

# **The Psychological Costs of Tax Compliance: Some Evidence from Portugal**

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*The purpose of this paper is to identify and present some qualitative evidence of compliance related psychological costs in the Portuguese tax system. We address the psychological costs incurred by taxpayers in the process of complying with their tax obligations. We intend to evaluate, through the creation of a qualitative indicator of tax related anxiety, psychological costs of individual taxpayers, as well as to identify the profiles of taxpayers most likely to incur in these costs. This aspect of the study is of particular significance in the international tax compliance literature, since the issue of psychological costs has been a largely neglected area of tax research.*

## **INTRODUCTION**

The application of a tax system, or a particular tax, implies a broad and diversified set of costs, such as efficiency costs, administrative costs and compliance costs. Taxpayers also incur in psychological costs, which are the mental and emotional costs, anxiety and stress which taxpayers experience when dealing with tax issues. Those costs do not constitute a direct monetary expense. Therefore, they are very difficult to measure. However, they should be taken into consideration.

Thus, the aim of this paper is to evaluate the psychological costs in the Portuguese tax system, as well as to identify the groups of taxpayers who incur in higher costs of anxiety and stress when dealing with their tax affairs.

The paper is organized as follows: section 2 presents the concept of psychological costs; section 3 highlights some inherent difficulties discussed in the international tax compliance literature in the process of measuring such costs; section 4 presents the methodology; section 5 analyzes the results of our research; and section 6 offers some conclusions.

## **PSYCHOLOGICAL TAX COMPLIANCE COSTS: CONCEPTS AND DEFINITIONS**

There are many definitions of tax compliance costs and most of them are similar. (See for example, Sandford, 1989; Woellner et al, 2001; Slemrod and Bakija, 2004; Evans, 2003; Slemrod, 2007; Woellner et al, 2007). However, the most quoted definition in the literature tax compliance costs is Sanford's definition. According to Sandford (1973; 1989; 1994; 1995; 2000), compliance costs are divided into three groups of costs: time costs, other monetary costs, and psychological costs.

For individual taxpayers, time costs include hours taken to fill tax returns and collect and prepare the necessary tax data. It is particularly difficult to measure time spent on questions and concerns about taxes. This difficulty increases when tax help (v.g., tax law interpretation) is given not by professionals but by family and friends. Monetary costs include payments to tax advisers or tax professionals. Monetary costs also include other general expenses such as telephone, books, equipment, computers and software. Finally, the psychological costs are those such as anxiety, stress and emotional pain, which taxpayers or advisors experience when dealing with tax affairs.

Regarding the psychological costs, there is no generally agreed definition in the tax literature, and to the best of our knowledge no one has yet succeeded in precisely measuring them (Woellner *et al* 2001). The psychological costs were firstly identified by Adam Smith (1776) and taken into account in Sanford's definition of compliance costs. As we noted above, Sanford stated that psychological costs comprise the anxiety, stress and frustration caused by complying with complex legislation.

There are various approaches to defining stress (Woellner *et al*, 2001). The first is to look at the responses of an individual or the "strain" which he undergoes. Selye (1956) described it as consisting of three stages: alarm, resistance and exhaustion.

A second approach to defining stress is to identify it in terms of stimuli or "stressors". Sometimes specific events such as retrenchment, the death of a close family member or a war, are chosen as the stressors. Holms and Rahe (1967) constructed a checklist of events which could precipitate stress responses and asked a sample of participants to rate the amount of readjustment which event would require. Thirdly, Cohen and Hoberman (1983) indicated that positive events may help neutralize distress caused by negative events.

Other research has hypothesized that life's daily hassles are better predictors of stress than major life events (Kanner *et al*, 1981). Brown and Harris (1989) further distinguish between "life events" and "difficulties". The first ones are discrete changes in the environment, whereas the second are problems which last for at least four weeks. Events and difficulties both contribute to individual stress. This third approach defines stress in terms of an individual ability to deal with his or her environment.

The complexity of the tax system and the uncertainty in tax law may increase compliance costs for taxpayers, as well as some anxiety in the process of paying taxes. Therefore, as a result of tax complexity, psychological costs have increased. It is thus quite important to include them in the estimative of compliance costs. However, they are difficult to put a price on. Some taxpayers use the services of a tax advisor to reduce their level of concern, and then the psychological costs are transformed into monetary costs.

The stress and anxiety incurred by taxpayers when dealing with tax affairs may have several causes (Woellner *et al*, 2007). Firstly, it could result from the complexity of filling in the tax returns, that increases with the number of categories/schedules of earned income, which obviously complicates the process of complying with taxes. Secondly, all taxpayers, even the most honest of them, suffer the pressure generated by a probable tax inspection. Thirdly, maybe there are also psychological costs sensed by the staff of the Inland Revenue Services, whether they consider their job very complex and difficult, and forward their frustrations to the taxpayers in auditing processes.

