Rethinking the Research Paradigms for Analyzing Tax Compliance Behavior

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Abstract

In this paper we give our perspective on the different paradigms that have shaped—and seem likely to shape in the future—research in the field of tax compliance behavior. These research paradigms include viewing tax evasion as a decision under risk made by a single taxpayer, as a social dilemma in which there is a tension between individual interests (e.g., cheating on one's taxes) and collective goals (e.g., providing public goods), as a series of decisions made by many different types of taxpayers, and as a psychological contract between tax authorities and taxpayers. We argue that these different paradigms require that particular attention be paid to the main “actors in the field”, which involves going beyond a focus on a single taxpayer to consider other taxpayers, tax accountants, the tax authorities, and the government. The ways in which these actors interact in different climates, especially the dynamics of power and trust between the actors, must also be considered. We conclude with a discussion of a framework—the “slippery slope framework”—that attempts to synthesize these different research paradigms. Throughout, we illustrate our arguments by reference to research that focuses especially on the European experience.

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Abstract
In this paper we give our perspective on the different paradigms that have shaped – and seem likely to shape in the future – research in the field of tax compliance behaviour. These research paradigms include viewing tax evasion as a decision under risk made by a single taxpayer, as a social dilemma in which there is a tension between individual interests (e.g., cheating on one’s taxes) and collective goals (e.g., providing public goods), as a series of decisions made by many different types of taxpayers, and as a psychological contract between tax authorities and taxpayers. We argue that these different paradigms require that particular attention be paid to the main “actors in the field”, which involves going beyond a focus on a single taxpayer to consider other taxpayers, tax accountants, the tax authorities, and the government. The ways in which these actors interact in different climates, especially the dynamics of power and trust between the actors, must also be considered. We conclude with a discussion of a framework – the “slippery slope framework” – that attempts to synthesize these different research paradigms. Throughout, we illustrate our arguments by reference to research that focuses especially on the European experience.

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It is often argued that citizens value the public goods financed by the money of other taxpayers, but that they themselves are reluctant to pay their own taxes. This reluctance to pay taxes is often explained by various theories, or “research paradigms”: by theories that emphasize individual self-interest, by alternative theories of individual motivation, by perspectives that focus on group interactions, by doubts concerning the responsible spending of the taxes by the government and its tax authorities, and the like.

A strong tradition here is the economics-of-crime paradigm that views the decision to pay taxes as an individual’s choice between a sure option of paying all taxes honestly and a risky option of evading taxes. Depending on the audit and fine rates, the risky option may result in a higher or a lower payoff compared to the sure option. In this paradigm, tax compliance is understood mainly as the result of a rational “portfolio” decision by a single taxpayer.

However, this research paradigm has been increasingly challenged as incomplete, both by economists but especially by psychologists, and especially under the premise that the complex decision to pay taxes cannot be understood solely by framing this decision as a decision under risk made by a single taxpayer. There are more “actors in the field” whose separate behaviours, whose different motivations, and whose dynamic interactions must all be considered as a way of explaining compliance. The consideration of these actors, their behaviours, and their interactions has given rise to other and emerging research paradigms for the analysis of tax compliance.

In this paper we discuss these research paradigms. In the next sections we sketch the different paradigms and their development over time. We argue that these different paradigms require that particular attention be paid to the main “actors in the field”, which involves going beyond a focus on a single taxpayer to consider other taxpayers, tax accountants, the tax authorities, and the government. The ways in which these actors interact in different climates, especially the dynamics of power and trust between the actors, must also be considered. We conclude with a discussion of a framework – the “slippery slope framework” – that attempts to synthesize these different research paradigms. Throughout, we illustrate our arguments by reference to research that focuses especially on the European experience.

