New Zealand (2003), *Report of the Inland Revenue Department for the Year Ended 30 June 2003*, Wellington, New Zealand: Inland Revenue Department.
Organisation for Economic Co-operation and Development (OECD) (2004), 'Compliance risk management: managing and improving tax compliance', Centre for Tax Policy and Administration, OECD, Paris, accessed 2 March 2015 at http://www.oecd.org/dataoecd/44/19/33818656.pdf.
Organisation for Economic Co-operation and Development (OECD) (2013a), *Comparative Information on OECD and other Advanced and Emerging Economics*, Paris: OECD Publishing, doi:10.1787/9789264200814-en.
Organisation for Economic Co-operation and Development (OECD) (2013b), Revenue Statistics: 1965–2012, Paris: OECD Publishing, doi:10.1787/rev stats-2013-4-en-fr.
Organisation for Economic Co-operation and Development (OECD) (2013c), *Tax and Development: What Drives Tax Morale?*, Tax and Development Programme, OECD, accessed 1 March 2015 at http://www.oecd.org/ctp/tax-global/TaxMorale_march13.pdf.
Payne, J.L. (1993), *Costly Returns: The Burdens of the U.S. Tax System*, San Francisco, CA: ICS Press.
Posner, E.A. (2000), 'Law and social norms: the case of tax compliance', *Virginia Law Review*, **86** (8), 1781–819.
Rees-Jones, A. (2014), 'Loss aversion motivates tax sheltering: evidence from U.S. tax returns', 8 December, Operations and Information Management Department, University of Pennsylvania, accessed 1 March 2015 at http://ssrn.com/abstract=2330980.
Schmölders, G. (1970), 'Survey research in public finance: a behavioural approach to fiscal theory', *Public Finance*, **25** (2), 300–306.
Schwartz, H. (2008), *A Guide to Behavioral Economics*, Falls Church, VA: Higher Education Publications.
Soos, P.E. (1997), *The Origins of Taxation at Source in England*, Amsterdam: IBFD Publications.
Strassels, P.N. (1981), *All You Need to Know about the IRS: A Taxpayer's Guide*, New York: Random House.
Strümpel, B. (1969), 'The contribution of survey research to public finance', in A.T. Peacock (ed.), *Quantitative Analysis in Public Finance*, New York: Praeger, pp. 13–32.
Sunstein, C.R. and R.H. Thaler (2003), 'Libertarian paternalism is not an oxymoron', *University of Chicago Law Review*, **70** (4), 1159–202.
Thaler, R.H. and C.R. Sunstein (2008), *Nudge: Improving Decisions about Health, Wealth and Happiness*, New Haven, CT: Yale University Press.
Torgler, B. (2005), 'Tax morale and direct democracy', *European Journal of Political Economy*, **21** (2), 525–31.
Torgler, B. (2006), 'The importance of faith: Tax morale and religiosity', *Journal of Economic Behavior & Organization*, **61** (1), 81–109.
Torgler, B. (2007), *Tax Compliance and Tax Morale: A Theoretical and Empirical Analysis*, Cheltenham, UK and Northampton, MA, USA: Edward Elgar.
Torgler, B. and F. Schneider (2007), *The Impact of Tax Morale and Institutional Quality on the Shadow Economy*, IZA Discussion Paper No. 2541 and CESifo Working Paper Series No. 1899, accessed 3 March 2015 at http://ssrn.com/abstract=958248.
Vallgårda, S. (2012), 'Nudge – a new and better way to improve health?', *Health Policy*, **104** (2), 200–203.
Wenzel, M. (2005), 'Misperceptions of social norms about tax compliance: from theory to intervention', *Journal of Economic Psychology*, **26** (6), 862–83.
Whyte, K.P., F. Selinger, A.L. Caplan and J. Sadowski (2012), 'Nudge, nudge or shove, shove: the right way for nudges to increase the supply of donated cadaver organs', *American Journal of Bioethics*, **12** (2), 32–9.
Wilkinson, N. (2008), *An Introduction to Behavioral Economics*, Basingstoke: Palgrave Macmillan.

18 Income tax compliance*

Erich Kirchler, Barbara Hartl and Katharina Gangl

INTRODUCTION

Tax evasion and aggressive tax avoidance are significant problems in most societies and represent an important source of a potential loss of revenue for governments. Understanding taxpayers' behavior and fostering tax compliance are therefore important challenges for the state. The traditional economic approach to tax behavior assumes that taxpayers are rational decision makers trying to maximize their utility while filling in their tax returns. From the individual perspective, the smartest thing to do would be to evade taxes as long as the probability of getting caught is low and the expected fine is small. This assumption is also reflected in the public opinion that tax evasion is a game won by the clever and the intelligent (Kirchler 1998). Honest taxpayers are perceived to be hard working, but not as intelligent as tax evaders. This is puzzling, as in many countries in the world tax honesty is rather high compared with the low audit rates (Kirchler 2007).

Citizens value public goods and comprehend the necessity of tax collection to finance them, but are at the same time often reluctant to accept the full burden of their taxes. Indeed, since the beginning of tax collection, taxpayers have complained, and their complaints survive in the hieroglyphics of ancient Egypt and in the work of scholars from medieval times until today. For instance, Thomas Aquinas (1225–74) is said to have coined the description of taxes as 'legal theft'; and Peter Sloterdijk (2010) wonders why the public has not engaged in a civil rebellion against the prodigious enlargement of the tax base, which he perceives as the equivalent of socialist expropriation.

In a recent survey in Germany, taxpayers show an ambivalent attitude towards taxation and taxes: although the majority of respondents maintain that paying taxes is a duty which must be respected, a vast majority complain that the tax burden is much too high, the legal and bureaucratic procedures of filing taxes are complex and too time-consuming, and politicians spend tax money wastefully (Deutsche Wirtschafts-Nachrichten 2014). Tax attitudes vary among taxpayers: the self-employed appear to hold more negative attitudes than white collar workers or civil servants (Kirchler 1998), and citizens expressing preferences for liberal and right-wing political parties also express preferences for 'less state' and lower taxes as compared to those who typically vote for left-wing parties (Lozza et al. 2013; Sussman and Oliviola, 2011).

The desire to reduce taxes can be even stronger than rational maximization of one's own income, leading to the selection of suboptimal options. Sussman and Oliviola (2011) presented scenarios describing two stores selling television sets which the participants were to imagine purchasing. They were invited to choose either buying the television at full price in a store nearby or to take a 30-minute drive to a store offering a discount. In one scenario the discount was related to taxes (tax-free discount equivalent to 8 percent discount); in the other scenario, taxes were not mentioned but the discount was slightly larger (9 percent discount). Willingness to take the 30-minute drive was significantly higher if the discount was related to taxes, even if the discount was smaller. If taxes can be avoided, people are also willing to wait longer for a commodity, to invest in riskier assets, and express higher acceptance when confronted with moving to a country with a longer daily commute (Sussman and Oliviola 2011).

People perceive tax evasion as illegal and unacceptable, whereas they endorse tax avoidance, defined as the legal reduction of taxes (Kirchler et al. 2003). Tax avoidance refers to the reduction of the tax burden within the limits of the law, for instance, through the exploitation of tax loopholes. Tax avoidance can be perceived as a positive and clever act (Kirchler et al. 2003). In contrast, tax evasion is seen as immoral, illegal and as a form of fraud associated with the shadow economy (Kirchler et al. 2003). Also, tax avoidance in the form of aggressive tax planning against the spirit of the tax law, such as the cross-border money shifting of international companies, is seen as unfair by many taxpayers and provokes protests by the media and the citizens. For example, in 2011, the information technology company Apple made a profit of US$22 billion, but owing to aggressive tax planning, the company paid less than 1 percent of its profit in taxes (Szigetvari 2014). When Starbucks was accused of aggressive tax planning in the United Kingdom by the media, consumers took to the streets in protest of this non-cooperative behavior and boycotted Starbucks stores (Cambell 2012).

