits as intrusion by tax authorities can undermine tax morale more strongly if the taxpayers' sense of self-determination is high.

Tax officials are assumed to be aware of the effects on taxpayers' behavior suggested by crowding theory. They know that disrespectful treatment of taxpayers undermines their tax morale and thereby increases the cost of raising taxes. Tax authorities will only behave in a respectful way towards taxpayers when they are aware that there exists a substantial extent of tax morale to begin with. Tax officials know at the same time that tax payments do not solely depend on tax morale, but that extrinsic incentives also play a major role. In particular, incentives are used to prevent taxpayers with low (or lacking in) tax morale from exploiting the more honest taxpayers and escaping paying their due share. A combination of respectful treatment and incentives is possible and widely practiced. The sole reliance on extrinsic incentives, as suggested by a large part of the tax compliance literature based on subjective expected utility maximization, represents a special case which only applies under restrictive conditions. Such a special case occurs when the tax officials are convinced that individuals' tax morale is low or does not exist at all. In general, however, it is optimal to simultaneously use both respectful treatment as well as incentives. The higher the initial level of tax morale, and the stronger the crowding effect, the less weight is put on negative incentives, and the more respectfully taxpayers are treated.

This relationship between taxpayers and tax authorities can be modeled as an implicit or relational contract (Akerlof, 1982) which involves strong emotional ties and loyalties. Social psychologists (Rousseau and McLean Parks, 1993; Schein, 1965) 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 sanctions previously agreed upon. Osterloh and Frey (2000), for example, use psychological contracts to successfully analyze the organization of firms. Psychological contracts could also be used in tax compliance analysis, suggesting that incentives and respectful treatment are important determinants of tax compliance. This contract can be thought of as a contractual relationship between the taxpayer and the state, while the latter comprises the other fellow taxpayers on the one hand and the official authorities on the other hand. The official authorities are considered to be the government and the legislature, which decide about tax laws and the public services provided, but also the bureaucracy and the tax authority which execute or enforce these decisions. The psychological tax contract must therefore be interpreted as an inclusive relation between state and citizens.

In a psychological tax contract, punishment still plays a role in order to restrict possible exploitation by others; however, the satisfaction of taxpayers

with what they get from the other contract party (i.e., the government) mainly influences their tax morale. Taxpayers' reward from that contract must be understood in a broad sense, going beyond pure exchanges of goods and services for the payment of a tax price. In addition to such direct exchange components, the fairness of the procedures leading to particular political outcomes as well as the way the government and the taxpayers treat each other are part of the contractual relationship. A genuine reward is therefore obtained only if taxpayers as citizens have an inclusive, respectful relationship with the community. Both sides of the contract perceive the other as a contract partner and treat each other with mutual respect. As deterrence and tax morale interact, it would be counterproductive to rely solely on punishment or monetary rewards because tax morale may be undermined. A dynamic relationship results in which deterrence, monetary rewards and fiscal exchange. but also decision-making procedures and treatment of taxpayers, play a role.

The contractual metaphor has many advantages over traditional theoretical approaches. First, it underlines that paying taxes is a quasi-voluntary act. Each party has to agree to the contents of the contract. In practice, it is seldom the case that each public good is individually contracted with each taxpayer for a certain tax price. However, a steady reduction in tax compliance needs to be not only interpreted as a violation of the law, but also as taxpayers' discontent with what they receive for their taxes. Second, the contractual approach emphasizes the role of fair procedures decided upon at a constitutional stage. Tyler (1990) argues that people comply with the law in general if they perceive the process that leads to this law as being fair. Most obviously, it will be difficult to think of a psychological tax contract in autocratic regimes. The inclusiveness of political decision-making could, however, also be very different in democratic regimes, depending on the extent of citizens' involvement in political decision-making. This second advantage of the contractual metaphor stems from its potential to include notions of procedural fairness almost by construction. Third, the way people are treated by the tax authorities affects cooperation levels.

At this procedural level, respectful treatment can be split into two different components. The procedures used by auditors in their contact with taxpayers are to be transparent and clear. In the case of arbitrary procedures, taxpayers feel helpless and get the impression that they are not taken seriously. Such behavior reduces their perception of being obliged to pay taxes. In addition, respectful treatment has a direct personal component in the sense of how the personality of taxpayers is respected by tax officials. If they treat taxpayers as partners in a psychological tax contract, instead of inferiors in a hierarchical relationship, taxpayers have incentives to pay taxes honestly. In addition, respectful treatment of taxpayers enforces the effects of emotions on compliance behavior. Grasmick and Bursik (1990) show, for example, that shame affects tax compliance. Makkai and Braithwaite (1994) report similar evidence regarding the impact of avoidance of humiliation on compliance with nursing home regulation.