**Paradigm (1): Tax Compliance Behaviour as an Individual Decision under Risk**

For many years, researchers were aware of the significance of such issues as taxpayers’ attitudes towards the state, the government, and taxes in explaining tax compliance (Veit,
1927; Schmölders, 1960). However, much of this perspective was lost when the decision to comply was framed as a purely economic decision under risk. This economic theory of tax compliance behaviour was developed in the early 1970s by Allingham and Sandmo (1972) and Srinivasan (1973), who applied to compliance the more general theory of criminal behaviour first developed by Becker (1968). Here a “representative” taxpayer either decides to declare his or her income honestly and to pay the legally due taxes as required, or he chooses the risky option of evading taxes. In the case of an audit, the individual’s cheating is discovered, the individual is fined, and he ends up with less money than if all income had been fully declared. However, if no audit takes place, the individual receives a higher income than if he had fully declared income. A central conclusion of Allingham and Sandmo (1972) and Srinivasan (1973) was that tax honesty increases with a higher audit probability and more severe fines.

However, there are various difficulties with this economics-of-crime paradigm of tax compliance behaviour.

Perhaps the most fundamental problem with this research paradigm is that it is difficult to explain compliance behaviour by the purely financial consideration of enforcement (Webley et al., 1991). In this paradigm, it is sufficient to impose controls and sanctions severe enough to ensure compliance, making coercive power a necessary tool for government. However, if enforcement was the only consideration, individuals (especially those whose incomes are not subject to third-party sources of information) should report virtually no income, given the relatively low rates of audits and fines that exist in most all countries. This type of behaviour is seldom if ever seen.

A related problem is that the deterrent effects of audits and fines are typically present but not always very strong, as demonstrated in a number of studies on European taxpayers. See Kirchler et al. (2010) for a comprehensive review and summary of these (and other) studies.

Further, the long-lasting effect of audits and fines is more than questionable. In an experimental setting, Guala and Mittone (2005) found a strong decrease in taxpayers’ compliance immediately after an audit, even with no actual changes in enforcement. This so-called “bomb crater effect” has proven to be quite robust in various experimental studies using European subjects (Kastlunger et al., 2009). One possible explanation is that those participants who were punished for incorrect declarations strived to regain their lost money in the following filing periods. Another is that audits and fines may be perceived as a signal of a
lack of trust from the authorities, thereby generating a cycle in which mistrust on the part of the taxpayer is created, negative attitudes toward the authorities in general and toward taxes in particular are formed, and a crowding out of the “intrinsic motivation” to cooperate results (Schmölders, 1960; Frey, 1997).

All of these results suggest the relevance of other possible individual motivations that go beyond narrow financial considerations to include notions of guilt, shame, morality, altruism, or alienation. These results also suggest that individuals may be motivated by group notions like social norms, social customs, fairness, trust, reciprocity, tax morale, and even patriotism, as well as by the public goods that taxes finance. More broadly, they suggest the relevance of other “actors in the field”, which necessarily leads to consideration of the ways in which these various actors interact.

For example, consider these “actors in the field”. Taxes are paid not simply by a single taxpayer. Rather taxes are paid by all of the taxpayers of a state earning a taxable income, often with the assistance of tax accountants, collected by the tax authorities, and spent by the political representatives of the state. The combined activities of the responsible government, the tax authorities, the tax accountants, and all taxpayers are mutually related. The focus on a single taxpayer in the standard portfolio model of tax compliance behaviour necessarily neglects these other actors and their complex interactions.

Consider the government. By this we mean the elected representatives who are responsible for determining the various features of the tax system imposed on the taxpayers. Furthermore the way of communicating to the citizens the decisions on taxes and on spending are important aspects of the actions of the government. Laws are often not clearly formulated and comprehensibly communicated, as suggested by the fact that the reading skills required to understand legal texts in many western countries like Great Britain are much higher than the average reading ability in the populations.

Another actor is the tax authorities (or the tax administration), who act under the mandate of the government. The tax authorities offer services, implement controls, and impose punishments according to their conception of the motives driving the behaviour of the taxpayers.

Tax accountants often act as intermediaries between authorities and taxpayers, assisting taxpayers in the determination of taxpayer liabilities. In this, it is often assumed that the
purpose of tax accountants is to reduce the tax load of their clients by all available means. In fact, Sakurai and Braithwaite (2003) found out that the majority of taxpayers expect their accountants to fill in their tax declarations correctly.

