

# **Measurement possibilities of motivations and attitudes influencing the formation of unethical business behavior – the effect of self-esteem on the black economy**

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*Abstract: In recent years, more research has found that values, societal norms and attitudes differ from country to country and that these differences have a measurable impact on economic behavior. The unethical business behavior and the causes of the hidden economy are examined extensively through multiple research methods. Generally, the shadow economy can be measured in two ways: micro-level surveys, questionnaires, interviews, or indirect approaches such as demand for currency and hidden variables, using macroeconomic indicators. Several studies deal with the relationship between money and self-esteem, stating that low self-esteem and the development of criminal behavior are typical among limited economic prospects. The purpose of the research is to compile a questionnaire that examines unethical business behavior, including the reasons for the development of a black economy from a business psychologist's view, based on the Rosenberg self-esteem used in international research to measure self-esteem. The results of the trial queries are presented in this study.*

*Keywords: self-esteem, pilot-survey, Rosenberg Self-Esteem Scale, shadow economy*

## **1 Introduction**

Taxation has been a concept since the birth of the states. Different and very varied forms of tax evasion have evolved through different historical periods. In a rapidly

changing economic environment, tax-related abuses are difficult to type, because human ingenuity knows no limits. "The hidden economy is one of the phenomena that can be noticed in all market economies, but its amount varies from one country to another, and this difference is an important information about the state of the economy, the behavior of economic operators, the acceptance of government and government measures" [1]. In order to reduce or eliminate abuses, it is important for organizations and public bodies assigned to taxation to be more prepared and efficient. In order to increase preparedness, this research and the feedback of the experiences gained may also be important.

The NAV Criminal Investigation Directorate and the investigative organs under its control - in compliance with governmental expectations - focus resources on the prevention of and damage caused by financial crime offenders and organized crime groups in order to protect the Hungarian budget. Table 1 shows the number of main criminal offenses in the years 2014-15-16. The values affected by known crimes in 2014 were 148.8 billion forints and 136.6 billion forints in 2015, of which the value of the crimes of fiscal fraud would be nearly 139 billion forints in 2015 and nearly 131 billion forints in 2014. In 2016 these two figures amounted to 109.5 billion forints and 98.1 billion forints respectively. The perpetration of crimes falling within the scope of fiscal fraud amounts to 93.4% to 95.9% to 89.6% of the aggregate perpetration, which can be considered to be considerably high.

	2014	2015	2016
Budget fraud	4044	3094	2628
Bankruptcy Crime	818	688	626
Infringement of the order of accounting system	544	536	436
Use of private document falsification / fake private document	1219	639	418
Infringement of Industrial Property Rights	449	573	330
Trafficking of stolen goods	538	407	290
Public document forgery	1181	480	255
Abuse of social security, social or other welfare benefits	95	114	152

Table 1

The formation of numbers of main crimes became known in 2014-15-16. (Source: NAV Yearbook 2014-15-16. own edition)

In the life of the National Tax and Customs Office (NAV), a turning point was the year 2016. In 2016, the process started to make NAV a non-tax office, but a provider of services acting in a way that supports taxpayers' affairs. The aim of the transformation is to create a tax office that cooperates with customers to effectively meet the social and government expectations, by transforming the culture of administration and by creating the availability of services, taxpayers are encouraged to pay fair tax payments. For this reason, supportive procedure that helps to correct defaults and mistakes instead of immediate punishment. The

rating of taxpayers has provided the opportunity to get profitable taxpayers, within the limits provided by the laws. The main goal is to operate a credible, client-centric National Taxation and Customs Administration, which is accepted by the society and at the same time improves voluntary observance and tax moral [2] [3] [4]. The choice of topic - the factors influencing the tax toll and the examination of these - therefore, because of the reform of the tax authority, is both very timely and necessary.

## **2 History, special literature review**

### **2.1 Factors affecting the willingness to pay tax**

In the literature, there are several economic models that seek to correlate between human behavior patterns, attitudes, tax evasion and its risk. Among the theoretical models of taxpayers' behavior, Allingham-Sandmo's model [5] is a pioneer, which develops Becker's model further [6]. Among the theories of gaming theory, it is worth mentioning Corchòn's model [7], which illustrates the coexistence norms of economic operators, the game of a robbery of a citizen trying to escape from the taxing state and obligations. In addition, Ehrlich's model [8] demonstrates the possibility of choosing between legal and non-legal activities. According to these classic models, the individual decision determining the tax attitudes of rational, profit maximizing individuals is a function of the taxpayer's income level, tax rates, probability of getting caught/ the extent of penalty.