Psychological costs are intangible and not a monetary cost. In addition, there is no generally accepted definition or a common method to evaluate them. From one taxpayer to another, psychological costs are difficult if not impossible to quantify. Therefore, the psychological costs are not subject to evaluation in many studies. However, they should not be neglected. In the next section, we will analyze some major problems highlighted by the international tax literature in the assessment and measurement of the psychological costs.

## **THE MEASUREMENT OF PSYCHOLOGICAL COSTS OF TAXATION IN THE INTERNATIONAL LITERATURE**

As noticed above, psychological costs are very difficult, if not impossible, to measure; however, some attempts have been tried for a qualitative assessment of such costs.

In the United Kingdom, Sandford (1973) concluded that a disproportional number of pensioners required professional help with their tax affairs when compared with taxpayers in general. Sandford et al (1989), further noted that the group of taxpayers who incur more anxiety and who suffer most stress in the process of tax compliance is older females, particularly widows.

In Spain, Diaz and Delgado (1995) interviewed Spanish taxpayers when analyzing compliance costs of Spanish personal income tax, and included four attitude indicators: how they perceived the time dedicated to the task; what part of the fiscal obligation was most disliked; their state of mind when the process was completed; and the conversational time occupied by the topic of filling tax returns.

Through personal interviews, Diaz and Delgado (1995) qualitatively measured psychological costs and noted that older and retired taxpayers are the categories of taxpayers with higher psychological costs, since for those groups it is more difficult to understand the tax law. At the same time, the information and advice provided by tax authorities is not sufficient to explain all questions they might have.

In Australia, Woellner *et al* (2001, 2007) conducted a study that evaluated psychological costs in a qualitative way, relating them to behaviour and attitudes of taxpayers. The methodology was based on the use of case studies. The method consisted in the distribution, for the two groups of individuals, of different case studies with different complexity levels. The attitudes and behaviour of participants in solving problems, from oral and body language, were videotaped for subsequent analysis by a psychologist. The authors decided to pursue the original intention of obtaining assistance from a psychologist to best analyze the videotapes for signs of psychological costs.

Results indicated that individuals incurred psychological costs. None of the respondents could correctly solve the presented cases. Moreover, the words "frustration" and "confusion" were very prominent, as were the many bodily gestures which indicate "stress". As a result, some but not all participants exhibited psychological costs, either verbally or in their body language such as biting lips and wringing hands.

Woellner *et al* (2001; 2007) state that psychological costs are observed in the behavior of the person required to apply the tax law. They can be inferred by behavioral traits such as fidgeting, tapping, hair chewing and so on. Therefore, Woellner *et al* (2001, 2007) added some important conclusions.

Firstly, the definition of Sanford's' psychological costs only took into account the anxiety and nervousness of the individual taxpayers. Meanwhile, Woellner *et al* (2001, 2007) considered the psychological costs of individual taxpayers and also the costs of the tax professionals. However, in a competitive market, the psychological costs of tax professionals are included in the amount of fees charged to taxpayers. For this reason, according to Evans (2003), referring to the psychological costs of tax professionals may be conceptually complex.

Secondly, these authors concluded that the increase in using of external help decreases psychological costs of individual taxpayers, but increase their direct monetary costs.

Thirdly, they noticed that the absolute evaluation of psychological costs is extremely difficult, if not impossible, but they added that, in most cases, it is sufficient to identify taxpayers who incur this type of costs. To sum up, the psychological costs are observed in the behavior of persons required to complying with the tax law. These reactions have a real impact on the time spent in complying and even on the willingness of taxpayers to comply.

Thus, in this paper, we propose to develop a methodology that enable measuring psychological costs of taxation in the Portuguese tax system. We decided to attempt to evaluate the psychological costs in a qualitative format, which means through the identification of the groups of taxpayers who incur higher psychological costs. Governments and decision-makers currently prefer to identify groups of taxpayers in order to propose measures adequately.

## **METHODOLOGY**

The purpose of this paper is to present an evaluation of compliance costs incurred by individuals subject to the personal income tax in Portugal. We evaluated compliance costs for the year 2007 using a

survey applied in 2008. The reasons for evaluating compliance costs for personal income tax were as follows.