In this chapter, we start with the economic perspective on tax behavior which has traditionally dominated tax research. Tax-paying decisions are conceptualized as decisions under uncertainty, shaped by the probability of audit and the severity of punishment in case of detected wrongdoing. We then present the results of psychological tax behavior research and consider different segments of taxpayers and their respective attitudes towards taxes. In the following section, tax behavior is discussed as a behavior in a social dilemma situation with decisions influenced by rational utility maximization and beliefs about other taxpayers' behavior. In this section, we briefly present a survey conducted on emotions, the perceived power of authorities and compliance. In the penultimate section, we illustrate how the interaction between taxpayers and tax authorities determines cooperative interaction climates and corresponding forms of tax cooperation. We conclude with a discussion of current developments in the field and future research directions for tax psychology.

2 THE ECONOMIC APPROACH

The neoclassical economic approach to tax behavior is based on the assumption that taxpayers, aiming to maximize their utility, are confronted with a decision under uncertainty. It is suggested that taxpayers calculate which of the two options – paying taxes honestly or evading taxes – provides the greatest value. If effective audits with severe fines are in place and the probability of audit is high, a taxpayer should be honest because the risk of being caught and fined outweighs the small chance of gain through evasion. In contrast, if audits are rare and fines low, a rational taxpayer would choose to evade taxes because the risk of being caught is low and, even if that were to happen, the fine is low. Since taxpayers seek to accrue higher profits, they would always evade if audits and fines were absent (Allingham and Sandmo 1972; Srinivasan 1973). Audits and fines are the keys to ensuring tax compliance.

Empirical research suggests that the effect of audits and fines is more complex than assumed in the economic theory of crime (Becker 1968). Indeed, the effect of audits and fines is smaller than theoretically expected and sometimes in the opposite direction (Andreoni et al. 1998; Kirchler et al. 2010). In many countries in the world, the probability of audit is low, which should result in low tax honesty; however, tax honesty is rather high compared to the low audit rates (Kirchler 2007). For instance, the Internal Revenue Service in the United States (IRS) audited only about 1 percent of the more than 137 million returns filed by taxpayers in 2008 (Bible 2010). Despite the low audit probability, about 80 percent of total reportable income is assumed to be reported correctly, while 18–23 percent of reports are incorrect (Cebula and Feige 2012).

The contradictory effects of audits may be due to the fact that it is hard for people to deal with uncertainty. They often underestimate or overestimate the likelihood of events. Therefore, the perceived and objective probability of audit may differ significantly (Fischer et al. 1992). The effect of audits seems to vary more with their perceived severity than with their actual severity. The more severe audits and fines are perceived to be, the stronger their impact on tax compliance (Alm et al. 1992; Kirchler 2007; Mulder et al. 2009). For instance, frequent audits at the beginning of an individual's professional life in contrast to later audits may increase a taxpayer's perception of high audit probability and lead to sustainable tax compliance. Tax experiments in which participants file taxes on earned income over a 'lifespan' of 60 filing periods showed that audits conducted at the beginning of the 60 rounds (in contrast to later audits) lead to an increase in tax compliance and keep tax compliance high even if the frequency of audits decreases in the later rounds (Guala and Mittone 2002).

Misperception of chance can also lead to the opposite of the intended effects. The same tax experiments also showed that tax compliance decreases immediately after an audit takes place (Guala and Mittone 2002; Kastlunger et al. 2009). It seems that after an audit, taxpayers feel safe from another audit in the next round and choose risk-seeking behavior. This phenomenon is referred to as the 'bomb crater effect' (Guala and Mittone 2002) following the observation in World War One that soldiers under heavy fire believed themselves to be safe in the craters of recent explosions, assuming it would be unlikely for two bombs to fall in the same spot. Likewise, taxpayers may underestimate the likelihood of upcoming audits immediately after they have been audited (Kastlunger et al. 2009) and therefore evade. Instead of the objective audit probability, it seems that the perceived audit probability determines tax compliance.

Beside audits, fines are assumed to be a useful measure to diminish tax evasion. According to classical economic assumptions, the amount of a possible fine has a positive effect on taxpayers' willingness to pay taxes honestly (Allingham and Sandmo 1972). This effect might be undermined by causing reactance instead of subordination (Kirchler 2007), that is, taxpayers become motivationally aroused by the tax law as a threat to their behavioral freedom (Brehm 1989). The implementation of fines per se may lead to reactance and negative attitudes towards the tax authority. As such, the imposition of a fine can also crowd out the intrinsic motivation to comply (Feld and Frey 2002). Gneezy and Rustichini (2000) studied parents' behavior in Israeli daycare centers before and after the introduction of a fine for late picking up of their children. After the introduction of a monetary fine for latecomers, delayed picking-ups increased rather than went down. Instead of feeling guilty about their late picking-ups, parents had a clear conscience about leaving their children longer under custodial care and made less of an effort to be punctual. Rather than being perceived as a fine, the payment was gladly accepted as a 'price' for prolonged custody.

Generally, audits and fines impact tax compliance positively, but the effect is smaller than theoretically expected, and sometimes audits and fines backfire (Alm et al. 1995; Gangl et al. 2013). Audits might be perceived as an unpleasant experience whose probability of occurrence decreases immediately after an audit has occurred; fines sometimes might be perceived as a 'price' people are willing to pay. Audits and fines can also be perceived as a signal of mistrust from the tax authority and elicit mistrust in the authorities and non-cooperative behavior (Alm et al. 2012; Feld and Frey 2007).

3 DIFFERENTIAL EFFECTS

Taxpayers are not a homogeneous group of people trying to evade taxes. Instead, based on different socio-demographic characteristics and experiences with the tax authorities, taxpayers can be assumed to differ in their motivation to pay taxes and in their compliance. Women and older taxpayers as well as employees taxed at source are found to be more compliant than men, younger taxpayers, and self-employed taxpayers (Kirchler 2007; Torgler 2006). Based on such differences, tax authorities could segment taxpayers into groups and take a different approach with each group. Audits and fines may be most appropriate to enforce compliance among taxpayers intentionally evading, whereas they should assist and educate those who want to comply but fail to do so owing to the complexity of tax law (Braithwaite 2003b).

Women are often found to be more compliant than men. This effect seems to have social rather than biological reasons (Kastlunger et al. 2010). The classic social role of women is typically associated with pro-social and cooperative behavior, in contrast to the social role of men (Fallan 1999; Kastlunger et al. 2010). Empirical research shows that it is only those women who identify with the classical gender role that differ from men in their tax compliance (Kastlunger et al. 2010). However, self-employed women, who seem to identify less with the classical role and more with their occupational role, which is associated with values such as competitiveness and dominance, do not seem to be more compliant than self-employed men (Gangl et al. 2013). As a consequence, gender could be a criterion for tax authorities to differentiate among employed taxpayers but not among self-employed taxpayers.