Finally, the decision of a single taxpayer whether to cooperate depends on his or her own conceptions and judgments about the activities of all other taxpayers. As emphasized by Kirchler (2007), it has frequently been observed that the willingness to pay taxes increases with a rising awareness of tax laws and relevant rules. It has also been observed that social norms can be a strong regulative of behaviour and that citizens often have a pronounced sense of justice and respond to violations of the principles of justice. Finally, it has been observed that the individual motivation for cooperation or evasion varies across taxpayers.

Consequently, this early paradigm of tax compliance behaviour as an individual decision under risk neglects many essential elements. It focuses on only one motivation (e.g., a purely rational benefit-cost calculus) to the exclusion of other individual and group considerations. It largely ignores other actors, like the government, the tax authorities, tax accountants, and all other taxpayers. It neglects the psychological and social aspects of the interaction dynamics between these agents. Other research paradigms attempt to address these elements.

**Paradigm (2): Tax Compliance Behaviour as a Social Contribution Dilemma**

Taxpayers often recognize that their taxes are used for the community welfare, and most understand that taxes need to be paid to finance public goods. Nevertheless, individuals may also doubt that the taxes that they pay are spent efficiently. They may also suspect that some individuals may not pay their taxes while still enjoying the public goods. This raises a “social contribution dilemma” (or a “free-rider problem”), where personal gains work against the collective good.

More precisely, Dawes (1980) defined a social dilemma as a situation in which an individual’s interests are opposed to those of the community. By acting selfishly, an individual can benefit. However, if most individuals similarly decide to maximize their own individual profit, then everyone is harmed because the public goods are not provided.

In laboratory experiments, this social dilemma can be easily created (Davis and Holt, 1993). Participants are endowed with money and are free to contribute any given amount to a collective account. The experimenter tells the participants that the collected sum will be
increased by a fixed factor, and returned to the participants in equal proportions. If all players are uncooperative, then nothing can be redistributed from the collective account, and everyone is left with only their original endowed money. If everyone cooperates, then the collected amount is increased by the fixed factor, and everyone is better off relative to the uncooperative outcome.

The crucial question is how to influence the willingness to cooperate. In the laboratory, the “experimenter” is essentially the “government”, and can be assumed to act honestly. However, it cannot be assumed that the other players (e.g., the “taxpayers”) can be trusted, and typically they do not. Even so, there is some experimental evidence that cooperation increases when subjects are allowed to communicate, when they set the rules of the game themselves, and especially when any defection is announced in public communicate (Wahl, Muehlbacher, and Kirchler, 2010).

These experimental results are also supported by empirical evidence in regionally limited areas with direct democracy. For example, the cantons in the east of Switzerland approach the highest level of tax honesty relative to other countries and regions (Feld and Matsusaka, 2003; Muehlbacher et al., 2008). Similarly, Rothstein (2000) reported an encounter with a Russian tax official who argued, that although Russians cherish the public goods financed by tax payments, most of them do not want to pay taxes because of the high corruption and lax social norms to cooperate. To increase compliance, he argued that two conditions need to be fulfilled, both of which act broadly to increase “trust”: taxpayers need to believe that other taxpayers are paying their shares, and the tax authorities must ensure that the taxes are invested in the public welfare rather than filling the pockets of tax administrators or other government officials. Put differently, both interpersonal trust and institutional trust are of paramount importance for ensuring cooperation.

Overall, however, the social contribution dilemma research paradigm remains largely oriented toward an individual taxpayer as rational and maximizing, and the suspicion remains that an individual would not behave cooperatively if able to hide in the anonymity of the masses. Further, although taxpayer interactions with other taxpayers via the group are now recognized, other types of interactions – indeed, other actors – are not considered. Finally, much of this research continues to view all individuals as the same. The next research paradigm focuses largely on this last omission.

