

USING METHODOLOGICAL TRIANGULATION TO STUDY THE INDIVIDUAL COMPLIANCE BEHAVIOUR TOWARDS INCOME REPORTING

Empirical study

Keywords

Triangulation
Compliance
Behaviour
Individual taxpayers

JEL Classification

H26, H39

Abstract

The research in tax compliance has approached various methods of data collection, but almost never methodological triangulation has been used. Triangulation helps the researcher in obtaining more reliable results, if they prove to be similar after each method used and also it increases the validity of the entire study.

The purpose of the paper is to highlight the importance of triangulation and especially methodological triangulation, by presenting the use of it in researching the compliance behaviour of three categories of individual Romanian taxpayers (doctors, lawyers/notaries and self-employed accountants) towards income reporting.

Two studies have been conducted: a survey on actual taxpayers and a quasi-experiment on potential taxpayers. The studies had similar results, so the usefulness of triangulation is once again confirmed.

The results may be useful to both theorists and practitioners.

1. Introduction

Economists and not only have been always interested in explaining the behaviour of people, in relation with economical aspects. One of these directions regards their behaviour as taxpayers. Globally, it is known the so-called "tax aversion" of people (Sun, 1994) and, as the taxes are more numerous and larger, the general aversion is growing. Although this aversion towards taxes is widely spread, people continue in performing their duty as citizens and pay their taxes, giving more subjects of research to specialists.

In order to study any research topic, a proper methodological design is needed. Sometimes, in order to have a better view on the subject, the researcher decides to use multiple methods of research or multiple sources of data, in other terms, using "triangulation". According to the Merriam Webster dictionary, triangulation can be defined as "any similar trigonometric operation for finding a position or location by means of bearings from two fixed points a known distance apart".

The aim of this paper is to describe the use of methodological triangulation in the study of individual compliance towards income reporting of three categories of Romanian taxpayers: doctors, lawyers/notaries and self-employed accountants. Two different quantitative methods have been approached: the survey and the quasi-experiment. The main contribution of the research refers to the use of triangulation to study this subject, as it has been rarely used in the speciality literature.

In the following section, the role of triangulation in research is highlighted, followed by the description of the methodology of the research and a brief comparison between the results obtained from by the two studies. Last, but not least, the conclusions part comes to underline the most important aspects of the paper.

2. The role of triangulation

In scientific research, triangulation refers to the adoption of two or more approaches, at the same time (Zait, Spalanzani, 2006).

The main purpose of triangulation is to increase the degree of confidence in the results obtained and also to consolidate the validity of a research (Jick, 1979; Thurmond, 2001).

Oppermann (2000) believes that triangulation refers more to the verification of the results and, at the same time, to the identification and exclusion of "methodological shortcomings, data or investigator bias".

Starting from the forms of the approaches used, there are a few different types of triangulation identified in the specialty literature (Oppermann, 2000; Thurmond, 2001; Zait, Spalanzani, 2006):

- Data source and data analysis triangulation;
- Methodological triangulation;
- Theoretical triangulation;
- Investigator triangulation.

Data source triangulation refers to obtaining information from at least two different sources. Data analysis triangulation, on the other hand, is related to the use of different methods of analysis of the data obtained from the research.

Theoretical triangulation regards the fact that the starting point of the research is represented by two or more theoretical concepts or general theories on the matter. The analysis from this perspective puts the subject in the centre of the different theories involved and the views are discussed in the same context.

Investigator triangulation is related to the use of different investigators or operators in the same research (male and female etc.).

Methodological triangulation has been saved for last, as it constitutes the basis of the research presented in the following section of the paper. When a researcher uses at least two different research methods in order to measure the same object of interest

(Oppermann, 2000), he approaches methodological triangulation. Although the different methods used are mainly from the same category, a mix of quantitative and qualitative methods is mostly preferred by scientists, due to the fact that it allows the researcher to overcome the limits of each methods used by comparing the results obtained (Williamson, 2005).