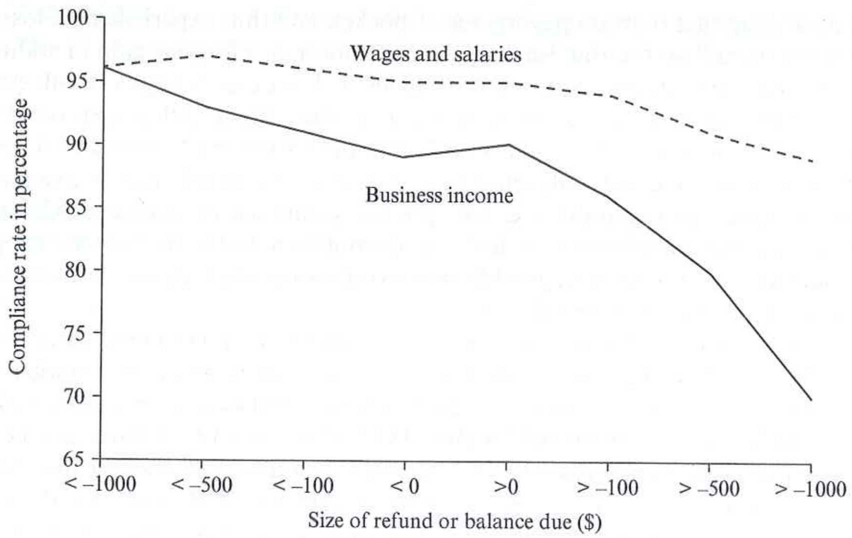
Tax compliance seems to increase with age. Older taxpayers are consistently found to be more tax compliant than younger taxpayers (Frey and Torgler 2007; Kirchler 2007; Lewis 1978; Sidani et al. 2014). The reason might be that age correlates with knowledge about taxes, experiences with taxes, and a better understanding of the tax law, which in turn enhances trust in tax law. Moreover, knowledge about taxes enhances the opportunities for a taxpayer to legally reduce their taxes instead of illegally evading them. For instance, younger taxpayers with less experience might not put money aside during the year in order to pay their taxes at the end of the year (Muehlbacher and Kirchler, 2013). In contrast, based on 'mental accounting', older taxpayers are more likely able to separate gross income into net income, tax duties and social security payments and consequently put tax money at least 'mentally' aside, which 'prepares' them to pay taxes. Rather than

having the feeling that they are paying out of pocket, and thus experiencing a loss when paying taxes, mental accounting leads to the perception of a forgone gain in addition to the net income when paying taxes, and thus, to less risk-seeking behavior. While younger taxpayers may experience an unpleasant surprise when filing and paying taxes, older taxpayers are aware of their tax liability and know approximately how much money they have to put aside for taxes (Muehlbacher and Kirchler 2013). Based on these assumptions, it can be assumed that tax authorities who provide young self-employed people and less experienced businesspeople with services introducing them to the tax law and tax procedures would increase tax knowledge while improving money management related to taxes, which would lead to higher compliance.

Income has been investigated as a potential moderator of tax compliance. From a theoretical perspective, high-income earners could be either more or less compliant than low-income groups, and empirically, income has been found to be both related and unrelated to compliance (Allingham and Sandmo 1972; Srinivasan 1973). High income might increase an individual's willingness to take the risk of evading taxes because possible fines might be seen as easy affordable. Conversely, low income might also increase the motivation to evade taxes because the money spent on taxes might represents a larger fraction of available income. The results of empirical studies are inconclusive (Pickhardt and Prinz 2014). It seems that factors related to income, such as source of income, might play a relevant role (Durham et al. 2014). For instance, experiments show that taxes on windfall gains are more likely to be evaded than money earned through hard work (Muehlbacher et al. 2008).

Occupation has been tested as an essential determinant of tax compliance and an important segmenting criterion. Employed and self-employed taxpayers differ in their opportunities to evade taxes. Also, in many countries, employed taxpayers' income is taxed at source as compared to the self-employed, who take home their gross income and pay taxes out of pocket (Antonides and Robben 1995; Engström and Holmlund 2009; Webley et al. 1991, 2001). Self-employed people who pay taxes out of pocket not only face more opportunities to engage in 'creative' tax planning, in the concealment of income and the exaggerated deduction of expenditures, but also have a tendency to exhibit more risk-seeking behavior as they often perceive paying taxes as a loss (Antonides and Robben 1995). According to the prospect theory (Kahneman and Tversky 1979), taxpayers are expected to either be risk averse or to take the risk and evade, depending on whether taxpayers conceive of their tax decision as within a forgone gain frame or a loss frame.

Prospect theory also explains withholding phenomena: it is to be expected that people who have, for example, already paid taxes in advance in the form of monthly contributions and then have an additional sum to pay at the end of the fiscal year experience this balance as a loss and are reluctant to pay additional taxes. In contrast, taxpayers with the same total amount of tax liability who have already paid all of their taxes in advance, resulting in a year-end refund, may experience their taxes when filing at the end of the year as a gain and tend to be loss averse, resulting in willingness to declare revenue and expenses correctly. A study by Cox und Plumley (1988, cited in Webley et al. 1991) shows that these assumptions might be accurate. The authors investigated 50 000 tax declarations in the US and found that willingness to pay taxes depended upon whether a taxpayer was expecting a refund from the tax authorities or faced a balance due. For wage earners, it has been demonstrated that willingness to pay taxes reaches 96 percent when a refund is

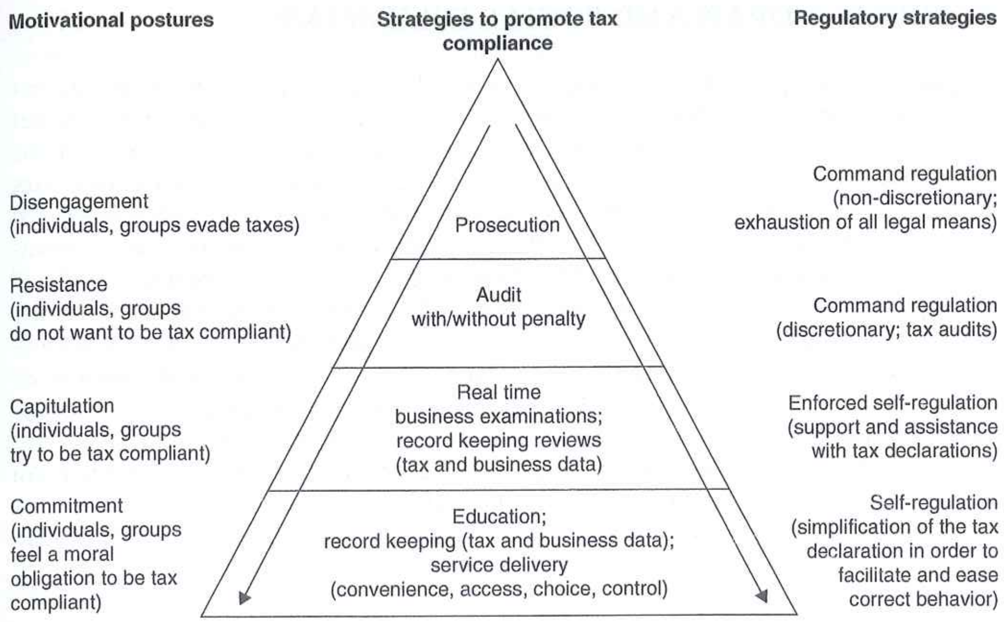


Source: Cox and Plumley (1988), cited in Webley et al. (1991, p. 84).