**Paradigm (3): Tax Compliance Behaviour as Behaviour of Many Different Taxpayers**
The economics-of-crime approach tends to view each taxpayer as the same, motivated by the same type of utilitarian consequentialism that requires individuals to evaluate different states of the world purely on the financial outcomes. However, it is obvious that taxpayers cannot be perceived as a homogeneous group. Some individuals may be motivated only by financial outcomes, but others may have different preferences, including nonfinancial considerations like guilt, altruism, fairness, or reciprocity. Further, the process by which a different outcome is attained often matters. In short, people exhibit great diversity in their behaviour, and a research paradigm must recognize this “full house” of behaviours (Alm, 2012).

For example, the opportunity for cheating has been shown to matter, and this opportunity differs across individuals. Employees in many countries have their taxes directly deducted from their salary with little opportunity to cheat. Even though self-employed individuals are also required to pay various taxes, the self-employed have a much greater opportunity to cheat because they are not subject to employer source-withholding and must instead pay taxes out of their own pockets. In fact, there is some evidence that there is more evasion on such out-of-pocket-payments (Kirchler, Maciejovsky, and Weber, 2005).

However, the general opinion that the self-employed are always unwilling to pay their taxes is false. Although the self-employed when young and inexperienced show a greater tendency towards evasion, this tendency decreases with work experience (Kirchler, 1999). This behaviour may be occur because increasing experience leads to the establishment of separate “virtual” accounts for tax debts and own money.

This behaviour may also occur because of individual differences in morality. Such differences have been shown in a natural field experiment investigating the honesty of Austrian newspaper purchasers (Pruckner and Sausgruber, 2012). Sunday newspapers in Austria are placed in plastic bags attached to street lanterns, and anyone who wishes to buy a paper is asked to put money into a fixed cashbox. However, there is no monitoring, so that individuals may pick up a newspaper without making any payment. Pruckner and Sausgruber (2012) found that approximately one-third of the (observed) customers paid at least part of the price, while the other two-thirds did not pay anything at all. However, when a message thanking customers for their honesty was added to the plastic bag, they found that cooperation increased.

All of these results are consistent with work by Braithwaite (2009), who has argued that taxpayers differ strongly in their motivations. She distinguishes five “motivational postures”.
“Commitment” and “capitulation” both combine views that express a responsibility to cooperate. Other postures express a negative tendency to cooperate. “Resistance” is characterized by doubt regarding the good intentions of the government; “disengagement” refers to individuals who have abandoning the struggle for their own rights and see no sense in cooperating; “game playing” denotes taxpayers who refuse to act according to the law, and see the law as something that can be used to their own advantage. Braithwaite (2009) uses this framework to argue for a differential approach by the authorities, one that emphasizes that taxpayers should be dealt with according to their underlying motivational posture. A service orientation is needed for some taxpayer segments, while “an iron fist in a velvet glove” should await those who repeatedly and deliberately violate the law.

However, the taxpayer remains the center of attention, and other actors are more or less neglected. Further, the tax authorities themselves are not questioned. The next research paradigm addresses these last limitations.

**Paradigm (4): Tax Compliance Behaviour as a Psychological Contract**

A more recent research paradigm emphasizes that tax compliance behaviour can be broadly viewed as a “psychological contract” between taxpayers, the tax authorities, and the government. Central to this contract is the broad notion of a “social norm” of behavior (Elster, 1989).

There is no one single definition of a social norm. Even so, it is now widely accepted that a social norm can be distinguished by the feature that it is process-oriented, unlike the purely outcome-orientation of individual rationality. It also represents a pattern of behavior that is sustained largely by social approval or disapproval: if others behave according to some socially accepted mode of behavior, then the individual will behave appropriately, but if others do not so behave, then the individual will respond in kind. This factor suggests that an individual will comply as long as he or she believes that compliance is the social norm (however defined); conversely, if non-compliance becomes pervasive, then the social norm of compliance disappears. More broadly, a social norm suggests that the nature of one’s social interactions with others affects one’s own compliance decision.