Thurmond (2001) states that methodological triangulation may reveal unique differences or important information that could be omitted when using only one method of research.

Of course, these types of triangulation may be used in the same research and this is called "multiple triangulation" (by blending triangulation of methods with triangulation of data, for example).

3. Blending two quantitative methods in the study of income reporting behaviour of individual taxpayers

Tax compliance behaviour has been extensively studied in economics literature, but its importance has grown especially in the last 10-15 years, when, in fact, the consumer, generally, has become one of the most important topics of study.

Compliance with the payment of taxes could be defined as the voluntary obedience to the rules and laws of the tax system in order to contribute to overall economic welfare.

In tax compliance research, triangulation has been rarely approached. Dijke and Verboon (2010) have used two quantitative methods in order to test the same hypotheses regarding the trust in authorities and the moderating role it has over procedural fairness on compliance with the tax authorities: an experiment and a field study, involving a questionnaire. They obtained the same results, thus a stronger support for the hypotheses tested and the data obtained.

The present study aims to analyse the compliance behaviour towards income reporting of individual taxpayers from

Ia i County, Romania, who practice a liberal profession, mainly doctors, lawyers/notaries and self-employed accountants.

Due to the sensitivity of the subject and to the limitations imposed by the target population, the study has been conducted through two quantitative methods of research, supporting the importance and the role played by triangulation in researching tax compliance. The two studies had the same objectives and mainly the same hypotheses. The variables measured and analysed from the compliance perspective were demographic ones (age, sex), income level, income source (taxable income that does not appear on records), occupation, audit probability, perceived chance of being detected, perceptions about the level of the income tax and tax morale.

The first method used was a survey with self-administered questionnaires and the target population was formed by doctors, lawyers/notaries and self-employed accountants from Ia i County, who report income on their own and pay the afferent taxes. After the survey, 263 valid questionnaires were collected, following the general structure of the target population (52.5% doctors, 32.7% lawyers and notaries, 14.8% accountants). The self-administration of the questionnaires was preferred due to the sensitivity of the subject and the fact that the presence of an interviewer may have influenced the answers of the respondents. Also, the questionnaires were completed anonymously, in order to minimize the effects of social desirability bias. But the survey has its limitations, by collecting only data about taxpayers' opinions or attitudes and less about their actual behaviour.

The second study conducted was a quasi-experiment focused on potential taxpayers. The study approached a convenience sample formed from students at the Faculty of Medicine, master students at the Faculty of Law and accountancy master students, who want to practice as freelancers one of the

professions mentioned above. The design of the quasi-experiment was kept rather simple, similar with the pre-test, post-test design from the classic experiments, containing two phases. The participants received the test instrument in the first phase, along with an identification code, needed in the second phase. After they had completed the task, they returned the materials to the investigator. After a period of time of minimum two hours, the investigator returned with the test instrument for the second phase. Each participant was asked to imagine him/herself as doctor/lawyer or notary/accountant that had to report a certain amount of income. The only difference between the two instruments was the introduction of the experimental factor in the second phase, more exactly the amount of income which needed to be reported did not appear in their records (income source).

In order to keep each participant anonymous and to reward them at the end of the study, they received the identification code in the first phase. The reward consisted in a voucher (ticket) for coffee from a coffee-to-go store, placed near by the faculties involved. The quasi-experiment was conducted during the courses taken by the target population, in three sessions, one for each faculty involved, in three different days. A final and valid sample of 102 participants at both phases has been obtained (31 law master students, 31 accountancy master students and 40 students at the Faculty of Medicine).

The results obtained from the two studies will be discussed in the following section of the paper.

4. A brief comparison of the results obtained from the two studies

The question that has been in the minds of the researchers for years now is “why do people pay taxes?” (Alm, Sanchez, Juan, 1995; Feld, Frey, 2007). In the attempt to offer an answer

to this question, both economic and noneconomic factors have been taken in consideration and analysed, more exactly two main directions took form (Kastlunger et al., 2010): the economic direction and the socio-psychological direction.

