

PERSPECTIVE

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## Assessment of the Tax Culture and the Size of the Shadow Economy in European Studies

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### Abstract

In the article, the authors analyse problems related to the interdependence of a country's tax culture and the size of its shadow economy on the basis of fundamental scientific approaches and results of modern studies conducted by European scientists.

**Keywords:** Tax Culture; Tax Morale; Shadow Economy; Europe

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## Introduction

It is not possible to imagine studies about problems currently faced by the Russian economy without conducting a profound analysis of the peculiarities of the country's transition to the market after the collapse of the Union of Soviet Socialist Republics (USSR), which resulted in the considerable size of the shadow economy that is forecast at 46.4% of Gross Domestic Product (GDP) (Hassan, & Schneider, 2016).

Along with other fundamental reasons behind such a big size of the shadow economy in the sovereign economy, we think that one of the determinants is the low tax culture in Russia. The tax culture is usually understood as a part of a country's general national culture that relates to the activities carried out by the participants of tax relations and reflects public knowledge and compliance with laws on taxes and duties, accuracy of calculation, completeness and timeliness of tax and duty payment, and public awareness of the rights and obligations that stems from the understanding that tax payment is of importance for the state and the society (Leonova, & Chukhnina, 2008).

Unfortunately, the Russian approach to the understanding of the essence and the role of the tax culture in the formation of civilised forms of economic relations is entirely one-sided because it does not take account of its correlation with the problem related to the size of the shadow economy. At the same time, many European scientists directly associate the size of the shadow economy with the level of tax morale which, in turn, depends on a number of factors, including peculiarities of a state's political structure, its socio-economic development, moral and spiritual values of the public and social standards of the society in which people live. .

The article substantiates the relevance of adapting the experience of European scientific research on the problem of tax culture and the shadow economy in Russia. In the introduction, the main hypothesis of the study is formulated. The next section discusses the results of foreign

scientific work devoted to assessing the degree of influence of tax culture on the scale of the shadow economy in Europe. After that, we record the fact that in scientific research in Russia, tax culture is not considered at all as a factor affecting the shadow economy. It is concluded that such scientific research in Russia is necessary to ensure the implementation of a compelling state policy aimed at combating the shadow economy.

## Review of Existing Literature

The problem of the relationship between tax culture and the shadow economy, as a rule, does not stand out as a separate area of scientific research and is considered in the framework of the interdisciplinary study of the general economic theory of institutionalism.

When examining the origin of scientific views about this problem, one can note that the tax culture was broadly presented in the papers compiled by J. Schumpeter (1929), A. Spitaler (1954), A. Pausch (1992), J. Alm and B. Torgler (2006), R. Dell'Anno, (2009), J. Alm, J. Martinez-Vazquez and Schneider, and F. Schneider (2009).

J. Schumpeter used the term "tax culture" for the first time in his article "Economics and Sociology of the Income Tax" in 1926, in which he emphasised its evolutional character. "Like any social institution, every tax goes through the epoch of its economic and psychological feasibility. But, like in all other social institutions, everything that does not conform in the tax system does not live forever. The wave of evolution slowly exhausts it in the opinion about "the tax culture" (Schumpeter, 1929). Meanwhile, in his opinion about the tax culture, J. Schumpeter puts emphasis on the important role played by its creators – tax economists and tax politicians who professionally create handmade tax harmony – a national taxation system.

In a similar way, A. Spitaler sticks to the opinion about the term "tax culture". In his works, he puts emphasis on the fact that taxation depends on economic, social, cultural, historical, geographical, psychological and other

differences that prevail in separate countries and their societies (Spitaler, 1954).

Seemingly, decades after, A. Pausch, who studies the role of persons in tax history, tax policy and tax administration, generally ties the term "tax culture" directly to persons who determine the development of the tax system in a country (Pausch, 1992).

It is fairly illustrative that in modern history it was M. Camdessus, the Managing Director of the International Monetary Fund (IMF), who publicly claimed in his speech in Moscow in 1997 that it is necessary to form and develop the tax culture as a priority of the mid-term policy towards transformation in the Russian economy (IMF, 1997). He thinks that the tax culture should be based on voluntary compliance by citizens with tax laws that, in turn, should be applied at a measured and consistent pace. It is noteworthy that IMF tends to pursue such an approach to the understanding of the tax culture as the appearance of a certain level of "tax awareness" on the part of taxpayers (IMF Survey, 2000). In Russia, as in most transition economies, taxpayers did not have this specific experience because the practice of tax administration in the conditions of a planned economy prevailed in their conscience for a long time. As the socialistic economic system basically deprived the public of any contact with direct taxes (as this system was based on indirect means of taxation which were virtually unnoticeable for taxpayers), many taxpayers, as a rule, treated the introduction of clear taxes in the conditions of market relations in a hostile manner. To overcome this, it was necessary to pass a certain historical stage of adaptation and establishment of new tax ethics and traditions.