Two opposing methods of treating taxpayers can be distinguished: (i) a respectful treatment supporting, and possibly raising, tax morale; and (ii) an

authoritarian treatment undermining tax morale. The tax officials can choose between these extremes in different ways. For instance, when they detect an error in the tax declaration, they can suspect an intention to cheat, and impose legal sanctions. Alternatively, the tax officials may give taxpayers the benefit of the doubt and seriously inquire about the reason for the error. If the taxpayer in question indeed did not intend to cheat but simply made a mistake, he or she will most likely be offended by the disrespectful treatment by the tax authority. The feeling of being controlled in a negative way, and being suspected of tax cheating, tends to crowd out the intrinsic motivation to act as an honorable taxpayer and, as a consequence, tax morale will fall. In contrast, if the tax official makes an effort to find out the reason for the error by contacting the taxpayer in a friendly way, the taxpayer will appreciate this respectful treatment and tax morale will be upheld.

The impact of deterrence on tax compliance

Given the requirements of a psychological tax contract, it is necessary to identify what role deterrence plays. According to surveys by Andreoni *et al.* (1998), Alm (1999), and Slemrod and Yitzhaki (2002), an overwhelming majority of theoretical studies predict a positive impact of deterrence on tax evasion. The higher the fines, the lower the tax evasion – ceteris paribus; the higher the intensity of control, the lower the tax evasion – ceteris paribus. However, the empirical evidence looks less convincing. This already holds for experimental studies, although the meta-study of tax compliance experiments conducted by Blackwell (see Chapter 6 of this volume) indicates that higher deterrence raises tax compliance. More recent experiments, which deviate from the simple public good games used in earlier studies of tax compliance, carefully identify the crowding-outs emphasized by the psychological tax contract approach. For example, Falk and Kosfeld (2006) highlight the crowding out of intrinsic motivation as the hidden costs of control in a principal–agent experiment in which the agent is controlled by the principal. In a crime and punishment experiment, Hörisch and Strassmair (2008) even found that, for some subjects in their experiments, higher punishment *increases* criminal behavior in the lab if the incentives do not become overwhelmingly large.

In field studies, many scholars[5] find a negative impact of a higher probability of detection on tax compliance. Some authors[6] report a positive impact of fines on tax complianc, while others[7] present ambiguous evidence. For example, Slemrod *et al.* (2001) report a significant positive impact of the probability of detection on tax evasion for high-income groups. Scholz and Lubell (2001) find a crowding out of tax compliance when penalties are introduced. The results by Feld and Frey (2002a) support the ambiguous impact of deterrence on tax compliance. According to their evidence from Swiss cantons, a higher intensity of control increases tax evasion, while fines and penalties reduce tax evasion. Martinez-Vazquez and Rider (2005) report evidence for the US that enforcement efforts affect the mode of tax evasion targeted by these efforts negatively, but

the untargeted mode positively. While an overall positive effect of enforcement on tax compliance is reported, it remains generally open whether the unintended side effect on the untargeted mode overcompensates the intended effect.

This mixed evidence can occur for many different reasons, ranging from measurement errors in the empirical analysis to a social sanctions approach of deterrence (Ekland-Olson *et al.*, 1984) and the impact of personal and social norms as moderators of deterrence (Wenzel, 2004). It may, however, also be convincingly explained by crowding theory. Higher control intensities increase deterrence and thus tax compliance on the one hand, but may be perceived as intrusive by taxpayers and thus reduce tax compliance on the other hand (Kirchler, 1999; Scholz and Pinney, 1995). Feld and Frey (2002a) provide evidence that fines and penalties are part of a non-linear punishment schedule that allows for low levels of fines in the case of minor offenses against the tax code – even a standing tax amnesty in the case of self-denunciation – in order to reduce taxpayers perception of intrusiveness, but requires high penalties in cases of tax fraud or major convictions in order to make it clear that the psychological tax contract is at stake. Put differently, nobody is perfect, and to cheat a little bit on taxes is a common and minor human weakness, and should be considered as such, while basic violations of the tax code undermine the basic contractual relationship between citizens and the state and must therefore be punished more heavily. Minor and major offenses could thereby be distinguished with respect to the amount evaded, but also to procedural categories – for example, by differentiating between active tax fraud by manipulation of the balance sheet and passive tax evasion when taxpayers forget to report particular income components.