Figure 18.1 Willingness to pay taxes as dependent upon the type of tax and the size of refund or balance due at the end of the fiscal year

expected. On the other hand, when a balance due is expected, willingness to pay drops to 89 percent. People with business income act even more clearly according to the predictions of prospect theory: willingness to pay varies from 96 percent to 70 percent, depending on whether they expect to receive a refund or make an additional payment. Figure 18.1 illustrates the results of Cox and Plumley's (1988, p. 84) study. Similar results were achieved by Schepanski und Kelsey (1990) and Schepanski und Shearer (1995) as well as by Elffers and Hessing (1997) and Kirchler et al. (2005).

Taxpayers do not only differ in their socio-demographic characteristics, but also in their experiences and relationship with the tax authorities, factors which are also suggested to result in differences in individual motivations to be honest. Braithwaite (2003a) distinguishes among five motivational postures of tax compliance based on the social distance taxpayers perceive towards the tax authority. Two motivational postures (commitment, capitulation) represent an overall positive orientation to the tax authority. The motivational posture of commitment describes taxpayers who feel morally obliged to pay taxes; they are open to admitting mistakes and want to correct them. Taxpayers holding the motivational posture of capitulation are not as committed; rather, they accept the tax authority as a legitimate authority and give in to this authority. The other three motivational postures (resistance, disengagement, game playing) express a negative tendency to cooperate. Resistant taxpayers doubt that the tax authority intends to behave cooperatively and keep their guard up. Disengaged taxpayers see no sense in cooperating and try to keep their distance from the tax authorities. 'Game playing' reflects a motivational posture and attitude toward laws, whereby the law is seen as something that can be used for one's own advantage (Braithwaite 2003a).



Source: Adapted from Braithwaite (2003b, p. 3).

Figure 18.2 The responsive regulation approach based on different motivational postures of taxpayers

Based on these motivational postures, the Australian Tax Office has proposed a system of responsive regulation in order to address taxpayers effectively (Braithwaite 2003b). The responsive regulation approach requires tax authorities to apply different strategies to ensure tax compliance for taxpayers with differing motives to comply or not to comply. The regulatory pyramid (Figure 18.2) serves as a guide for a tax authority's response to non-compliance and is based on the opinion that it is less costly to resolve a problem at the bottom of the pyramid than to allow it to escalate to the top of the pyramid (Braithwaite 2003b). Instead of treating all taxpayers alike, the tax authorities should approach taxpayers depending on their motivational posture. Taxpayers who intentionally evade taxes should be confronted with the full rigor of the law. In contrast, taxpayers who hold positive motivational postures of commitment and capitulation should get assistance and support from the tax authorities (Braithwaite 2003b). Figure 18.2 conceptualizes the responsive regulation approach. The bottom of the pyramid mirrors empirical findings indicating that most taxpayers hold motivational postures reflecting a compliance-minded attitude (Braithwaite 2003b). The appropriate strategy of the tax authorities for most taxpayers would be to facilitate compliance by educating taxpayers and providing services. Conversely, the tax authorities should apply the full force of the law only for the minority of intentional resistant evaders, represented by the top of the pyramid (Braithwaite 2003b, 2009).

4 SOCIAL NORMS AND SOCIAL DILEMMAS

Taxpayers do not pay taxes in a social vacuum (Mittone and Patelli 2000) and do not only consider the balance between the tax burden and the provision of public goods, but also orient their behavior on other taxpayers' behavior. Taxpayers' conceptions of the attitudes and activities of other taxpayers impact their decision on whether to pay taxes honestly or not. As people feel part of social groups, their decisions are often motivated by group norms (Frey and Torgler 2007; Wenzel 2007). In this vein, social norms consistently prove to be a strong regulator of behavior since one's own tax compliance is related to the perceived noncompliance of others (Wenzel 2005). The term 'social norm' is either defined as what is commonly done in a community (descriptive norm) or what is commonly approved and disapproved by the community (injunctive norm; Kallgren et al. 2000). Individuals will comply as long as they believe that other people pay taxes honestly and that compliance is the social norm for the group they identify with.

Wenzel (2005) shows that people overestimate others' acceptance of tax evasion. An intervention whereby participants are informed about the actual social norms on tax evasion could reduce tax cheating. In addition, a large-scale field experiment in the United Kingdom by Hallsworth et al. (2013) shows that social norm messages increase compliance. Over 100000 taxpayers received letters from the tax authority which varied only in the inclusion of a short phrase after the first sentence. Some of these letters contained messages based on social norms (for example, 'Nine out of ten people pay their tax on time', Hallsworth et al. 2013, p. 34). The results show that including norm messages in a standard tax payment reminder letter enhances tax compliance, with the greatest effect obtained from the 'minority norm' treatment, where taxpayers were informed that 'Nine out of ten people in the UK pay their tax on time. You are currently in the very small minority of people who have not paid us yet' (Hallsworth et al. 2013, p. 34). Similar to perceived social norms, tax morale, civic duty, taxpayer identity, appeals to patriotism or conscience, and feelings of altruism and morality also impact tax compliance (Torgler 2007).

As taxes are used to finance public goods for the good of the community, taxpaying represents a social dilemma. The term 'social dilemma' refers to a situation in which the interest of an individual is opposed to the interest of the community or the group (Dawes 1980). When people use a public resource, they are individually better off when they make use of it without contributing in return – for instance, without paying taxes. They can benefit by acting selfishly as 'free riders'. However, if most people maximize their own utility and act selfishly, the outcome can be a disaster for everyone (Kollock 1998). Public goods will not be provided and as a consequence everyone will be harmed.

Experimental evidence indicates that communication between individuals, opportunities to participate in setting up the rules of the game, and the public announcement of defection increase cooperation in social dilemma games (Kollock 1998). Emotions also seem to play an important role in social dilemmas and are assumed to influence people's tendency to choose individual interests over collective interests (Polman and Kim 2013). An investigation concerning the effect of anger, disgust and sadness on people's willingness to give shows that angry people give fewer shared resources to others, whereas the recall of disgusting and sad experiences lead to more resource-giving (Polman and Kim 2013). Coricelli et al. (2010) measured skin conductance and self-reports to show that emotional arousal is associated with cheating behavior: a high degree of emotional arousal correlates with the likelihood of tax evasion and the amount evaded. Further, tax compliance was higher when the pictures of evaders were made public. The impact of shaming on tax compliance remains beneficial over the long term if the contravener is reintegrated into the group after evading, but leads to higher levels of evasion when reintegration fails (Coricelli et al. 2014). Nevertheless, participants were initially less likely to evade in the treatment without reintegration, possibly because they anticipate negative emotions related with stigmatization. Tax decisions therefore may be driven by the willingness to avoid negative emotions, which may occur, for instance, during public denouncement. Emotions also play a role when taxpayers perceive the tax authority as unjust. People differ in their affect intensity, so they react more, or less, emotionally to their treatment by the tax authorities (Murphy 2009). When people feel unfairly treated by an authority, they feel anger and, in turn, reduce compliance (Murphy and Tyler 2008). Those who feel that the authority used procedural justice during its enforcement action are less likely to feel anger, and are therefore also less likely to evade taxes (Murphy 2009). Although research on emotions in the context of taxpaying is relatively scarce, the existing evidence indicates that the interplay of cognition and affect moderates the effectiveness of key economic variables like audit probabilities and fines (Maciejovsky et al. 2012).