Under the classic model of tax evasion, individuals' decision on tax behavior is assessed rationally by the expected effects of the above variables. According to classical models, control probability has a positive effect on taxpayers' compliance, and the degree of punishment has a considerable deterrent effect. The positive impact of control probabilities is supported by empirical studies, while the degree of punishment is less clear. There are also significant contradictions on the impact of income and tax rates. These contradictions are seen in Table 2. Motivational motivations behind economic and investment decisions are not always rational, classical economics models identify important factors, but they cannot explain the behavior of taxpayers, so it is expedient to extend investigations in sociology and behavioral fields as well. A number of studies point out the shortcomings of classic models, which are also shown in Table 2.

	Positive effect	Negative effect	Contradictions
Income level of the taxpayer		Schneider – Torgler [9]	Semjén [10], Kirchler et al. [11], Semjén – Szántó – Tóth [12]
Tax rates	Belyó [13], Belyó [14]	Semjén [10]	Sisak [15], Schneider [16], Cummings et al. [17], Schneider – Torgler [9]
Probability of controlling/getting caught	Semjén [10], Belyó [13], Semjén – Szántó – Tóth [12], Cummings et al. [17]		
The extent of the penalty	Belyó [13], Cummings et al. [17]	Semjén – Szántó – Tóth [12]	Frey – Feld [18], Semjén [10], Kirchler et al. [19], Semjén – Szántó – Tóth [12], Alm et al. [20]
The shortcomings of classic models	Hámori [21], Semjén [10], Kirchgässner [22], Alm - Torgler [23]		

Table 2  
Deductible conclusions from classical models (Source: own edition)

"Economic psychology is a science of psychological phenomena that do not simply accompany economic processes, but they also take part as a disadvantageous or corrective effect factor. Economic psychology deals with the activities of people themselves, as they fit into one economic system, and economic psychology does not create its own positions, which are the result of economic processes. Spiritual phenomena have to be considered as economic leverage" [24].

Despite the fact that tax policy is the most obvious means of enforcing and regulating tax payments, the policy of deterrence, i.e. the prospect of higher penalties and fines, or compulsory or counterproductive effects, can be offset by taxpayers because of the loss of trust in state institutions. There are numerous international researches that go beyond the tools of classical economics models, and examine the factors affecting taxpayers' willingness to pay tax on economic psychological, behavioral and sociological aspects. Among other things, the impact of cultural norms on tax willingness to pay - especially religious behavior. Apart from cultural factors, the positive impact of national pride on tax havens is also evident. There are several studies on whether demographic factors have a significant impact on the willingness to pay tax. Age, gender of respondents, marital status are also related to general tax attitudes, i.e. the taxation mentality and the tax moral depend on the demographic characteristics of the respondents. In demographic studies, results were obtained that women and married people were characterized by higher taxation moral, and the widow's willingness to pay tax was also higher. The main findings of the studies in this topic are shown in Table 3.

Main thoughts	Author(s)
The values, norms of the societies and attitudes differ from country to country - they have a measurable effects on the economic behavior	Alm – Torgler [23]
The demographic factors have an effect on tax moral	Schneider – Torgler [9], Kirchler [25], Kirchler [26], Kirchgässner [22]
The taxpayer's age has an impact on the tax moral	Kirchler [27], Kirchler [25], Kirchler [26], Schmolders [28], Strümpel [29], Kirchgässner [22]
The taxpayer's gender has an impact on the tax moral	Kirchler [26], Kirchgässner [22], Schneider – Torgler [9]
The taxpayer's marital status has an impact on the tax moral	Kirchgässner [22], Schneider – Torgler [9]
The cultural environment has a significant impact on the tax willingness to pay	Schneider – Torgler [9], Kirchgässner [22], Cummings et al. [17]
Religious values	Kirchler [26], Kirchgässner [22]
The national pride has an impact on the tax moral	Schneider – Torgler [9]

Table 3

The impact of demographic factors, the cultural environment, national pride and religious values on the willingness to pay taxes (Source: own edition)

In addition to cultural and demographic factors, several studies are also exploring the impact of the relationship between state, state institutions, control bodies and taxpayers on tax havens. Studies show that confidence in the government, the stability of the tax system and the treatment of taxpayers as partners and respecters - by the control authorities - also have a positive impact on the tax willingness to pay. In addition, the direct political participation of citizens, their involvement in political decisions and democracy have a significant positive impact on the tax havens. Studies on the above findings are shown in Table 4.