The presence of a social norm is also consistent with many other approaches, including those that rely upon social customs, intrinsic motivation, tax morale, civic duty, appeals to patriotism or conscience, or feelings of altruism, morality, guilt, and alienation. For example,
Braithwaite (2009) argues that most people have an “intrinsic motivation” to cooperate. Similarly, Schmölders (1960) and Frey (1997) define “tax morale” as an intrinsic motivation to pay one’s taxes, so that tax morale is anchored in the consciousness to be a citizen as a basis to accept one’s tax duty and acknowledge the sovereignty of the state. Orviska and Hudson (2002) link tax morale to the concept of civic duty, proposing that people are motivated by a sense of responsibility and loyalty to society. Responsible citizens are said to be collaborative even if the system would allow for non-compliance because their behaviour is not externally regulated by controls and sanctions but rather by a concern for society. This intrinsic motivation to cooperate can be “crowded out” by exaggerated punishments for non-compliance or inadequate rewards for cooperation (Frey 1997), as shown by in experimental work by Gneezy and Rustichini (2000). In empirical work, Alm and Torgler (2006) find significant differences in tax morale across European countries.

Indeed, inspired by the concept of a “psychological contract” between employees and management in organizations, Feld and Frey (2007) have argued for maintaining a good cooperative relationship between authorities and taxpayers, one that goes beyond legal regulations. Building on a norm of reciprocity, they suggest that the commitment of one party requires an equivalent commitment of the other party. By focusing on the reciprocity of commitments between authorities and taxpayers, the usual hierarchical and authoritarian structure often reflected in the formulation of tax laws seems obsolete, and the possibility of an adverse reaction to enforcement seems plausible. The psychological contract therefore implies that citizens will entrust their money to the government and the tax authorities to use it for sensible projects. As long as the tax authorities and elected politicians do not disappoint the trusting citizens, taxpayers will cooperate to ensure the provision of public goods. If this psychological contract is violated, taxpayers will no longer cooperate by paying their taxes.

Of some relevance here is the dynamics of power and trust between the various actors. “Power” can be defined as the potential and perceived ability of a party to influence another party in an intended way (Russell, 1986). The most prominent psychological taxonomy stems from French and Raven (1959), who distinguish between “coercive power”, “reward power”, “legitimate power”, “expert power”, “referent power”, and “information power”. Also useful here are two meta-factors: “harsh power”, which combines coercive and reward power, and “soft power”, which includes legitimate, expert, referent, and information power (Raven, Schwarzwald, and Koslowsky, 1998). There are also different notions of “trust” (Castelfranchi and Falcone, 2010). Most definitions distinguish trust based on automatic,
intuitive, or affective processes (or implicit trust), from trust determined by the motivation, benevolence, goal achievement, and dependency on trustees (or reason-based trust).

Several studies in less applied fields of research have argued that exerting power leads to negative effects on trust, by evoking suspicion and mistrust (Gambetta, 1988). This result is consistent with a crowding out of the intrinsic motivation to cooperate (Frey, 1997; Feld and Frey, 2007). However, some studies have suggested that power affects trust positively (Bachmann, 2001). For example, depersonalized forms of power (e.g., technical standardization, trade associations) can be perceived as a necessary precondition for trust.

There are also some studies that examine the opposite question: how does trust affect power? There is some evidence that trust might decrease the perceived level of power (Nooterboom, 2002). Trust can make measures directed at enforcing rule compliance unnecessary, thus making the exertion of power redundant (Gulati, 1995). However, trust may also increase power. If one of the involved parties is assumed to be trustworthy and able to exercise legitimate power, then other party is more likely to be compliant, therefore increasing the power of the first party (Tyler, 2006).

Overall, the evidence on the various interactions of trust and power remains somewhat murky, and requires additional research. Regardless, the assumption of a psychological contract shifts attention away from taxpayers acting alone to the relationship between taxpayers (and their accountants), the government, and the tax authorities. All actors are now seen as partners in a cooperative relationship.

**Towards a Synthesis**

How – if at all – can these various research paradigms be combined into a single framework?