Deterrence thus has two different aspects. On the one hand, in order to keep up a psychological tax contract between the tax office and the taxpayers, honest taxpayers must be confident that they are not being exploited by dishonest tax cheaters. Thus, deterrence for major violations of the tax code reduces tax evasion. On the other hand, each taxpayer may make a mistake, and thus minor offenses can be penalized less without undermining the psychological tax contract. A non-linear punishment schedule, with low fines for minor tax evasion and high penalties for tax fraud, will serve the purpose of shaping tax morale. All in all, the evidence suggests that an exclusive reliance on deterrence is not a reasonable strategy to increase tax compliance.

Rewarding taxpayers

In contrast to the standard model of tax evasion which raises the relative cost of *not paying* taxes, rewards raise the benefits of *paying* taxes. A reward, which is given to taxpayers for correctly fulfilling their duties, changes the relative prices in favor of paying taxes, and against evading them (Falkinger and Walther, 1991). For this result to obtain, two conditions must be met:

1. The income effect induced by the higher wealth position must not work in the opposite direction. However, this is unlikely if the reward is small

compared to the tax liability so that the income effect also tends to be small. Moreover, there is little reason to expect that higher wealth should induce more, rather than less, tax evasion.

2 The reward may induce strategic behavior by the taxpayers if it depends on the reduction of evasive behavior. In that case, it may be rational first to increase tax evasion and thereafter to reduce it in order to benefit from the rewards offered. As the rewards considered here depend on *being* a "good" taxpayer, strategic behavior is not a rational option.

It is crucial to consider effects of rewards on behavior going beyond those analyzed by standard theory. From the perspective of crowding theory, receiving certain types of rewards may undermine the intrinsic motivation to pay taxes. The more rewards are perceived as an acknowledgment for being a good taxpayer, the more they are perceived as supporting, and tend to bolster and raise tax morale quite in contrast to deterrence. This motivational effect then works in the same direction as the relative price effect, and strengthens the attractiveness of giving rewards to "good" taxpayers. In the case of the normally applied punishment for failing to pay the taxes due, the relative price effect and the motivational crowding-out work in opposite directions. The *way* in which rewards are handed out to "good" taxpayers is thus significant for its effects on taxpayer behavior.

The reward may take the form of a *direct monetary* payment. It may be proportional to the size of the tax payment (i.e., a percentage rebate) or, at the other extreme, may be the same size for all "good" taxpayers. The relative price effect is larger in the first case, but this beneficial effect may easily be overcompensated by a crowding-out effect. A reward received in the same monetary dimension as the tax payments is likely to be discounted by the taxpayers as a "right", and therefore does not positively influence tax morale. In contrast, a reward clearly distinguished from the taxes due tends to be perceived as a sign of acknowledgment. If this is indeed the case, it is even better to give the reward in a *non-monetary* form. Providing "good" taxpayers with better and less costly access to public services is likely to raise tax morale more strongly than money will. Such a "gift" also emphasizes the exchange relationship between the taxpayer and the state based on reciprocity (Fehr *et al.*, 1997). There are many possible ways to reward "good" taxpayers in these terms – for instance, they may be offered free entry to museums, exhibitions and other cultural activities undertaken by the state, or they may be given a reduction (say, 50 percent) on all public transport. Most taxpayers receiving a reward in these terms take it as a sign of appreciation rather than simply a reduction in taxes (which would quickly be taken as a matter of course).

It is well known from psychological research that punishment and rewards lead to different behavioral outcomes. Indeed, it appears to be common knowledge among psychologists that rewards lead to better outcomes than punishment. As early as 1948, Skinner (1948, 1953) was emphasizing the importance of positive incentives. In the literature on social loafing (see Diehl and Stroebe,

1987; Witte, 1989), the impact of reward and punishment is emphasized, and it is shown that rewards particularly help to solve the problem of "hiding in the crowd" (Davis, 1969).