Firstly, the personal income tax represents one of the major sources of tax revenue in Portugal, alongside VAT and social security contributions. Secondly, most of the active population includes potential individual taxpayers. Lastly, major international research on compliance costs has also covered personal income tax. (Wicks, 1965; Wicks, 1966; Sandford, 1973; Slemrod and Sorum, 1984; Vaillancourt, 1989; Sandford *et al*, 1989; Blumenthal and Slemrod 1992; Pope, 1993; Malmer, 1995; Chattopadhyay and Das-Gupta, 2002; and Klun, 2004).

Determining the sample of personal income taxpayers caused some problems, since the tax register is not publicly available, and the current study was not formally supported by the Portuguese Inland Revenue. In fact, tax administrations withheld their support in almost all the countries in which the earliest research projects into compliance costs were carried out. Without support of the Portuguese tax administration, it was difficult to carry out the research but, in our opinion, taxpayers were in favor of the research in the pilot study. Therefore, and given the circumstances, data was collected in the Coimbra district, and 350 taxpayers were interviewed face to face, by direct application of the questionnaire (face - to - face interviews). The interviews were conducted between March and April 2008, when most taxpayers are obligated to fill in their tax forms.

We believe that taxpayers from the district of Coimbra, in Portugal, are no different from taxpayers from other regions of Portugal, since the tax system and their obligations of tax compliance do not differ according to Portuguese regions. However, in some developed tax systems the fiscal system differs from region to region, such as in the USA or in Brazil, and then the tax compliance obligations may differ according to the region or state where the taxpayer is registered (Bertolucci, 2003).

Forty-two questionnaires were excluded because the taxpayers refused to be interviewed. Thus, the evaluation of compliance costs was made on the basis of 308 responses.

The respondents presented the following characteristics: 162 were male; 221 were married; 119 did not have any dependents; 88 taxpayers did not have any help filling in the tax form and 78 had professional consultancy; 173 were employed; 87 were self-employed and 48 did not have a job (unemployed, retired or housewives); 184 had only one source of income (category); 93 had two and 31 had more than two. Only 46 per cent of tax-fillers declared themselves to be competent in completing the income tax form, while the majority (54 per cent) required some kind of outside help to be able to complete it.

The questionnaire sought qualitative and quantitative information on demographic, legal, economic and tax characteristics of respondents. Firstly, it asks about some personal information, in particular, the respondent's gender, age, level of education, income, and employment status. The purpose of the survey is devoted to collecting information about the household's cost of filling in tax returns. Then, the last question of this section asks how the taxpayer fills in the tax form (properly, with unpaid help - family and friends - or with paid help - professional assistance).

Then, for taxpayers without professional assistance, in section 2, we ask how many hours were spent during the year. We divide the hours into various categories with different values in order to calculate compliance costs. In addition, any money spent on tax affairs or otherwise spent in filling in the tax form is solicited, such as on postage and on the Internet. Section 3 is dedicated to the evaluation of the compliance costs of taxpayers with professional assistance. We ask how much taxpayers were paying for the tax professional to help them with the tax form. Finally, some questions on the individual's attitude before the filling in of the form were included, such as a question designed to elicit the level of stress or anxiety (Likert scale) incurred by taxpayers while managing their tax affairs. In this case our goal is to find one way of measuring the psychological costs incurred by taxpayers when dealing with their tax affairs.

At this point, we want to know whether taxpayers, in Portugal, suffer anxiety and stress in the process of tax compliance obligations. If we find a positive response, we are also interested in identifying and characterizing groups of taxpayers who incur psychological costs.

To achieve our objectives we must define the relevant variables and used the questionnaire to collect data. In the psychological variables, to assess the psychological costs, taxpayers were then asked about their emotional state before and after completing the tax return (very calm, calm, neither/nor, stressed, much stressed). In the following section we present the main results of our research.

## RESULTS

The evaluation of the psychological costs incurred by Portuguese taxpayers when filling in a tax form was conducted using a qualitative indicator: “emotional costs”. This indicator shows the state of mind before and after the completion of a tax form. In the survey, we started by asking taxpayers: “How do you feel before filling in the tax forms?” (Very calm, calm, neither/nor, stressed, much stressed). After finishing the completion of the tax return we asked: “How do you feel after filling in the tax forms?” (Very calm, calm, neither/nor, stressed, much stressed). These reactions have a real impact on time spent on compliance and even on the willingness to comply.

We then created an indicator to measure psychological costs: 1- taxpayers who incur emotional costs; 0- taxpayers who don’t incur emotional costs. For example, if taxpayers changed their state of mind from stressed to calm, they incurred psychological costs. If taxpayers didn’t change their state of mind but were stressed before filling in the tax form and stressed afterwards, they also incurred psychological costs. However, if taxpayers were calm before and after filling in the tax form, they didn’t incur psychological costs.

Consequently, feelings following the completion of the tax return are unequally divided between those taxpayers for whom this task has been a stressful burden and those who have not perceived it as such, as can be seen from on tables 1 and 2.