At the same time, for most developed countries, the fundamental factors for the stability of their socio-economic and political systems included the high level of tax consciousness and tax relations.

For this reason, the most exciting experience for Russia can be the expertise amassed by European countries which traditionally pay much attention to the efforts to keep the tax culture high and to broadly diversified

approaches applied in tax relations and harmonisation of national economic development models on this basis. Specifically, the study of the European Union (EU) experience on development and establishment of the general tax culture makes it possible not only to analyse all possible factors, including intercultural differences and peculiarities of EU member states, as primary criteria that influence the formation of the tax culture of the public, but also to reveal which government and public methods European governments apply to influence the shadow economy to maintain the high tax culture and morale.

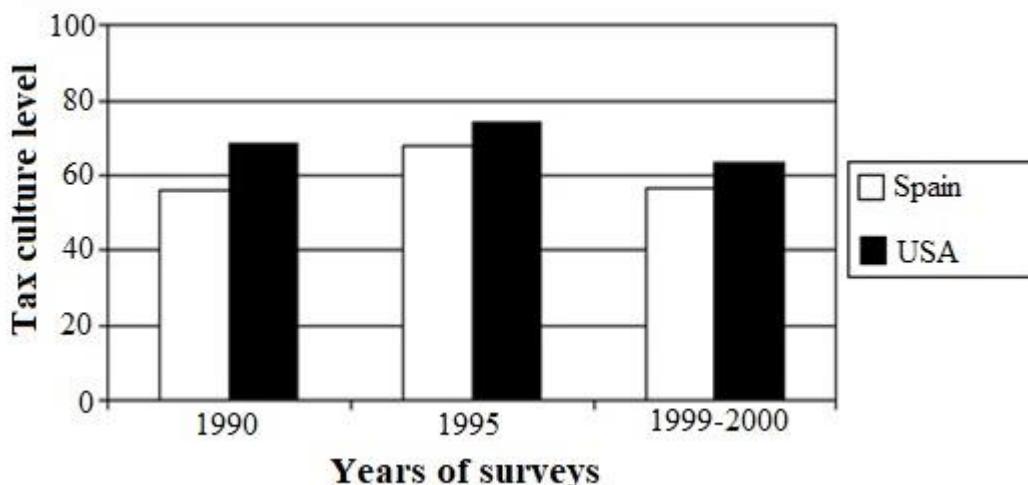
According to the modern research conducted by European scientists J. Alm and B. Torgler (2006), there is an inverse relationship between the development level of the public tax culture and the size of the shadow economy. While performing analysis on the basis of the US and Spanish comparative data, they found statistically significant evidence that the higher level of the tax culture in a country results in the smaller size of the shadow economy. The same results were confirmed in many other empiric analyses, specifically in those conducted by B. Torgler (2006), R. Dell'Anno (2009), and B. Torgler and F. Schneider (2009). In their paper, J. Alm and B. Torgler (2006), using data from the World Values Survey (WVS) (n. d.), consider tax culture as a dependent variable. When in the course of sociological surveys, WVS employees asked some common questions amongst the respondents in different countries (including in the US and Spain); their answers can help obtain quite accurate information about taxpayers' real compliance with tax obligations. This research aims to review and assess the tax culture and the size of the shadow economy using these European studies and perhaps, applied in the Russian economy. The results are discussed in the following sections.

## **Results and Discussion**

An analysis of the results of European studies on the interdependence of tax culture and the shadow economy allows us to conclude that this scientific experience can be adapted and applied in Russia to substantiate the basic approaches

and practical recommendations in the development and implementation of an effective state tax policy.

The chart in Figure 1 shows the percentage of people who claim that tax evasion is never justified. The analysis of the results of the WVS poll-based surveys leads to the conclusion that the tax culture in the US is higher than in Spain.