Main thoughts	Author(s)
A higher level of confidence in the state and public institutions has a positive effect on the tax moral	Alm et al. [30], Frey - Torgler [31], Cummings et al. [17]
Dealing with taxpayers with more respect and less control	Strümpel [29], Frey - Feld [18], Kirchler et al. [11]
Direct political participation of taxpayers has a positive impact on the willingness to pay taxes	Frey - Torgler [31]
The impact of regulations, the complexity and transparency of the tax system have a positive impact on the willingness to pay taxes	Schneider et al. [32], Schneider et al. [33]

Table 4

The impact of the relationship between state, state institutions and taxpayers on the willingness to pay taxes (Source: own edition)

Measurement of the shadow economy is possible through micro-level surveys, questionnaires, interviews or indirect methods such as demand for currency and hidden variables, using macroeconomic indicators. The direct estimation of the hidden economy is mostly based on the composition of the Multiple Indicators Multiple Causes (MIMIC) and the currency demand method. In addition, there are a large number of World Values Survey (WVS) and European Values Survey (EVS) data sets that enable the conduct of empirical studies within the subject. Among the listed methods, the method of questionnaire surveying was chosen to measure the factors and attitudes that motivate the entry into the black economy, with the aim of supporting the relationships revealed on the basis of the previously published international literature. Testing the questionnaire and the probing queries were made by competent executives of taxation decisions of small and medium-sized enterprises of various sizes and activities in Hungary. The survey covers the following factors:

- the impact of demographic factors (gender, age, marital status, qualifications, number of children) on the tax havens
- the impact of national pride on tax willingness to pay
- the friendly and respectful treatment of taxpayers, their impact on tax willingness to treat them as partners
- direct political participation of citizens, involvement in political decisions, the impact of democracy on the tax havens

In addition to the factors studied so far, we want to extend the survey with the effect of self-esteem on tax havens, using the Rosenberg Self-Esteem Scale used in international research to measure self-esteem. Several studies deal with the

relationship between money and self-esteem and the relationship between low self-esteem and criminal behavior. The aim of the research is therefore to compile a questionnaire that examines non ethical business behavior, focusing on the causes of the development of the black economy from the point of view of economics and psychology. The results of the trial queries are presented in this study.

## **2.2 The effect of self-esteem on the willingness to pay taxes**

### **2.2.1 The relationship between money and self-esteem**

The concept of self and its component of evaluation, self-assessment, one of the most sought after phenomena of personality and social psychology, whose health-psychological aspects are also significant. It is generally assumed that people are strongly motivated to maintain and protect their high self-esteem [34]. Self-evaluation is a relatively stable, feature-like feature that can be related, for example, to age or gender, but is also associated with many health indicators. In further longitudinal studies, the self-assessment of Rosenberg Self-Esteem low by the scale predicted some aspects of adult health and behavior in adolescents, such as worse financial outcomes, weaker physical and mental health, and greater risk of crime [35].

Numerous studies also study the relationship between money and self-esteem, two factors that people generally desire. The relationship between money and self-esteem can be: increase, substitution and competition. The augmentation effect shows that excellent payment opportunities increase the level of self-esteem. The substitution effect means that money and self-esteem can partially compensate for each other. The symbolic meaning of money, the individual differences and the extent of the need for money affect how money and self-esteem can substitute each other. Competition effect emphasizes people's choice between money and self-esteem. Money and self-esteem compete against each other when decision makers have to choose between them. These theories can help bridge the gap between psychology and economics and provide an integrative perspective for understanding human decision-making [36].

Since we find studies to explore the relationship between money and self-esteem, the study of low self-esteem and greater risk of crime, we want to look at the direct relationship between self-esteem and tax evasion, tax avoidance and tax evasion.

### **2.2.2 Rosenberg Self-Esteem Scale, RSES**

The questionnaire was developed by Rosenberg [37] [38] to measure "global" self-esteem. Nowadays, this is the most commonly used appraisal questionnaire. It

contains ten (5 positive and 5 negative) statements about the value of self and self-acceptance. With a four-stage Likert-scale (1 - strongly disagree, 2 - disagree, 3 - agree, 4 - strongly agree) can indicate the filler how much you agree with each statement. The reliability and validity of the scale is demonstrated in a number of test samples (e.g. adolescents, elderly people, and psychiatric patient groups) and research results obtained in different cultures. There are several translation versions in Hungary. Later language is simpler than previous versions, but it can be stated that the scale was always reliable and valid regardless of translation differences. The factor structure of the measuring instrument has also been studied in a number of domestic and international studies, and the results mostly support the validity of the one-dimensional factor structure, but also indicate that positively and negatively-defined items are separated. The two-dimensional structure derives from the methodic distortion that the positive and negative content formulas result in systematic variance, which is more due to the distorting effect of the response style rather than the construct [39]. In our questionnaire, which is currently being tested in Hungarian, we use the translation version of Sallay et al. [40].