The present research incorporates both economic and psychological variables in the analysis of the compliance behaviour towards income reporting of individual taxpayers (actual or potential) from Ia i County.

In the both studies, female participants proved to be more compliant in terms of income reporting than male participants. This has been previously analysed by Andreoni, Erard and Feinstein (1998), Chung and Trivedi (2003), Torgler (2003) and Kastlunger et al. (2010), who came up with the same conclusion.

Only the survey on the actual taxpayers has on the differences between the taxpayers' compliance intention according to their age group. The results show that the young and adult segments comply less than the older segment (50 and above). But the results are not perfectly consistent with previous studies (Andreoni, Erard and Feinstein, 1998) as the young segment seems to be more compliant than the adults' segment.

The income source, income level and occupation can be grouped in one important research direction, described by Fischer et al.(1992) and Chau and Leung (2009) as the “opportunity of noncompliance”. The income level showed no significant influence in both studies and the differences in matters of occupation were partially significant only in the case of the survey results. The quasi-experiment results showed no differences between the three groups studied. The income source proved to be the most important variable comprised by the opportunity of noncompliance, as in both studies it showed a significant influence on the compliance towards income reporting of both actual and potential taxpayers. The income source has

been viewed as amounts of income that do not appear in the taxpayers' records (there is no evidence on paper that proves their existence). Blanthorne and Kaplan (2008) also reached the conclusion that an increase in the level of opportunity has a direct influence on the intention of the taxpayers to evade taxes.

The audit probability and the perceived chance of being detected have a direct relationship with compliance, no matter if the income appears or does not appear on paper. This means that if the audit probability and the perceived chance of being detected rise, the compliance towards income reporting also rises.

Since always, taxpayers have felt a high pressure from the tax burden. As the tax burden rises, the taxpayers tend to avoid more and more to report their income entirely (Alm, Sanchez, Juan, 1995; Dhimi, al-Nowaihi, 2007). According to the both studies presented, as the perception about the level of the income tax in Romania (16%) is improving (or as the participants perceive the income tax as being low or very low), the compliance rises.

Tax morale has been proven, once again, to have a major influence on compliance (Dell'Anno, 2009). As tax morale rises, compliance towards income reporting also rises, for both actual and potential taxpayers.

As the results have been similar in both studies, this fact confirms the usefulness of triangulation or multiple methods research in the validation of the methodology and increasing the degree of confidence in the results obtained.

5. Conclusions

The compliance behaviour of taxpayers towards income reporting is still an important source of scientific information for the research in economy (tefura, 2011a).

According to the existing theoretical models on tax compliance, much more people should be noncompliant than the data collected from

taxpayers is showing (Alm, Sanchez, Juan, 1995).

Various methods of research have been used to study the tax compliance behaviour of individual taxpayers. But none of them has proven to be the best choice in collecting the data needed (tefura, 2011b). Triangulation may be the answer and the solution to those researchers who cannot decide which method is more suited.

The paper brings its contribution to the tax compliance literature by approaching methodological triangulation, through the use of two quantitative methods of research: a survey on actual taxpayers and a quasi-experiment on potential taxpayers. Both methods have their strengths and weaknesses and using them in the same research has emphasized, once again, the importance of triangulation. The survey could only emphasize on the attitudes and the opinions of the taxpayers, but the quasi-experiment has given a second perspective, by including the data obtained from simulating the behaviour of taxpayers when towards income reporting. Another contribution regards the results obtained, by offering a new insight on the behaviour of individual taxpayers. Also, this perspective on tax compliance has not been previously approached in the Romanian specialty literature.

The results obtained from the two studied were similar, increasing the validity of the research and the degree of confidence in the data obtained (Jick, 1979; Thurmond, 2001).

The research has its limitations, including the sensitivity of the subject which makes it difficult to control the social desirability bias and the honest answers. In order to minimize their effects, some of the questions have been written in an indirect style and the anonymity of the participants was kept across both studies. Also, the three professional categories studied are not very easy to access and this fact has limited the number of questionnaires collected. The number of participants at the quasi-experiment was also

limited, due to low accessibility at the courses taken by the target population and that is why the results should be interpreted carefully.