**Figure 1: Tax Culture Level in Spain and the United States**

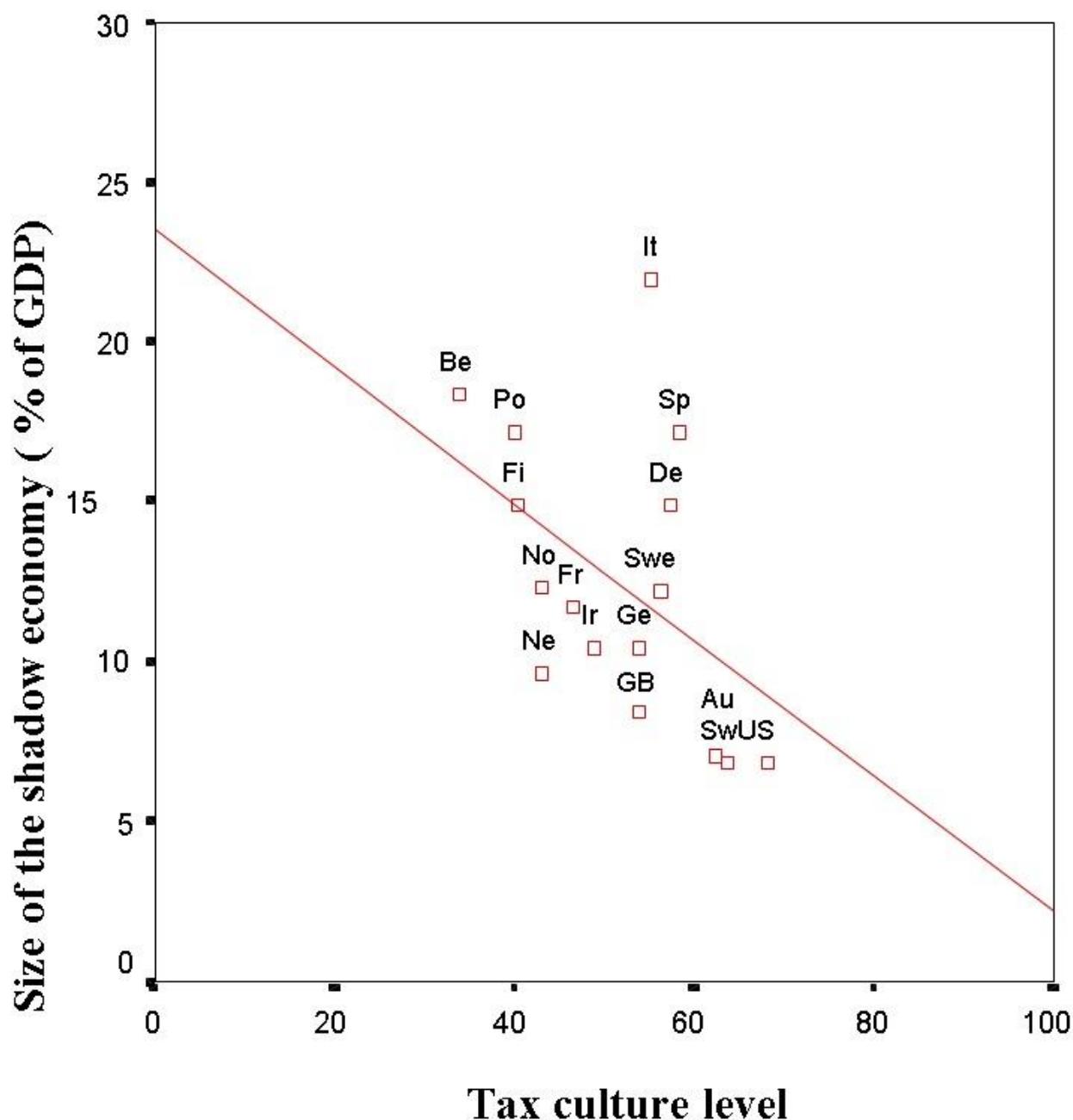
Source: World Values Survey

The value of the paper compiled by J. Alm and B. Torgler (2006) is their analysis of factors that influence the tax culture, and cause and effect relationship between the quality of the tax culture and the size of the shadow economy not only in the US and Spain but also in other European countries.

Figure 2 shows interrelation between the quality of the tax culture and the size of the shadow economy in EU member states and the US where Au stands for Austria, Be – Belgium, De – Denmark, Fi – Finland, Fr – France, Ge – Germany, GB –Great Britain, Ir – Ireland, It – Italy, Ne – the Netherlands, No – Norway, Po – Portugal, Sp – Spain, Sw – Switzerland, Swe – Sweden, and US – the United States. The figure shows that there is a strong negative correlation (Pearson's correlation coefficient ( $r$ ) is  $-0.460$  at  $0.05$ ). Analysis of linear dependence in simple regression shows that the “tax culture” variable

exceeds 20% of the total difference with the “size of the shadow economy” variable.