**TABLE 1**  
**PSYCHOLOGICAL COSTS AND AGE (%)**

Age	Emotional costs		Total
	Without emotional costs	With emotional costs	
18-24	100,0		100,0
25-35	91,7	8,3	100,0
36-55	85,3	14,7	100,0
56-65	53,6	46,4	100,0
> 65	40,0	60,0	100,0
Total	80,0	20,0	100,0

From table 1, we can conclude that the higher the age of taxpayers the more stressful they felt in the completion of the tax return, with  $X^2(4) = 42.135$  and  $p\text{-value} < 0,001$ . But not all participants showed psychological costs. The youngest group of taxpayers (18-24 year olds) didn’t feel anxiety or any other emotional cost in the process of compliance. One reason for this situation could be due to the definition of tax unit in the Portuguese tax system. In fact, in Portugal, the definition of dependents includes all children up to 25 years old who have no economic independence.

**TABLE 2**  
**PSYCHOLOGICAL COSTS AND EDUCATION (%)**

Education	Emotional costs		Total
	Without emotional costs	With emotional costs	
Primary School	69,7	30,3	100,0
Secondary school	87,7	12,3	100,0
University degree	85,5	14,5	100,0
Total	80,0	20,0	100,0

In table 2, the percentage of taxpayers with a primary level of education who incurred psychological costs is 30, 0 per cent. The other groups, while suffering from anxiety in the process of compliance, present lower percentages: 12, 3 and 14, 5 per cent for secondary school graduate and university graduate taxpayers, respectively. For taxpayers who are less educated the psychological costs were higher, with  $X^2(2) = 9.798$  and  $p\text{-value} = 0,007$ .

We can conclude from tables 1 and 2 that the tax form is obviously a theme which causes concern among Portuguese taxpayers.

In the personal interviews, taxpayers highlighted that the tax system is very complex, and this contributes to increase the psychological costs. Thus, the perception of tax complexity is responsible for higher psychological costs. This perception is quite widespread among taxpayers over 55 years old, with lower educational levels, self-employed, pensioners, receivers of income from movable capital, capital gains and, especially, among taxpayers with high levels of income.

The major difficulties identified by taxpayers in filling in tax returns were: interpretation of tax rules regarding the complexity of deductible tax allowances, tax benefits, number of dependents included in the tax unit, the constant changing of tax rules, and the complexity of tax forms, among others.

Therefore, in the future it seems useful to do a detail research about the determinants and characteristics that introduce complexity in the tax system for these groups of taxpayers, in order to propose measures that will reduce psychological tax compliance costs.

## CONCLUSIONS

The psychological costs are intangible, and so they are difficult to put a price on. Nevertheless, in our study we have tried to measure, qualitatively, the stress and anxiety incurred by taxpayers when complying with their tax affairs. We believe this aspect of the study is of particular significance, as the issue of psychological costs has been a largely neglected area of tax compliance costs research, as we have already highlighted before.

To evaluate the psychological costs, our choice focused on the use of interviews by direct application of the questionnaire (face to face interviews) on one hand. This method allows us to collect information and obtain a good level of response rate and, on the other hand, the reliability and quality of results is also ensured.

We conclude, with the creation of an emotional indicator, that taxpayers do incur in psychological costs caused by anxiety and stress and, as far as these are concerned, elderly and less educated taxpayers have higher psychological costs.

We believe that the results here presented further contribute to the research in the field. Firstly, this paper presents new evidence from a country where there is no prior study that analyses the psychological tax compliance costs. Secondly, we inserted a new indicator to measure the psychological costs of taxpayers, the “emotional costs”, an indicator which has been neglected in the international tax

compliance literature. In fact, the psychological costs incurred by taxpayers have received little attention by researchers, except most recently, in Australia, Woellner *et al* (2001) and Woellner *et al* (2007).

However, it is important to highlight that our study was not supported, and so our sample was selected from the district of Coimbra, a convenience sample to the author. Nevertheless, the fiscal system does not differ according to the Portuguese districts or regions. This means that the tax compliance obligation and consequently the tax compliance costs do not differ from taxpayers in one region to others in other regions. Moreover, we think any research that assesses the taxpayers' point of view is important evidence to place before policy-makers. Since compliance costs and the role of taxpayers are important in developed countries, this argument becomes even stronger.

In conclusion, the qualitative evaluation of psychological Portuguese tax compliance costs and the identification of groups of taxpayers with higher psychological costs have been raising some interest among tax academics, practitioners and specially policy makers in Portugal, with the aim of simplifying the tax system and minimizing such costs for individual taxpayers.

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