BOX 18.1 SURVEY ON EMOTIONS RELATED TO TAXES, PERCEIVED PROTECTIVE POWER AND COMPLIANCE

We conducted a survey investigating the relationship between emotions, authorities' perceived use of their power to detect and punish evasion, and tax compliance. A representative sample of 500 Austrian self-employed taxpayers (61 percent men, M_{age} = 44.46 years, SD_{age} = 10.55 years) were presented with PANAS (20 items; Watson et al. 1988), an instrument to measure 20 qualities of emotions, and six additional items based on the PANAS-X (Watson and Clark 1994). Respondents were asked to indicate their emotions when thinking of the tax authority on a 7-point Likert scale (7 = high emotional intensity). They were also asked how likely it was that they had paid their taxes honestly in the past year (7-point Likert scale; 7 = very likely) and to indicate whether they feel that the tax authorities exert power in an undifferentiated way to combat tax evasion or in a well-targeted way towards wrong-doers in order to protect cooperative citizens (7-point Likert scale). The items read as follows:

1. As the tax authority takes targeted action against tax evaders, I feel protected by the authority.
2. As the tax authority indiscriminately takes action against all taxpayers, I feel like I'm being harassed by the authority.
3. People who pay their taxes honestly do not have to fear audits and fines.
4. Even people who pay their taxes honestly have to fear indiscriminate audits and fines.

We computed the mean response to these four items, labeled as perceived protective power, and computed Pearson correlations between the 26 emotions, past tax compliance and protective power. Table 18.1 shows means, standard deviations and correlations. Respondents who perceive tax authorities as exerting protective power have a greater interest in taxes and indicate that they do not feel hostile, irritated, disgusted, upset, scornful, scared, afraid, nervous, sad, distressed, confused, ashamed, or guilty. Also, they indicate higher past compliance. In sum, although protective power seems unrelated to positive emotional qualities, the opposite, untargeted power, is related to strong negative emotions. If taxpayers perceive actions taken by the tax authority as illegitimate random threats, negative emotions towards the tax authority are evoked, like hostility or disgust. On the other hand, taxpayers react positively when they have the feeling they are protected by the tax authority's power. The present survey shows that tax authorities therefore need to be careful in how they apply power in terms of audits and fines.

Table 18.1 Protective power, tax compliance and emotions

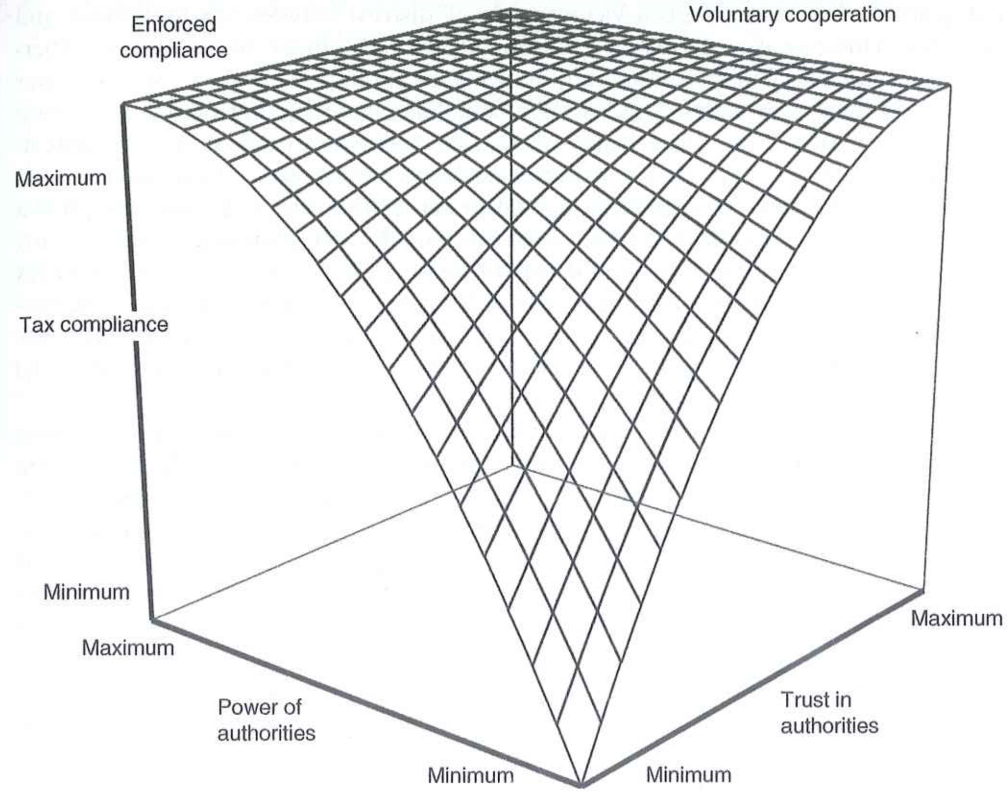
Quality of emotion	M (SD)	Protective power	Past compliance
Interested	2.99 (1.64)	.17*	–.03
Proud	2.05 (1.39)	.06	–.21*
Active	2.93 (1.72)	.05	–.06
Strong	2.40 (1.40)	.03	–.18*
Excited	1.74 (1.18)	.02	–.23*
Enthusiastic	1.87 (1.27)	.01	–.21*
Inspired	2.24 (1.46)	.01	–.21*
Attentive	3.54 (1.83)	–.00	–.05
Unburdened	2.21 (1.40)	–.03	–.24*
Determined	2.89 (1.70)	–.09	–.06
Alert	3.20 (1.73)	–.12	–.06
Unemotional	3.41 (2.03)	–.16	–.06
Surprised	2.29 (1.51)	–.16	–.19*
Guilty	1.92 (1.43)	–.22*	–.31*
Ashamed	1.98 (1.39)	–.24*	–.31*
Confused	2.36 (1.59)	–.29*	–.25*
Distressed	3.08 (1.75)	–.30*	–.15
Sad	2.34 (1.77)	–.31*	–.13
Nervous	2.48 (1.67)	–.34*	–.23*
Afraid	2.28 (1.64)	–.35*	–.23*
Scared	2.46 (1.67)	–.38*	–.21*
Scornful	2.40 (1.75)	–.47*	–.19*
Upset	3.61 (1.89)	–.49*	–.06
Disgusted	2.94 (2.04)	–.49*	–.12
Irritable	3.39 (1.94)	–.51*	–.08
Hostile	2.69 (1.77)	–.51*	–.17*
Protective power	4.55 (1.38)		.17*
Past compliance	1.65 (0.48)		

Note: N = 500; 7-point Likert-type scales; r > .16 significant at p < 0.01 (Bonferroni corrected).

5 INTERACTIONS BETWEEN THE TAX AUTHORITY AND TAXPAYERS

Tax behavior can be viewed as the result of a 'psychological contract' which regulates the interactions between taxpayers and the tax authority (Feld and Frey 2007). This relational contract involves strong emotional ties, building on a norm of reciprocity that goes beyond legal regulations. Commitments from taxpayers, on the one hand, require an equivalent commitment from the tax authority, on the other hand. The psychological contract approach assumes that as long as taxpayers are treated like equal partners instead of 'robbers' or subordinates, taxpayers will cooperate.

The slippery slope framework (Kirchler 2007; Kirchler et al. 2008, 2014), presented in



Source: Kirchler et al. (2008, p. 212).

Figure 18.3 The slippery slope framework of tax compliance

Figure 18.3, suggests that the relationship between tax authorities and taxpayers can be described in terms of the power of tax authorities and taxpayers' trust in tax authorities. The power of tax authorities is the perceived ability of the tax authorities to prosecute tax evasion, whereas trust in the tax authorities is defined as the tax authorities' perceived benevolence and competence in working for the common good. Whereas power is assumed to lead to an antagonistic interaction climate in which tax authorities and taxpayers work against each other and taxpayers only comply out of a fear of enforcement, trust in the tax authorities is believed to foster a synergistic and cooperative tax climate and taxpayers' voluntary cooperation (Kirchler et al. 2008, 2014). Experimental evidence from different countries suggests that, independent of cultural differences, power and trust determine enforced and voluntary tax cooperation (Kogler et al. 2013).