Tax compliance and social exchange

From the perspective of standard economic theory, a much more direct incentive for tax compliance than deterrence or rewards consists in the goods and services that the state provides to citizens in exchange for their tax payments (Mackscheidt, 1984; Smith and Stalans, 1991). If the analogy to private contracts is considered, the goods or services purchased provide the foremost incentives to pay the price for these goods and services. The incentives from private law to stick to the duties fixed by the contract mainly serve as insurance if the individuals' desire to get a product is insufficient, or the terms of trade are unfavorable. Similarly, rewards in the form of gifts for loyal customers serve as a positive means to bind them. Because the state supposedly provides public goods, services, and infrastructure, which are not necessarily traded in private markets, or redistributes income and wealth, the fiscal exchange relationship poses additional difficulties.

From the perspective of a psychological tax contract, respectful treatment occurs at two different levels of action: the fiscal exchange, and the procedural level. The fiscal exchange between the state and its citizens requires that citizens' tax payments are met by a corresponding supply of public services provided by the government. According to the benefit principle of taxation, taxes are prices for particular public goods (Buchanan, 1976). However, the benefit principle does not necessarily imply that income redistribution becomes impossible and only infrastructural goods as well as public consumption goods are provided by the state. Citizens may perceive their tax payments as contributions to the "*bonum commune*" such that they are willing to honestly declare their income even if they do not individually receive a full public good equivalent to their tax payments. Income redistribution is more accepted by affluent citizens the more the political process is perceived to be fair, and the more policy outcomes are legitimate.

Establishing social exchange between citizens and the government

Empirically, the more governments follow the benefit principle of taxation and provide public services according to the preferences of taxpayers in exchange for a reasonable tax price, the more taxpayers comply with the tax laws. Many scholars[8] present experimental evidence that governments which stick to the principle of fiscal exchange achieve more tax compliance. Pommerehne *et al.* (1994) used a simulation study design to analyze the impact of fiscal exchange on tax compliance. They show that the more the citizens' optimal choice of a public good and the actual provision level and quality deviate from each other, the higher is tax evasion. Tax compliance also increases with reductions in government waste. In

experimental papers, the proposed fiscal exchange relationship is based on the provision of a public good financed by taxes. Several authors use this analogy to public good games in order to analyze additional variables that influence tax evasion (Feld and Tyran, 2002). According to the benefit principle of taxation, such a restricted view of government action could be rationalized.

However, in real-world settings the state undertakes many activities that cannot be subsumed under the heading of public consumption or public infrastructure. In particular, pure redistribution is not covered by such a design. Whenever redistribution of income is at stake, problems of tax evasion become pertinent. There are only a few studies that consider the relationship between tax evasion and redistribution in a fiscal exchange setting. In an experiment, Güth and Mackscheidt (1985) chose a simple tax-transfer scheme to approximate the principle of vertical equity – i.e., taking from the rich and giving to the poor – as closely as possible. They found that subjects had a compliance rate of 93 percent. Becker *et al.* (1987) report, however, that evasion rises if taxpayers fear to lose from redistribution.

Obviously, the satisfaction with what the government provides in exchange for tax payments strongly depends on the experimental setting or, in the real world, on the environmental conditions. In particular, notions of fairness or justice shape the extent to which the fiscal exchange paradigm increases tax compliance. Kinsey and Grasmick (1993)[9] report evidence that horizontal equity plays a role. If an individual's tax burden is of similar magnitude as that of comparable others, tax compliance increases. According to Kinsey and Grasmick (1993) as well as Roberts and Hite (1994), vertical unfairness of the tax schedule (the progressivity of the income tax) increases tax evasion. This is in line with the results by Scott and Grasmick (1981), who report evidence that deterrence is more effective for taxpayers who perceive the tax system to be unfair. Moreover, Scholz and Lubell (1998) emphasize the importance of trust in government for tax compliance. In contrast to their definition (1998: 411), trust in government is more than a "rough measure of the net benefits from governing institutions". It also involves the effectiveness of the government in conducting the policies and programs promised to citizens. In particular, trust in government can be eroded if government waste is high (Ahmed and Braithwaite, 2004; Braithwaite, 1998, 2003).

Establishing fiscal exchange by political decision-making procedures

The fiscal exchange relationship between taxpayers and the state therefore depends on the politico-economic framework within which the government acts. According to Alm *et al.* (1999: 149), rational egoists should vote for the lowest control intensities and fines that are necessary to ensure compliance. However, the possibility for voters to vote directly on matters of content increases the legitimacy of policies and serves as an insurance against exaggerated government waste. Direct political participation particularly activates the public-spiritedness of taxpayers (Feld and Kirchgässner, 2000).

