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The slippery slope framework on tax compliance: An attempt to formalization

Aloys Prinz [a,*], Stephan Muehlbacher [b], Erich Kirchler [b]

[a] Institute of Public Economics, University of Münster, Germany
[b] Faculty of Psychology, University of Vienna, Universitätsstrasse 7, 1010 Vienna, Austria

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ABSTRACT

Kirchler, Hoelzl, and Wahl (2008) presented with the so-called 'slippery slope' framework a new approach to understand tax compliance. The slippery slope approach supposes two routes to tax compliance: deterrence of tax evasion by audits and fines on the one hand, and building a trusting relationship with taxpayers by services and support on the other hand. In this paper, the slippery slope framework is formalized by assuming two groups of taxpayers: compliance-minded and evasion-minded persons. Defining reaction functions for persons of both groups with respect to coercive and persuasive power instruments of tax authorities, the typical slippery slope picture emerges that characterises the authorities' work. As a consequence, both groups of policy tools are considered necessary to generate tax compliance. In addition to that, it is shown that coercive and persuasive power may be substitutes or complements to each other, depending of the parameters of the taxpayers' reaction functions. As a further crucial determinant of tax compliance, the behaviour of the fellow citizens with respect to taxpaying is identified.

1. Introduction

Tax compliance, as it seems, is a precarious behaviour from the taxpayer's viewpoint: On the one hand, paying taxes correctly is a civic duty and well accepted as a social norm among a large majority of citizens; on the other hand, tax laws, the conduct of tax authorities as well as the taxpaying behaviour of the fellow citizens make it more difficult to behave conform to the law: Tax laws are not transparent, difficult to understand, unjust and much too complicated. Tax authorities are considered too lenient with others and too stern with oneself. Moreover, other people are believed to behave unethical with respect to taxes. In this mental framework, to comply fully with the tax law is not an easy endeavour.

The first wave of economic literature on the behaviour of taxpayers was concerned with tax evasion rather than tax compliance. Applying the Becker (1968) model on crime and punishment, tax evasion was theoretically explained as rational choice (Allingham & Sandmo, 1972; Yitzhaki, 1974). However, the predicted behaviour of taxpayers differed widely from their actual behaviour: the high level of tax compliance rather than the level tax evasion was to be explained (see Andreoni,

* Corresponding author. Address: Institut für Finanzwissenschaft II, Wilmergasse 6-8, 48143 Münster, Germany. Tel.: +49 (0)251 83 22821; fax: +49 (0)251 83 22826.
E-mail address: A.Prinz@wiwi.uni-muenster.de (A. Prinz).

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Erard, & Feinstein, 1998, for a survey).[1] In this respect, tax psychology plays a major role (Kirchler, 2007). Although there were early attempts to combine insights as well as methods from psychology and social psychology with the economics of taxation (see for an overview Hansmeyer & Mackscheidt, 1977), it took a long time until these insights and methods were recognized in mainstream public economics.

A recent result of the economic psychology of taxation is the so-called slippery slope framework (Kirchler et al., 2008). In this framework, *trust* in authorities and *power* of authorities as well as their *interaction* are decisive for tax compliance. In contrast to former approaches to tax compliance, it is taken into account that not all taxpayers share the same mentality to taxpaying and that not all of them react in the same way to measures of tax enforcement. Two forms of compliances are distinguished: *enforced* compliance and *voluntary* compliance. Whereas the former is assumed to depend mainly on power of authorities to enforce taxpaying, e.g., through audits and fines, the latter form of compliance depends mainly on trust in authorities and a good relationship with taxpayers, e. g., by providing certain kinds of services and support to make taxpaying easier and more convenient. Both strategies may be useful and necessary to guarantee a high level of tax compliance. As it seems, the combination of power and trust is crucial. A reduction of power and/or trust may lead to a slippery slope: At first, overall tax compliance decreases somewhat; beneath a certain level of power and/or trust, tax compliance might begin to sink quite drastically.

In the following, it is attempted to formalize the slippery slope framework of tax compliance by Kirchler et al. (2008). In the context of a macroeconomic model of the labour market, a first formalization was presented by Lisi (2012a). In Eq. (5) of Lisi (2012a), a function for the generation of trust is defined in which the level of trust increases with the power of the tax authorities up to a certain point. Beyond that point, however, a further increase of power decreases trust; as a consequence, there is a unique level of power that maximizes trust in the tax authorities (Lisi, 2012a, Fig. 1, p. 5). Since trust increases tax compliance, declared income increases with the trust level. In contrast to Lisi (2012a), in this paper two different group of taxpayers are distinguished that react differently on power and trust, respectively. The static as well as the dynamic interaction of these type-groups are essential in our opinion to understand the difficulties tax authorities may face when deciding on a strategy to enhance tax compliance.

The main contributions of the following formalization of the concept consist of the following points:

1. It concretizes ideas from the slippery slope approach by identifying the key parameters of the framework. In this way, it may serve as a starting point for empirical analyses.
2. It makes it easier to design experimental studies of the slippery slope phenomenon.
3. It provides insights for tax policy and tax authorities to set parameters for the deterrence-oriented as well as cooperation-oriented policies.

2. The model

The general idea for the following model is that tax compliance consists (in accordance with Kirchler et al., 2008) of two parts: enforced compliance and voluntary compliance. However, by contrast to the original slippery slope framework, the present model describes taxpayers from the viewpoint of the state.[2] Therefore, two *groups of taxpayers* are differentiated: a number V of tax complying people in a population of N persons and a number of E tax evaders (with $V + E = N$). This means that although the allocation of taxpayers to types is an endogenous adaptation process – which might be understood along the lines of the Gordon (1989) model in which psychic reputation costs divide evaders from compliers –, the division of people in evaders and compliers seems exogenously determined although it is actually endogenously established, but not modelled here.

In the following, c_v (c_e) denotes the probability of full tax compliance of a single compliance-minded (evasion-minded) taxpayer. Hence, the average probability of full tax compliance in a society is given by:

$$c = c_v \cdot \frac{V}{N} + c_e \cdot \frac{E}{N} = (c_v \cdot V + c_e \cdot E) \cdot \frac{1}{N} \tag{1}$$

Tax authorities are assumed to have two groups of instruments available: instruments of *coercive power* and instruments of *persuasive power*. This differentiation is inspired by Turner (2005) who distinguishes coercive power and *legitimate power*. However, with respect to taxation it might be more adequate to go a step further than Turner: The willingness of compliance-minded taxpayers to cooperate with the tax authorities might be enhanced by the service quality of tax authorities. Being served as a customer might increase cooperation of compliance-minded taxpayers, especially in cases where the tax law is not very clear and the problem of tax 'avoision' (a combination of tax avoidance and tax evasion; Seldon, 1979; Tullock, 2002, pp. 63–70) demands some degree of voluntary cooperation. Therefore the notion of 'persuasive power' instead of legitimate power will be used in the following.

[1] It is worth mentioning that also in general the crime and punishment model of Becker (1968) was put into question; for recent developments see, e.g., Tyler (2008), Licht (2008), Tabbach (2009) and Girvan (2009).

[2] In Kirchler et al. (2008) an individual perspective is adopted. Therein also a mixture of both motivations for compliance is possible, whereas in the model presented here we assume that it is one of both that primarily drives taxpayers' compliance. Furthermore, in the original framework it was assumed that taxpayers' motivation is influenced by *perceived* power of and trust in authorities rather than the actual measures applied by the state.

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