The transformation from an antagonistic climate with enforced compliance to a synergistic climate with voluntary and committed tax cooperation can be described on the basis of the distinction between different qualities of power, that is, coercive power and legitimate power, and different qualities of trust, that is, reason-based trust and implicit trust (Gangl et al. 2015). Coercive power based on audits and fines creates a hostile, antagonistic climate and fuels a vicious cycle of distrust between tax authorities and taxpayers. However, if coercive power is combined with legitimate power – that is, expertise, the provision of information, and following accepted procedures – coercive power might be perceived as a safeguard for the compliant majority and taxpayers develop reason-based trust in the competence, motivation, and benevolence of the tax authorities (Hofmann et al. 2014). Hence, a synergistic service climate develops in which the tax authorities and taxpayers interact in a professional relationship with each other, like a service provider and its clients. Further, over time and through positive experiences, trust initially based on rational consideration might become implicit and automatic, and tax authorities and taxpayers can come to mutually trust and respect each other. The synergistic climate deepens from a service climate to a confidence climate. In a confidence climate, tax authorities avoid coercive power and taxpayers, in turn, are committed and pay their taxes automatically.

The dynamics between power and trust illustrate why it is difficult and time-consuming to build up trust and a synergistic tax climate and also, vice versa, why the destruction of a synergistic relationship between tax authorities and taxpayers can happen easily and quickly. A confidence climate can easily decay, transforming back to an antagonistic climate, if strong power measures alienate taxpayers, particularly if coercive power is applied without legitimate power. Although a service climate is assumed to be more stable than a confidence climate, it can also be destroyed if coercive power is applied without legitimate power (Gangl et al. 2015). Hence, coercive power in combination with low legitimate power easily destroys a synergistic tax climate and leads to an antagonistic climate.

These assumptions on the dynamics between power and trust have gained empirical support from experiments with taxpayers (Hofmann et al. 2014). Taxpayers were asked to imagine a tax authority in a fictitious country wielding either low versus high coercive power or low versus high legitimate power as well as a combination of low versus high coercive and legitimate power. Results showed that coercive power as well as legitimate power and its combination ensure high tax compliance. In addition, the results support the assumption that the coercive power of authorities as well as perceived low or high legitimate power might determine whether an interaction climate is perceived as antagonistic or synergistic (Hofmann et al. 2014). These results highlight the practical value of high coercive power in combination with high legitimate power. In combination with legitimate power, coercive power seems to be perceived as a targeted safeguard of cooperation rather than a hostile threat, as protective power as described in the survey and in Table 18.1. Therefore, it is recommended that tax authorities enhance legitimate power by establishing professional and comprehensible tax procedures, web and telephone services and by having competent, motivated, and friendly tax officers to assist taxpayers (Alm and Torgler 2011).

The attempt to describe tax behavior as a consequence of the relationship between tax authorities and taxpayers represents the latest development which has fueled research in tax psychology. The benefits of this approach are twofold. First, existing research on economic and psychological determinants of taxpaying behavior has been integrated. Second, theoretical and practical conclusions can be drawn and tested as to how a change in interaction climate between tax authorities and taxpayers can be accomplished in order to foster voluntary and committed tax compliance.

6 CONCLUSION: FROM COMMAND AND CONTROL TO COOPERATIVE RELATIONSHIPS

Traditionally, tax authorities applied a command and control approach to enforce taxpayers' cooperation, assuming that all taxpayers would otherwise evade taxes. However, there is hope that tax authorities can move on to establishing a cooperative relationship with taxpayers. In doing so, tax authorities avoid seeing taxpayers as potential criminals but instead as customers and partners. Tax authorities invest in their service provision and improve their assistance to reduce the time and effort required for taxpayers to comply with the law. Taxpayers, on the other hand, are believed to reciprocate this cooperative approach in the form of positive attitudes towards taxes and increased tax compliance.

Currently, tax authorities in countries such as the Netherlands, the Scandinavian countries, Austria, Slovenia, and New Zealand are expanding their approaches to include trust-building measures to build a confidence climate with 'enhanced relationships' (OECD 2013). According to the Organisation for Economic Co-operation and Development (OECD), the concept of enhanced relationships requires tax authorities to dispense with audits of committed taxpayers going back several years. Instead, the tax authorities should resolve and settle uncertainties on the tax issues of a taxpayer immediately. On the other hand, taxpayers are required to fully disclose their tax files to the tax authorities and to sign a voluntary code in which they agree to not engage in aggressive tax planning (OECD 2013). For both tax authorities and taxpayers, such an arrangement involves trust which can be harmed; however, it pays off in the form of lower auditing costs for the tax authorities and in enhanced planning reliability for the taxpayer.

Measures to increase voluntary and committed tax compliance are more important than ever. Tax avoidance among globally operating corporations has grown to a giant problem overshadowing tax evasion (Garside 2014). These global players do not evade taxes but legally avoid taxes through aggressive tax planning. Hence, classical command and control approaches fail to enforce cooperation. Research needs to further examine how the willingness of taxpayers to refrain from exploiting tax havens and to follow the spirit of the law rather than the letter of the law can be increased.

Future research on tax behavior needs to recognize even more that tax behavior is embedded in the social world and includes many actors. Thus, not only the role played by other taxpayers or by the tax authorities needs to be examined, but also the impact of the government or of tax practitioners on individual tax decision-making. Likewise, more clarification is needed as to the cognitive and emotional processes involved in tax evasion, tax avoidance, or perceived fairness of the tax system. How do the self-employed mentally account for and represent the tax decision, and what emotions are involved when they decide to cheat or to avoid taxes? Tax research in the past has focused on income tax compliance. Future research needs to go beyond that and should theoretically and empirically analyze the determinants of compliance with other taxes, such as value added tax (VAT) or inheritance tax. Furthermore, the effects of tax amnesties on perceived fairness of the system among honest taxpayers versus the effects of integrating former tax evaders back into the formal system needs further examination.

Democratic societies depend on the voluntary tax compliance of their citizens in order to be able to afford public goods. Psychological tax research shows that dealing with taxpayers on an equal footing might not only reduce negative attitudes towards paying taxes but might also increase the number of taxpayers who feel like responsible citizens willing to actively engage in their society.

NOTE

* This study was partly financed by the Austrian Science Fund (FWF), project number P24863-G16, and partly by the Jubiläumsfonds-project number 16042.