### **3 The compilation of survey based on the test results of the international special literature**

The questionnaire was compiled on the basis of the results of the aforementioned international literature, complemented by self-determined questions and Rosenberg's Self-Esteem Scale. The purpose of the present study was to summarize the literature needed for the compilation of the questionnaire and to test the questionnaire and to summarize the results obtained there.

In the first part of the questionnaire, issues related to the weight and components of the hidden economy are given by previous studies of Semjén and Tóth [41] and Balogh et al. [42]. The questions asked how respondents felt the frequency of unpaid sales, employment of undeclared employees, purchase of fictitious cost accounts or accounting for personal consumption as a cost to business partners, competitors and the Hungarian economy, and how to judge these phenomena.

In the second part, we relate the relationship of the taxpayer with the government, legal institutions and control bodies and their impact on the tax willingness to pay. The questions were compiled from Semjén and Toth [41], complemented by self-edited questions. This section also focuses on the effect of national pride on the tax havens.

The third part contains the questions of Rosenberg's Self-Esteem Scale, in a questionnaire prepared in the Hungarian language in the translation used by Sallay et al. [40].



In the fourth part, demographic data are included, such as gender, age, and marital status, number of children living in common households, residence, highest education, average monthly net income per capita, nationality and status of the respondent (function).

Questions in the questionnaire are closed questions, we offer pre-defined responses, and the participants should choose the appropriate ones. Test queries on paper basis - under supervision - were done individually and individually. After testing the questionnaire and making the necessary changes, we plan to use an online questionnaire to reach the larger sample.

## 4 Results

The questionnaires were executed with the help of 7 people - Hungarian leaders of small and medium enterprises, tax managers, and competent leaders. Demographics included 2 men and 5 women among the respondents. Considering their ages 3 were between 36 and 45 years old, 2 between 46 and 55, 1 between 26 and 35 years old and one of them was above 56 years of age. Among the respondents, 6 were married and 1 single, considering the children living in a common household 3 do not have children, while 2 people have 4 children, 1 have 3 children and 1 have 1 child. 5 of them live in the capital, while other 2 live in cities. From the point of view of education, 5 persons have higher education and 2 have secondary education. Their net earnings per person are between 200-300 thousand HUF, for one person between 100-200 thousand forints and another one's salary was over 300 thousand forints. From the point of view of their responsibilities in the company, 4 are owners and managers at once, one of them is competent chief executive and two are private entrepreneurs.

Concerning the weight and components of the hidden economy, worried responses were given on the basis of probation queries. In the case of unpaid sales, 4 respondents considered the possibility of being "frequent", according to 2 people, "part of the normal economic processes" and only one person, "not at all", among the business partners. The same question was only the answer to the "common" and "normal economic processes" of the Hungarian economy as a whole. The phenomenon was attributed to only two people as "tax evasion", with the other responses mixed with "some acceptable", "scam" and "exploit loopholes". Undeclared employees were rated by 3 people as tax evasion, others were "somewhat acceptable", but for a major case, they were "part of normal economic processes". A similarly worrying answer was given to the question of who would be affected by tax evasion. 1 person according to the state, 4 people according to society, but according to two people, no one.

Among the tools to increase the willingness to pay tax, the tax increases, the rigor, the correct information were usually considered "not at all suitable" or "inappropriate" by respondents. In the improvement of the tax culture, some respondents used the "slightly fit" indicator. Simplifying the tax system and reducing taxation, however, almost all respondents rated "fit" or "considerably fit".

Apart from a few exceptions, the complexity of the tax laws and the difficulty of compiling the forms of taxation are "true to full" answers. With regard to the fact that NAV is timely and well informed about taxation-related business, and has treated them with friendly and respectful opinions. There were more "partially true" and "true" responses. Here, I would refer to the supportive reform of the NAV in 2016, which has the effect of appearing as soon as this short time has passed. However, in relation to the fact that the direct involvement of the citizens in the political decision-making process in the country and the democracy of all respondents, the answer is "not quite right".

During the filling we asked the respondents to indicate the complexity, difficulty of understanding and the deficiencies of the questions. As one of the shortcomings of the questionnaire, it was mentioned that the business sector is not among the issues, as they believe that the scale of the black economy and the tax evasion are also a factor depending on the scope of activity. There are some sectors that are more widespread than others. Questions on demographic factors are therefore considered expedient to supplement this issue.