While working with the data of the sociological polls only, in their paper J. Alm and B. Torgler certainly assume several solely scientific errors and generalisation that in real practice have a number of drawbacks and inaccuracies, for example, they completely rule out any imperfection in the operation of tax authorities and tax administration. Moreover, as there is no detailed information on income generated by each polled respondent, it is not possible to determine the ceiling of a tax to be charged from his/her income as a potential factor influencing his/her tax culture. In addition, as a whole, the results of the estimate given by J. Alm and B. Torgler can be considered entirely objective because they are substantially confirmed by three rounds of WVS polls which were conducted at different times.



**Figure 2: The Interrelation Between the Tax Culture and the Size of the Shadow Economy**  
Source: Alm, & Torgler, 2006

A question arises: how and what can be done to reflect differences which are noticed in the tax culture among countries in reality? We think that one of the areas where the powerful influence of the tax culture can be really recorded is the size of unofficial (shadow) economy.

In this context, J. Alm, J. Martinez-Vazquez and F. Schneider think that the size of the shadow economy can be a helpful, albeit slightly imperfect, measure to study the level of tax evasion so that the negative correlation

between the size of the shadow economy and the tax culture points to what extent identified actions taken by separate persons relate to their attitude to tax payment (Alm, Martinez-Vazquez, & Schneider, 2004).

The current methods and recommendations on ways to assess the size of the shadow economy on the basis of official statistical data can be quite unreliable due to the unreliable and poor quality of initial information from official reports and statistical observations. For these and other

reasons, the size of the shadow economy is a problem for public authorities, and therefore, an important task is to understand using scientific means what specific factors can influence it to the most significant degree possible.

Table 1 sums up several empirical studies conducted by F. Schneider (2009), in which the size of the shadow economy is measured by Multiple Indicator-Multiple Cause method (MIMIC) or Currency Demand Approach method (CDA). The factor "tax culture" is used as an independent variable in these mathematical models.

Upon analysis of Table 1 data, one can understand that the higher tax burden and rising amounts of social security payments are currently the most crucial factor that determines the size of the shadow economy. This factor

describes 35-38% or 45-52% of the shadow economy's variance (depending on whether or not the "tax culture" is included as an independent variable). The tax culture constitutes 22-25% of the shadow economy's variance. The variable "quality of government institutions" accounts for 10-12%, while 7-9% falls to "state regulation" (mainly in the labour market). Tax and social contributions, the tax culture level and strength of government regulation are the main factors which affect the development of the shadow economy. It should be noted that these various factors can interact with one another and solidify one another: the bigger size of the shadow economy can dampen tax payments and the quality of government services and the performance of government institutions, thus, leading to higher tax rates and lowering the tax culture level.

**Table 1: Primary Reasons for the Size of the Shadow Economy to Grow**

Variable	Influence to Increase the Size of the Shadow Economy (in percentage)	
	12-study average	22-study empiric average
Tax burden and social security payments	35-38	45-52
Quality of government institutions	10-12	12-17
Labor market regulation	7-9	7-9
Transfer payments	5-7	7-9
Government services	5-7	7-9
Tax culture	22-25	-
Influence of all factors	84-98	79-96

**Source:** Schneider, 2009

According to IMF studies (Medina, & Schneider, 2018), the size of the shadow economy and corruption are more likely to increase in the countries with weak public administration. This is much less observed in the countries with strong, well regulated and efficient institutions of public administration. The big size and development of the informal sector of the economy are especially noticeable nowadays in many countries in southern Europe. In line with a new study published by the Institute of Applied Economic Research at the University of Tübingen in Germany (IAW), the shadow economy in Greece is estimated on average at 21.5% of its GDP. The size of the shadow economy in the

neighbouring southern European countries, Italy and Spain, is estimated at 19.8% and 17.2% of GDP, respectively. It looks as though the US struggle a lot against the shadow economy as the IAW study showed that "shadow" economic activities in the US are assessed at 5.4% of GDP (Institut für Angewandte Wirtschaftsforschung, 2017).

### Conclusion

The above analysis leads to the conclusion that the tax culture plays a vital role in the harmonious development of the society and the state, and tends to minimise negative trends and the size of the shadow economy.

It is evident that the size of the shadow economy and tax evasion decrease if the current tax system is considered relatively stable and well-balanced for taxpayers. It is problematic to assess the consequences of the low tax culture in Russian tax practice because, as we believe, this issue should be a subject of separate research and extensive public discourse. This problem should be regarded not only theoretically from the viewpoint of scientific analysis, but it is also necessary to provide the fundamental basis for the elaboration of an effective economic policy in Russia in order to develop practical solutions to overcome shadow economy problems.

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