REFERENCES

Allingham, M. and A. Sandmo (1972), 'Income tax evasion: a theoretical analysis', *Journal of Public Economics*, **1** (3–4), 323–38.
Alm, J. and B. Torgler (2011), 'Do ethics matter? Tax compliance and morality', *Journal of Business Ethics*, **101** (4), 635–51.
Alm, J., J. Jackson and M. McKee (1992), 'Estimating the determinants of taxpayer compliance with experimental data', *National Tax Journal*, **45** (1), 107–14.
Alm, J., E. Kirchler, S. Muehlbacher, K. Gangl, E. Hofmann, C. Kogler and M. Pollai (2012), 'Rethinking the research paradigms for analyzing tax compliance behaviour', *CESifo Forum*, **13** (2), 33–40.
Alm, J., I. Sanchez and A. de Juan (1995), 'Economic and noneconomic factors in tax compliance', *Kyklos*, **48** (1), 3–18.
Andreoni, J., B. Erard and J. Feinstein (1998), 'Tax compliance', *Journal of Economic Literature*, **36** (2), 818–60.
Antonides, G. and H. Robben (1995), 'True positives and false alarms in the detection of tax evasion', *Journal of Economic Psychology*, **16** (4), 617–40.
Becker, G.S. (1968), 'Crime and punishment: an economic approach', *Journal of Political Economy*, **76** (2), 169–217.
Bible, N.L. (2010), 'Good time to be a tax attorney', *Michigan Tax Lawyer*, **36** (3), 53–7.
Braithwaite, V. (2003a), 'Dancing with tax authorities: motivational postures and non-compliance actors', in V. Braithwaite (ed.), *Taxing Democracy. Understanding Tax Avoidance and Tax Evasion*, Aldershot: Ashgate, pp. 15–39.
Braithwaite, V. (2003b), 'A new approach to tax compliance', in V. Braithwaite (ed.), *Taxing Democracy. Understanding Tax Avoidance and Tax Evasion*, Aldershot: Ashgate, pp. 1–11.
Braithwaite, V. (2009), *Defiance in Taxation and Governance. Resisting and Dismissing Authority in a Democracy*, Cheltenham, UK and Northampton, MA, USA: Edward Elgar.
Brehm, J.W. (1989), 'Psychological reactance: theory and applications', *Advances in Consumer Research*, **16**, 72–5.
Campbell, P. (2012), 'Starbucks facing boycott over tax: protest groups threaten to try and close branches over revelations it hasn't paid for three years', *Daily Mail*, 17 October, accessed 9 October 2014 at http://www.dailymail.co.uk/news/article-2218819/Starbucks-facing-boycott-tax.html.
Cebula, R.J. and E.L. Feige (2012), 'America's unreported economy: measuring the size, growth and determinants of income tax evasion in the US', *Crime Law and Social Change*, **57** (3), 265–85.
Coricelli, G., M. Joffily, C. Montmarquette and M.C. Villeval (2010), 'Cheating, emotions, and rationality: an experiment on tax evasion', *Experimental Economics*, **13** (2), 226–47.
Coricelli, G., E. Rusconi and M.C. Villeval (2014), 'Tax evasion and emotions: an empirical test of re-integrative shaming theory', *Journal of Economic Psychology*, **40** (February), 49–61.
Cox, D. and A. Plumley (1988), 'Analysis of voluntary compliance rates for different income source classes, unpublished report, International Revenue Service, Research Division, Washington, DC.
Dawes, R.M. (1980), 'Social dilemmas', *Annual Review of Psychology*, **31** (February), 169–93.
Deutsche Wirtschafts Nachrichten (2014), 'Deutsche finden das Steuersystem ungerecht' ('Germans thinks the tax system is unfair'), *Deutsche Wirtschafts Nachrichten*, 24 July, accessed 30 September 2014 at http://deutsche-wirtschafts-nachrichten.de/2014/07/24/deutsche-finden-das-steuer-system-ungerecht/#.U9Eu27K5uk4.facebook.
Durham, Y., T.S. Manly and C. Ritsema (2014), 'The effect of income source, context, and income level on tax compliance decisions in a dynamic experiment', *Journal of Economic Psychology*, **40** (C), 220–33.
Elffers, H. and D.J. Hessing (1997), 'Influencing the prospects of tax evasion', *Journal of Economic Psychology*, **18** (2–3), 289–304.

Engström, P. and B. Holmlund (2009), 'Tax evasion and self-employment in a high-tax country: evidence from Sweden', *Applied Economics*, **41** (19), 2419–30.
Fallan, L. (1999), 'Gender, exposure to tax knowledge, and attitudes towards taxation: an experimental approach', *Journal of Business Ethics*, **18** (2), 173–84.
Feld, L.P. and B.S. Frey (2002), 'Trust breeds trust: how taxpayers are treated', *Economics of Governance*, **3** (2), 87–99.
Feld, L.P. and B.S. Frey (2007), 'Tax compliance as the result of a psychological tax contract: the role of incentives and responsive regulation', *Law & Policy*, **29** (1), 102–20.
Fischer, C.M., M. Wartick and M.M. Mark (1992), 'Detection probability and taxpayer compliance: a review of the literature', *Journal of Accounting Literature*, **11** (1), 1–46.
Frey, B.S. and B. Torgler (2007), 'Tax moral and conditional cooperation', *Journal of Comparative Economics*, **35** (1), 136–59.
Gangl, K., E. Hofmann and E. Kirchler (2015), 'Tax authorities' interaction with taxpayers: a conception of compliance in social dilemmas by power and trust', *New Ideas in Psychology*, **37** (2), 13–23.
Gangl, K., S. Muehlbacher, M. de Groot, S. Goslinga, E. Hofmann, C. Kogler and E. Kirchler (2013), 'How can I help you? Perceived service orientation of tax authorities and tax compliance', *FinanzArchiv*, **69** (4), 487–510.
Garside, J. (2014), 'European commission to investigate tax affairs of Apple, Starbucks and Fiat', *Guardian*, 11 June, accessed 17 September 17 2014 at http://www.theguardian.com/world/2014/jun/11/eu-formal-tax-inquiry-apple-starbucks-fiat.
Gneezy, U. and A. Rustichini (2000), 'A fine is a price', *Journal of Legal Studies*, **29** (1), 1–17.
Guala, F. and L. Mittone (2002), 'Experiments in economics: testing theories vs. the robustness of phenomena', *Journal of Economic Methodology*, **12** (4), 495–515.
Hallsworth, M., J. List, R. Metcalfe and I. Vlaev (2013), 'The behavioralist as tax collector: using natural field experiments to enhance tax compliance', NBER Working Paper 20007, National Bureau of Economic Research, Cambridge, MA.
Hofmann, E., K. Gangl, E. Kirchler and J. Stark (2014), 'Enhancing tax compliance through coercive and legitimate power of authorities by concurrently diminishing or facilitating trust in tax authorities', *Law & Policy*, **36** (3), 290–313.
Kahneman, D. and A. Tversky (1979), 'Prospect theory: an analysis of decision under risk', *Econometrica*, **47** (2), 263–91.
Kallgren, C.A., R.R. Reno and R.B. Cialdini (2000), 'A focus theory of normative conduct: when norms do and do not affect behavior', *Personality and Social Psychology Bulletin*, **26** (8), 1002–12.
Kastlunger, B., S.G. Dressler, E. Kirchler, L. Mittone and M. Voracek (2010), 'Sex differences in tax compliance: differentiating between demographic sex, gender-role orientation, and prenatal masculinization (2D:4D)', *Journal of Economic Psychology*, **31** (4), 542–52.
Kastlunger, B., E. Kirchler, J. Mittone and J. Pitters (2009), 'Sequences of audits, tax compliance, and taxpaying strategies', *Journal of Economic Psychology*, **30** (3), 405–18.
Kirchler, E. (1998), 'Differential representations of taxes: analysis of free associations and judgments of five employment groups', *Journal of Socio-Economics*, **27** (1), 117–31.
Kirchler, E. (2007), *The Economic Psychology of Tax Behaviour*, Cambridge: Cambridge University Press.
Kirchler, E., E. Hoelzl and I. Wahl (2008), 'Enforced versus voluntary tax compliance: the "slippery slope" framework', *Journal of Economic Psychology*, **29** (2), 210–25.
Kirchler, E., C. Kogler and S. Muehlbacher (2014), 'Cooperative tax compliance: from deterrence to deference', *Current Directions in Psychological Science*, **23** (2), 87–92.
Kirchler, E., B. Maciejovsky and F. Schneider (2003), 'Everyday representations of tax avoidance, tax evasion, and tax flight: do legal differences matter?', *Journal of Economic Psychology*, **24** (4), 535–53.
Kirchler, E., B. Maciejovsky and M. Weber (2005), 'Framing effects, selective information, and market behavior: an experimental analysis', *Journal of Behavioral Finance*, **6** (2), 90–100.
Kirchler, E., S. Muehlbacher, B. Kastlunger and I. Wahl (2010), 'Why pay taxes? A review of tax compliance decisions', in J. Alm, J. Martinez-Vazquez and B. Torgler (eds), *Developing Alternative Frameworks for Explaining Tax Compliance*, Oxford: Routledge, pp. 15–31.
Kogler, C., L. Batrancea, A. Nichita, J. Pantya, A. Belianin and E. Kirchler (2013), 'Trust and power as determinants of tax compliance: testing the assumptions of the slippery slope framework in Austria, Hungary, Romania and Russia', *Journal of Economic Psychology*, **34** (C), 169–80.
Kollock, P. (1998), 'Social dilemmas: the anatomy of cooperation', *Annual Review of Sociology*, **24**, 183–214.
Lewis, A. (1978), 'Perception of tax rates', *British Tax Review*, **6**, 358–66.
Lozza, E., B. Kastlunger, S. Tagliabue and E. Kirchler (2013), 'The relationship between political ideology and attitudes towards tax compliance: the case of Italian taxpayers', *Journal of Social and Political Psychology*, **1** (1), 51–7.
Maciejovsky, B., H. Schwarzenberger and E. Krichler (2012), 'Rationality versus emotions: the case of tax ethics and compliance', *Journal of Business Ethics*, **109** (3), 339–50.