In an experimental study, Feld and Tyran (2002) found that tax compliance is higher on average in an endogenous fine treatment in which subjects are allowed to approve or reject the proposal of a fine as compared to an exogenous fine treatment where the fine is imposed by the experimenter (see also Alm *et al.*, 1999). People exhibit higher tax morale when they are allowed to vote on a fine because they find it more legitimate. Not only do subjects who approve the fine in the endogenous fine treatment have considerably higher tax compliance than subjects in the exogenous fine treatment compliance rates are also higher if the fine is accepted than if the fine is rejected. Subjects who reject the proposal of the fine show a higher compliance rate than subjects in the exogenous fine treatment even if they know that the dominant strategy under the existence of the low fine is non-compliance. Finally, individuals who vote against the fine contribute effectively more if the fine is adopted than do individuals who vote for the fine if the symbolic fine is rejected.

Field studies provide additional support for the experimental findings. Focusing on tax evasion in the Swiss cantons between 1965 and 1978, Pommerehne and Weck-Hannemann (1996), Pommerehne and Frey (1992) and Frey (1997b) found that the more direct democratic the political decision-making procedures of a canton are, the lower the tax evasion is. These results were replicated by Feld and Frey (2002a) and Frey and Feld (2002) by extending the sample to the period 1985–1995. Torgler (2005) used an alternative approach to study tax morale in the Swiss cantons by investigating two micro-data sets (the World Value Survey and the International Survey Program) that contain questions about the tax morale of respondents. His results provide evidence that direct democracy shapes tax morale. According to his estimates, tax morale is significantly higher in direct democratic cantons. Distinguishing between different instruments of direct democracy, the fiscal referendum has the highest positive influence on tax morale. Moreover, the tax morale of respondents is higher if they have a higher trust in government, or in the courts and the legal system. Since studies for the US (Gerber, 1999) and Switzerland (Pommerehne, 1978) show that policies in direct democratic jurisdictions are more strongly in line with citizens' preferences, institutions of direct democracy can be seen as a means to establish a relationship of fiscal exchange between taxpayers and the government.

Torgler (2005, 2007) also reports evidence that local autonomy as an indicator of fiscal federalism has a marginally significant positive impact on tax morale. Güth *et al.* (2005) report a stronger effect of fiscal decentralization on tax compliance in an experimental setting. Subjects show higher tax morale if public goods are provided and financed regionally or locally, because their taxes are spent on their own regional or local public goods. The fiscal equivalence of the theory of fiscal federalism then holds more strongly.

The treatment of taxpayers

The psychological tax contract is also supported by interactional justice – in particular, a respectful treatment of taxpayers by tax authorities. In order to

investigate the relationship between taxpayers and tax authorities, Feld and Frey (2002a) sent a survey to the tax authorities of the 26 Swiss cantons asking detailed questions about the legal background of tax evasion, and including 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. According to this survey, the extent of *respectful treatment* of the taxpayers is captured by:

i fully observing procedures based on formal and informal rules – i.e., what typically happens if a taxpayer does not declare taxable income at all (procedures, fines), if a tax declaration is mistakenly filled out or, in a second stage, if taxpayers do not react?
ii acknowledgment of individual citizens' rights and personality – i.e., what does the tax administration do if taxpayers make a mistake by declaring a too high taxable income? Are there attempts to find out whether taxpayers intentionally or mistakenly declare too low a taxable income? Are mistakes in the tax declaration to the advantage or to the disadvantage of *taxpayers*?

The way taxpayers are treated by tax authorities reveals interesting differences between the Swiss cantons. Only 58 percent of Swiss cantonal tax authorities believe that mistakes in reported incomes are, on average, in favor of taxpayers; 31 percent believe that mistakes are neither to the advantage nor to the disadvantage of taxpayers, and 12 percent believe that mistakes are to the disadvantage of taxpayers. These answers indicate that distrust towards taxpayers is not universal. If the tax authorities presume that a taxpayer does not report his or her true taxable income, they contact that taxpayer in several different ways: 54 percent of the cantons phone the person concerned and ask how the mistake(s) occurred in the tax declaration and how it can be explained; all of the cantons send a letter to the taxpayer, half of them with a standard formulation; and nearly 85 percent ask the taxpayer to come to the tax office. Only half of the cantons mention the possibility of punishment. Thus, while one-half of the tax authorities rarely adopt the strategy of explicit deterrence, the other half seek to gain additional information. Of the cantonal tax authorities, 96 percent correct reported incomes that are too high (i.e., reduce taxable incomes when taxpayers commit mistakes that are to their disadvantage), and 27 percent correct reported taxable income even if taxpayers fail to apply legal tax savings.