Future directions of research may include expanding the study at a national or even at an international level (in countries with a similar tax system as the Romanian one) and also including more psychological or social variables, which would help in explaining the puzzle of tax compliance. Also, from the methodological perspective, the focus should be on experimental methods of research or mixed methods, in order to have a clearer view on the actual behaviour of taxpayers.

Reference list

[1] Alm, J., Sanchez, J., & Juan, de A. (1995). Economic and Noneconomic Factors in Tax Compliance. *Kyklos*, 48, 3-18.

[2] Andreoni, J., Erard, B., Feinstein, J., (1998). Tax compliance. *Journal of Economic Literature*, 36 (2), 818-860.

[3] Blanthorne, C., Kaplan, S. (2008). An egocentric model of the relations among the opportunity to underreport, social norms, ethical beliefs and underreporting behaviour. *Accounting, Organizations and Society*, 33, 684-703.

[4] Chau, G., Leung, P. (2009). A critical review of Fischer tax compliance model: A research synthesis. *Journal of Accounting and Taxation*, 1, 34-40.

[5] Chung, J., Trivedi, U.V. (2003). The Effect of Friendly Persuasion and Gender on Tax Compliance Behavior. *Journal of Business Ethics*, 47, 133-145.

[6] Dell'Anno, R. (2009). Tax evasion, tax morale and policy maker's effectiveness. *The Journal of Socio-Economics*, 38, 988-997.

[7] Dhama, S., al-Nowaihi, A. (2007). Why do people pay taxes? Prospect theory versus expected utility theory. *Journal of Economic Behavior & Organization*, 64, 171-192.

[8] Dijke, van M., Verboon, P. (2010). Trust in authorities as a boundary condition to procedural fairness effects on tax compliance. *Journal of Economic Psychology*, 31, 80-91.

[9] Feld, P.L., Frey, S.B. (2007). Tax Compliance as the Result of a Psychological Tax Contract: The Role of Incentives and Responsive Regulation. *Law & Policy*, 29 (1), 102-120.

[10] Fischer, M.C., Wartick, M., Mark, M.M. (1992). Detection probability and taxpayer compliance. *Journal of Accounting Literature*, 11, 1-26.

[11] Jick, D. T. (1979). Mixing Qualitative and Quantitative Methods: Triangulation in Action. *Administrative Science Quarterly*, 24 (4), 602-611.

[12] Kastlunger, B. et al. (2010). Sex differences in tax compliance: Differentiating between demographic sex, gender-role orientation and prenatal masculinization (2D:4D). *Journal of Economic Psychology*, 31, 542-552.

[13] Oppermann, M. (2000). Triangulation – A Methodological Discussion. *International Journal of Tourism Research*, 2, 141-146.

[14] Sun, Li-teh (1994). The Social Economist Examines Man's Aversion to Taxes. *International Journal of Social Economics*, 21 (9), 11-26.

[15] tefura, G. (2011a). Tax Compliance Behaviour. *Ovidius University Annals, Economic Sciences Series*, 11 (1), 2074-2078.

[16] tefura, G. (2011b). A Review of the Research Methods Used to Study the Tax Compliance Behaviour. *Ovidius University Annals, Economic Sciences Series*, 11 (2), 1251-1257.

[17] Thurmond, A. V. (2001). The Point of Triangulation. *Journal of Nursing Scholarship*, 33 (3), 253-258.

[18] Torgler, B. (2003). Tax Morale, Rule-Governed Behavior and Trust. *Constitutional Political Economy*, 14, 119-140.

[19] Williamson, R.G. (2005). Illustrating triangulation in mixed-methods nursing research. *Nurse Researcher*, 12 (4), 7-18.

[20] Zai, D., Spalanzani, A. (2006). *Cercetarea în economie și management*. Bucharest: Economic Publishing.