One promising approach has been labeled the “slippery slope framework” (Kirchler, Hoelzl, and Wahl, 2008). This framework recognizes the relationship between all actors – taxpayers (including tax accountants), tax authorities, and the government – and it considers the many possible avenues of their interactions, all as a determining factor of taxpayer compliance behaviour. All actors and their relationships need to be taken into account, and all interactions need to be structured in a way promoting cooperation. The government and the authorities are no longer assessed as superior agencies that force legal compliance in general and tax honesty in particular, but are seen as servants of the citizens acting for the well-being
of the community. Instead of concentrating on the enforcement of compliance, importance is granted to shaping the interaction as to promote mutual trust and cooperation. This corresponds to the “trust paradigm” that Alm and Torgler (2011) identify as one of the three paradigms of tax administration (in addition to the traditional “enforcement paradigm” in which taxpayers are treated as potential criminals and the “service paradigm” that acknowledges the necessity to ease tax honesty by way of service offerings). Tax authorities are to provide services to taxpayers that facilitate compliance with the law. The “trust paradigm” emphasizes the importance of building trust between interacting parties, based on the expectation of taxpayers and tax authorities that the other party will act beneficially rather than detrimentally (Gambetta, 1988).

The slippery slope framework distinguishes two types of tax honesty: voluntary compliance and enforced compliance (see Figure 1). These behaviours depend in turn on the power of the authorities and on the trust that individuals have in the authorities. Voluntary compliance depends primarily on trust in the state and its authorities, which is influenced mainly by perceptions of fairness and social norms and therefore may be better entitled voluntary cooperation (as in Figure 1). If taxes are not paid voluntarily, tax honesty can also be ensured by enforcing citizens to pay under the precondition that the authorities have the power to exert sufficient deterrence pressure, including (perceived) audit frequency and severity of fines. It is assumed that tax payments are influenced by trust and power of authorities: if both trust and power are at a minimum level, tax payments are assumed to be low and taxpayers will act selfishly by maximizing their own gains through tax evasion. When trust in authorities increases, tax payments are also assumed to increase. Furthermore, if the power of authorities (including the ability to detect and punish tax fraud) increases, then tax payments are expected to increase as well.

Wahl, Kastlunger, and Kirchler (2010) empirically tested the basic assumptions of the slippery slope framework with a computer-aided experiment. Participants were randomly presented with one of four different descriptions of a fictitious country, in which the authorities were characterized as either trustworthy or untrustworthy on the one hand and as either powerful or powerless on the other hand. Their results showed that participants paid significantly more taxes when power and trust were high compared to the other conditions, as suggested by the framework. They also found that voluntary compliance was highest when the authorities were presented as trustful and powerful, while enforced compliance was highest when authorities were portrayed as powerful but not trustworthy. An online
experiment by Wahl, Kastlunger, and Kirchler (2010) and two surveys of real-world taxpayers (Muehlbacher, Kirchler, and Schwarzenberger, 2011; Muehlbacher, Kogler, and Kirchler, 2011) have also confirmed the usefulness of the slippery slope framework. Even so, the power and the trust dimensions in the framework are likely to affect each other, and therefore may have complex interactions and dynamics. Further, as suggested by Alm and Torgler (2011), it may be useful to add explicitly an additional dimension of action by the authorities, one that corresponds to their service paradigm. As noted earlier, all of these dimensions require additional research.

**Figure 1: The Slippery Slope Framework of Tax Compliance Behaviour**


**Conclusions**

There is little doubt that we have learned much in our understanding of tax compliance behaviour. There is also little doubt that there are still major gaps in our understanding. The dominant trend in tax compliance behaviour research indicates a clear move from a paradigm in which an individual taxpayer is seen as a selfish individual who maximizes his own financial gain, to paradigms that recognize the differences in individuals, their different motivations, the different actors, and the different climates in which all of these actors interact. These paradigms continue to rely on an economic framework, but they also recognize the insights from other disciplines, especially psychology. Indeed, we believe that
all research paradigms offer essential contributions to understand tax compliance behaviour, and we also believe that an integration of all findings – although not easy to achieve – offers the most promising path ahead. It is especially important to recognize the insights of these different research paradigms in devising policies to combat tax evasion.

References