The impact of the treatment of taxpayers on tax evasion was studied more thoroughly in a regression analysis by Frey and Feld (2002) and Feld and Frey (2002a). With a sample of 26 Swiss cantons in the years 1970–1995, they showed that the tax authorities in Switzerland do indeed behave *as if* they were aware of the reaction of taxpayers to being treated with respect. Tax evasion turns out to be lower, the more fully the tax office observes formal and informal procedural rules. The observation on procedural rules is indicated by a distinction between friendly treatments (for example, implementing a respectful procedure) and unfriendly treatments (such as using an authoritarian procedure or

having the tax authorities' direct imposing an arbitrarily determined fine). The friendly treatment has a stronger dampening effect on tax evasion, particularly in cantons using referendums and initiatives in political decision-making, while the authoritarian procedure, the threat of deterrence, reduces tax evasion particularly in representative democracies, but is counter-productive in direct democracies. Moreover, Swiss citizens are more respectfully treated by the tax authority the more strongly developed the citizens' participation rights are (Feld and Frey, 2002b). In addition, tax authorities in more direct democratic cantons appear more frequently to give taxpayers the benefit of the doubt. Feld and Frey (2002b) report evidence that tax authorities in more direct democratic cantons believe to a significantly lesser extent that mistakes in tax declaration are in favor of taxpayers.

The role of tax amnesties

How tax amnesties affect tax compliance is intensively debated in the literature. Two main arguments oppose each other. On the one hand, when offering a tax amnesty, taxpayers are given the opportunity to return to normal and honest compliance behavior. This is the well-known bridge to tax honesty often stressed by governments. On the other hand, previously honest taxpayers may be negatively affected by tax amnesties. They could have the impression that it pays to behave dishonestly and get away with only small penalties. Moreover, when they have illusions about the true extent of tax evasion of their fellow taxpayers, they may realize that tax evasion is much more widespread and may fear that they are the last to pay their taxes honestly. This will induce them to comply with tax law to a lesser extent.

Including tax amnesties in the standard economic theory of tax evasion, the negative effects must be emphasized. Tax amnesties reduce the credibility of governments to commit to a deterrence policy, and thus lead to a decline in actual deterrence. The analytics of the psychological tax contract allow for inclusion of the positive argument for tax amnesties, however. The representatives of the state are reaching out to renew that contract with taxpayers who had become non-compliant in the past. They are confident that the components of fiscal exchange now fit those taxpayers' needs and wishes better than before. When tax amnesties occur infrequently – for example, only every two generations - the negative side effects on honest taxpayers are moderate. From governments' perspective, the additional fiscal revenue is often crucial for tax amnesty proposals. This desire stands in stark contrast to the requirement that tax amnesties should take place infrequently.

In general, tax amnesties do not generate much additional revenue for governments.[10] Alm *et al.* (2001), drawing lessons from Russian tax amnesties, support this conclusion. In addition, they found that tax amnesties generate higher revenue when accompanied by bigger changes in the tax system, often reductions of the tax burden, and that taxpayers must perceive a tax amnesty as a one-time opportunity. The revenue impact becomes smaller when tax amnesties

occur repeatedly (Luitel and Sobel, 2007). Interestingly, the introduction of a tax amnesty in US states depends on political economic factors (Le Borgne. 2006). States are more likely to introduce tax amnesties when their tax levels are high (Dubin *et al.*, 1992), but also when state indebtedness is growing (Le Borgne, 2006). Amnesties are thus perceived by governments as raising revenues. Moreover, governors are half as likely to declare a tax amnesty during an election year, because law-abiding taxpayers consider a tax amnesty as unfair and thus would punish governors at the polls. This evidence supports the argument regarding negative side effects of amnesties.