In the part I, i.e. the weight and components of the hidden economy, the four responses were fewer than the respondents, somewhere between the rare and the most common responses. However, it is not advisable to introduce another category because it is an easy option for averaging. With regard to the acceptance of various tax evasion variants, it was common to have liked to "be fairly acceptable" and "exploit loopholes" at the same time. The term "to some extent acceptable" would be useful to modify the term "to some extent acceptable". It seemed that such a form would be preferable to respond to the opinion of the respondents. In the question of "who harms the tax evasion", it was difficult to decide between the ethically acceptable response and the giving of their own feelings, so this question definitely needs to be clarified. It is necessary to emphasize that in this issue as well the own opinion is significant.

In questions of the measurement of the hidden economy, we have confirmed that we have managed to formulate the sensitive issues that are not specific to the respondent, their business environments, but they reflect their own feelings and their own entrepreneurial activity. This opinion may be very important when evaluating subsequent questionnaires. The entrepreneur environment as a client, competitor, and state client was not entirely clear to respondents, this need to be clarified. Employing an undeclared employee also needs fine-tuning because respondents have indicated that this category is not sufficient to reveal the area. It

is also necessary to supplement the employees reported but not fully employed, as this is a widespread phenomenon. In their own opinion on the size of the hidden economy, the participants wanted to have more answers. This raises the solution to ask these questions as a combination of closed and open questions, to provide individualized response options so that the topic can be explored as deeply as possible. The requirement to pay less tax than required is also a need for clarification because its interpretation significantly slowed the completion of the questionnaire.

Section III. there are considerably different questions from the previous one, the respondents have stopped for a moment, as this is a series of questions to measure self-esteem. Nevertheless, we have found that in the order of some parts of the questionnaire, in the case of the ex-post joint evaluation, the order of the order should not be changed. On the basis of the feedback, it is necessary to indicate in this section that the response to the questions must be answered because of the need for a significant degree of concentration resulting from the Rosenberg self-esteem scale. The 5 positive and 5 negative statements change each other and easily confuse the respondent.

Finally, we would like to share some interesting comments that were made while filling in the questionnaire because, in our opinion, they reflect a great deal of reflection on taxation and taxation. Respondents would be very eager to pay a tax rate of 10 to 15% higher than the amount actually charged, even if this would reduce their risk but only against the amount actually paid because it is considered realistic. That is, the amount of the contributions payable on the current minimum wage with a three times as much payload. According to their words, everyone knows the moral side of the subject, but small businesses are forced to choose a certain degree of tax evasion for their livelihoods and family livelihoods. In addition, it is generally recognized as a fact that if a person is starting to enter Hungary today, tax evasion is encoded to a lesser extent, but it also depends on which sector he or she is active in. In relation to the tax culture, it was said that everyone knows what is right, but the Hungarian tax system overrides this. Based on all of this, we believe that the topic is very important and timely.

### **Conclusions**

Test questionnaire testing can be considered successful, as it can be determined unambiguously based on the answers given to questions asked in order to measure the extent of the hidden economy that the phenomenon exists and is significantly present in the Hungarian economy, so it is definitely necessary to deal with it. The topic is very sensitive, but based on the feedback; it seems that the issues surrounding the hidden economy remained within the framework of not alarming the respondents. Filling in a personal meeting gave us an opportunity to gain a deeper and more detailed understanding of the participants' views on the subject, and also raised the question of incorporating further areas. Based on the completed questionnaires, we see that in addition to the online questionnaires, it will be

worthwhile to look at the topic in the form of personal interviews as well, because personal opinions also allow for a deeper exploration of the causes of the phenomenon. As we may have seen, tax compliance is influenced by a number of factors, in most countries the deterrence typical of individual economies, the level of certain fines and the review rates as well. Despite the rigor, punishment and compulsion, the phenomenon cannot be completely eradicated and even studies show that over a certain limit an opposite effect can be achieved on taxpayers' side. This type of tax policy seems to be only profitable in a short-term and temporarily. International special literature studies show that cultural environments and religious values have an impact on the willingness to pay taxes. In addition, we can find studies that are aimed at exploring the relationship between money and self-esteem, also, which are aimed at examining the relationship between low self-esteem and the greater risk of committing crimes. Extending the subject to assessing the relationship between self-esteem and tax evasion will hopefully help the understanding of the phenomenon even more widely, and it can even be taught in the school age to create a more acceptable tax culture. This, of course, requires a long-term investment and a well-developed financial education and training, but a lasting result can be only achieved this way. It is also clear from the above mentioned facts that long-term and sustained reduction of tax burden, the rigor and punishment alone will not reduce the size of the hidden economy, in the long term only the improvement of the autonomy and motivation of the actors can bring lasting results.

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