Mittone, L. and P. Patelli (2000), 'Imitative behaviour in tax evasion', in F. Luna and B. Stefansson (eds), *Economic Simulations in Swarm: Agent-Based Modelling and Object Oriented Programming*, vol. 14, Boston, MA: Kluwer, pp. 133–58.
Muehlbacher, S. and E. Kirchler (2013), 'Mental accounting of self-employed taxpayers: On the mental segregation of the net income and the tax due', *Finanzarchiv*, **69** (4), 412–38.
Muehlbacher, S., E. Kirchler, E. Hoelzl, J. Ashby, C. Berti, J. Job et al. (2008), 'Hard-earned income and tax compliance', *European Psychologist*, **13** (4), 298–304.
Mulder, L.B., P. Verboon and D. De Cremer (2009), 'Sanctions and moral judgments: the moderating effect of sanction severity and trust in authorities', *European Journal of Social Psychology*, **39** (2), 255–69.
Murphy, K. (2009), 'Procedural justice and affect intensity: understanding reactions to regulatory authorities', *Social Justice Research*, **22** (1), 1–30.
Murphy, K. and T. Tyler (2008), 'Procedural justice and compliance behaviour: the mediating role of emotions', *European Journal of Social Psychology*, **38** (4), 652–68.
Organisation for Economic Co-operation and Development (OECD) (2013), 'Co-operative compliance: a framework. From enhanced relationship to co-operative compliance', accessed 17 September 2014 at http://www.oecd.org/ctp/administration/Co-operative-Compliance-Preliminary.pdf.
Pickhardt, M. and A. Prinz (2014), 'Behavioral dynamics of tax evasion – a survey', *Journal of Economic Psychology*, **40** (C), 1–19.
Polman, E. and S.H. Kim (2013), 'Effects of anger, disgust, and sadness on sharing with others', *Personality and Social Psychology Bulletin*, **39** (12), 1683–92.
Schepanski, A. and D. Kelsey (1990), 'Testing for framing effects in taxpayer compliance decisions', *Journal of the American Taxation Association*, **12** (2), 60–77.
Schepanski, A. and T. Shearer (1995), 'A prospect theory account of the income tax withholding phenomenon', *Organizational Behavior and Human Decision Processes*, **63** (2), 174–86.
Sidani, Y.M., A.J. Ghanem and M.Y.A. Rawwas (2014), 'When idealists evade taxes: the influence of personal moral philosophy on attitudes to tax evasion – a Levabese study', *Business Ethics: A European Review*, **23** (2), 183–96.
Sloterdijk, P. (2010), *Die nehmende Hand und die gebende Seite* (*The Grasping Hand*), Berlin: Suhrkamp.
Srinivasan, T.N. (1973), 'Tax evasion: a model', *Journal of Public Economics*, **2** (4), 339–46.
Sussman, A.B. and C.Y. Oliviola (2011), 'Axe the tax: taxes are disliked more than equivalent costs', *American Marketing Association*, **48** (special issue), 91–101.
Szigetvari, A. (2014), 'EU greift nach Apples Milliardenrabatt' (EU reaches for Apple's billion rebate), *Der Standard*, 29 September, accessed at 30 September 2014 at http://derstandard.at/2000006184024/EU-greift-nach-Apples-Milliardenrabatt.
Torgler, B. (2006), 'The importance of faith: tax morale and religiosity', *Journal of Economic Behavior & Organization*, **61** (1), 81–109.
Torgler, B. (2007), *Tax Compliance and Tax Morale. A Theoretical and Empirical Analysis*, Cheltenham, UK and Northampton, MA, USA: Edward Elgar.
Watson, D. and L.A. Clark (1994), *The PANAS-X: Manual for the Positive and Negative Affect Schedule-Expanded Form*, Ames, IA: University of Iowa.
Watson, D., L.A. Clark and A. Tellegen (1988), 'Development and validation of brief measures of positive and negative affect: the PANAS scales', *Journal of Personality & Social Psychology*, **54** (6), 1063–70.
Webley, P., M. Cole and O.-P. Eidjar (2001), 'The prediction of self-reported and hypothetical tax-evasion: evidence from England, France and Norway', *Journal of Economic Psychology*, **22** (2), 141–55.
Webley, P., H. Robben, H. Elffers and D.J. Hessing (1991), *Tax Evasion: An Experimental Approach*, Cambridge: Cambridge University Press.
Wenzel, M. (2005), 'Misperceptions of social norms about tax compliance: from theory to intervention', *Journal of Economic Psychology*, **26** (6), 862–83.
Wenzel, M. (2007), 'The multiplicity of taxpayers identities and their implication for tax ethics', *Law & Policy*, **29** (1), 31–50.

PART V

SMART MACROECONOMICS AND FINANCE

Handbook of Behavioural Economics and Smart Decision-Making

Rational Decision-Making within the Bounds of Reason

Edited by

Morris Altman

Professor of Behavioural and Institutional Economics and Dean and Head, Newcastle Business School, University of Newcastle, Australia

Edward Elgar
PUBLISHING

Cheltenham, UK • Northampton, MA, USA

Published by
Edward Elgar Publishing Limited
The Lypiatts
15 Lansdown Road
Cheltenham
Glos GL50 2JA
UK

Edward Elgar Publishing, Inc.
William Pratt House
9 Dewey Court
Northampton
Massachusetts 01060
USA

A catalogue record for this book
is available from the British Library

Library of Congress Control Number: 2016957242

This book is available electronically in the Elgaronline
Economics subject collection
DOI 10.4337/9781782549598

MIX
Paper from
responsible sources
FSC® C013056

ISBN 978 1 78254 957 4 (cased)
ISBN 978 1 78254 959 8 (eBook)

Typeset by Servis Filmsetting Ltd, Stockport, Cheshire
Printed and bound in Great Britain by TJ International Ltd, Padstow

Contents