Torgler and Schaltegger (2005) conducted a tax amnesty experiment in which a referendum on the introduction of a tax amnesty was incorporated. They found that taxpayers usually refuse a tax amnesty. However, tax compliance rose significantly after the vote had occurred. When a tax amnesty is accompanied by higher enforcement mechanisms, higher tax compliance results. It is interesting to note that the latest federal tax amnesty in Switzerland, in 1968, became a success because it had to pass a referendum and was accompanied by *less* auditing efforts than a previous proposal (Pommerehne and Zweifel, 1991). In this case, the return of taxpayers to honest behavior dominated the crowding out of honest taxpayers.

Conclusions

Tax compliance is the result of a complicated interaction of deterrence measures and responsive regulation. Citizens and the state develop their fiscal relationships according to a psychological tax contract that establishes fiscal exchange between taxpayers and tax authorities. It reaches beyond pure exchanges, and involves loyalties and ties between the contract partners. Tax morale is therefore a function of (i) the fiscal exchange where taxpayers get public services for the tax prices they pay, (ii) the political procedures that lead to this exchange, and (iii) the personal relationship between the taxpayers and the tax administrators.

Empirical evidence on Switzerland summarized in this chapter underlines these arguments by showing a family of tax jurisdictions where a psychological tax contract appears to be in place. Tax authorities take into account that the way they treat the taxpayers systematically affects the latter's tax morale, and therefore their willingness to pay taxes, which in turn affects the costs of raising taxes. In addition, tax compliance in Switzerland is shaped by direct democracy establishing a fiscal exchange relationship between taxpayers and the state. This also holds for the latest successful tax amnesty in Switzerland, although even more complicated issues are at stake when tax amnesties are introduced.

Finally, it should be noted that the approach of a psychological tax contract shifts the emphasis in tax compliance research from deterrence and its effects towards the ways in which tax morale can be raised and social norms are shaped. As in pure market exchange, reciprocity norms, trust, and pro-social behavior are important pre-conditions for a fiscal system, and thus the state in general, to work smoothly. Without knowledge of these fundamental normative concerns, pure deterrence might easily backfire.

Notes

1 See also the comment by Frey (1976) on Buchanan's paper. In contrast, Musgrave (1939) argues that fiscal exchange theory is highly unrealistic given the compulsory nature of the actual revenue–expenditure process.
2 See also the Special Issue on Responsive Regulation and Taxation, *Law and Policy*, 29 (1) (Braithwaite, 2007).
3 Alm *et al.* (1992a), Graetz and Wilde (1985), Skinner and Slemrod (1985) and Pommerehne and Frey (1992) conclude that the risk aversion that is needed in order to raise compatibility with actual compliance rates is not supported by evidence. In a more recent paper, Slemrod (2007) questioned such an interpretation of the evidence by arguing that the way tax authorities collect information on taxpayer compliance matters such that the probability of detection increases considerably for large parts of the taxpaying population. In a recent work on the effectiveness of the IRS, Erard and Feinstein (see Chapter 7 of this volume) reported detection rates of 88 percent for wage earners (excluding tip income), 47 percent for recipients of rents and royalties, and 32 percent for self-employed individuals. The detection rate of capital income (including capital gains) was not reported. Even for wage earners, these figures do not amount to 100 percent, as claimed by Slemrod (2007).
4 Headed by Deci (1971). Extensive surveys are given in, for example, Pittman and Heller (1987), and Lane (1991). The effect is also known as "The Hidden Cost of Reward" (see Lepper and Greene, 1978). For meta-analyses, see Deci *et al.* (1999), and Cameron *et al.* (2001). That external interventions may crowd out intrinsic motivation is introduced into economics as "crowding theory" (Frey, 1997; Le Grand, 2003), and is supported by much empirical evidence (Frey and Jegen, 2001).
5 For example, Dubin *et al.* (1987), Dubin and Wilde (1988), Beron *et al.* (1992), Slemrod *et al.* (2001), Alm and McKee (2006), and Bergman and Nevarez (2006).
6 Schwartz and Orleans (1967), Friedland *et al.* (1978), Klepper and Nagin (1989), De Juan *et al.* (1994), Alm *et al.* (1995).
7 Spicer and Lundstedt (1976), Friedland (1982), Elffers *et al.* (1987), and Varma and Doob (1998).
8 Spicer and Lundstedt (1976), Porcano (1988), Alm *et al.* (1992a), and Alm *et al.* (1992b, 1992c, 1993).
9 See also Spicer and Becker (1980), De Juan *et al.* (1994).
10 Alm and Beck (1990), Hasseldine (1998), Feld (2003).

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