

practico nationalo, 2015, UCCM, Chisinou. pp.7-10. URL : <http://www.uccm.md/ro/images/stories/2015/manif-stiinte/19-10-2015/CONFERINTA-TUHARI-2.pdf> last accessed 2018/02/04

17. Turcanu, V., Golocialova, I., 2016. Contabilitatea în Republica Moldova între IFRS și Directivele UE/ Culegere de articole selectiv: [vol. 4]. Chisinou: ASEM, 2016. pp.200-206. URL : <http://www.ase.md/ro/publicatii-electronice.html> last accessed 2018/02/17

18. Turcanu, V., Golocialova, I. Funcționalitatea contabilității în Republica Moldova timp de 25 ani. Culegere de articole selectiv. Chisinou: 2017 (Tipogr. "Arva Color"), pp.10-15. URL : <http://ase.md/ro/facultatea/contabilitate/catedra/cae/activitatea-stiintifica.html> last accessed 2018/02/16

19. Zasadnyi B., 2016. The Current State of Application of International Financial Reporting Standards in Ukraine. Bulletin of Taras Shevchenko National University of Kyiv. Economics, 2016; 9(186): 22-30. DOI: <https://doi.org/10.17721/1728-2667.2016/186-9/3> <http://bulletin-econom.univ.kiev.ua/wp-content/uploads/2016/11/186.pdf>

20. Zlatina, N. Manoli, M., 2015. Rationamentul profesional al practicului contabil. În: Oportunitati de dezvoltare a contabilității, auditului sifanțelor alinate noilor reglementori contabile. Conferinta stiintifico-practico nationalo, 2015, UCCM, Chisinou. pp.24-29. URL : <http://www.uccm.md/ro/images/stories/2015/manif-stiinte/19-10-2015/CONFERINTA-TUHARI-2.pdf> last accessed 2018/02/04

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ДОСВІД РЕСПУБЛІКИ МОЛDOVA В РЕФОРМУВАННІ СИСТЕМИ БУХГАЛТЕРСЬКОГО ОБЛІКУ І ЇЇ ГАРМОНІЗАЦІЯ З МСФЗ ТА ДИРЕКТИВАМИ ЄС

Реформування системи бухгалтерського обліку в Республіці Молдова та її гармонізація з МСФЗ та європейськими директивами триває майже три десятиліття і являє собою складний технічний шлях, в якому задіяно важливі фінансові та людські ресурси. У цій статті поставлено за мету представити і проаналізувати, яким чином була проведена реформа системи бухгалтерського обліку, як міжнародні стандарти бухгалтерського обліку та європейські директиви були перенесені в національне законодавство для визначення основних хвилях реформи бухгалтерського обліку та регуляторних змін, що вносяться регулюючим органом, вигоди і втрати, переваги і недоліки, що виникли внаслідок реалізації реформованої нормативно-правової бази. Відповіді на ці запитання отримано шляхом застосування як методу дослідження феноменологічного інтерпретаційного аналізу, документального та аналітичного вивчення, здійснення думки і аналізу і по суті являють собою якісне емпіричне дослідження. Результати та висновки дослідження послужать основою й уроками для майбутніх реформ. Знання минулого створює майбутнє.

Ключові слова: реформа бухгалтерського обліку, бухгалтерський облік, національні стандарти бухгалтерського обліку, МСФЗ, бухгалтерська директива.

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ОПЫТ РЕСПУБЛИКИ МОЛDOVA В РЕФОРМИРОВАНИИ СИСТЕМЫ БУХГАЛТЕРСКОГО УЧЕТА И ЕЕ ГАРМОНИЗАЦИЯ С МСФО И ЕВРОПЕЙСКИМИ ДИРЕКТИВАМИ

Реформирование системы бухгалтерского учета в Республике Молдова и ее гармонизация с МСФО и европейскими директивами длится почти три десятилетия и представляет собой сложный технический путь, в котором задействованы важные финансовые и человеческие ресурсы. В этой статье поставлена цель представить и проанализировать, каким образом была проведена реформа системы бухгалтерского учета, как международные стандарты бухгалтерского учета и европейские директивы были перенесены в национальное законодательство для определения основных волн реформы бухгалтерского учета и регуляторных изменений, вносимых регулирующим органом, выгоды и потери, преимущества и недостатки, возникшие в результате реализации реформированной нормативно-правовой базы. Ответы на эти вопросы получены путем применения в качестве метода исследования феноменологического интерпретационного анализа, документального и аналитического изучения, сопоставления мнения и анализа и по сути являют собой качественное эмпирическое исследование. Результаты и выводы исследования послужат основой и уроками для будущих реформ. Знание прошлого создает будущее.

Ключевые слова: реформа бухгалтерского учета, бухгалтерский учет, национальные стандарты бухгалтерского учета, МСФО, бухгалтерская директива.

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INSTITUTIONAL FACTORS ASSOCIATED WITH TAX MORALE: A COUNTRY GROUP-LEVEL ANALYSIS

A growing literature coming from economics, sociology or psychology explores the wide range of variables that might explain voluntary compliance behaviour. The aim of this paper is to identify the institutional factors associated with tax morale and to highlight the resemblances and the differences among several countries across the world, grouped according to the level of development. Descriptive statistics and principal components analysis are used as methods and the analysis is carried out at country group level. The main results show that no matter the level of development, people's intrinsic motivation to pay taxes can be associated with good institutions and government ability to efficiently allocate public funds.

Keywords: tax morale, stage of development, institutions, government, corruption, principal components analysis.

Introduction. People pay taxes because they are forced to comply with regulations and sanctioned for non-compliance but also due to a sense of moral obligation, of

duty or of guilt. From this last perspective, the existing literature considers tax compliance as a complex behavioural issue [1], tax morale being an important

component of tax compliance decision. Studies point out significant correlation between tax morale and tax compliance in developing and developed countries [2].

Tax morale is defined as "the motivation of a country's citizens to paying taxes, in addition to legal obligations" [2, p. 9] or, in other words, as "the intrinsic motivation to pay taxes" [11, p. 1]. Tax morale has an important role for economic development due to its association with shadow economy: a higher tax morale is proven to lead to a smaller shadow economy [12].

The wide range of factors associated with tax morale points out to two main categories namely, socio-demographic and socio-economic explanatory variables (such as age, gender, education, occupational status etc.) and institutional factors which are mainly related to the efficiency of the government's activity in allocating public funds, to the extent to which it manages to enhance confidence, to fight corruption and rent-seeking, and the way people perceives these aspects. This paper focuses on the institutional explanatory variables. Descriptive statistics and principal components analysis (PCA) are used as methods and the analysis is carried out at country group level.

This paper is organized as follows. In the next section, we provide a brief literature review on tax morale and its main determinants. Then, we present the research design, including our research hypotheses, based on the existing literature, data and methods. The next section of the paper provides the research results, at each country group. Finally, we discuss and conclude, also presenting the limits of this study.

Theoretical background. A growing literature coming from economics, sociology or psychology explores the wide range of variables that might explain voluntary compliance behaviour. Socio-economic factors such as age, religion, gender, employment status and educational attainment have a significant impact on people's levels of tax morale. Sometimes the research results are consistent among the existing studies while in other cases the results are heterogeneous. The empirical study of Williams and Krasniqi [13] on 35 Eurasian countries shows a higher tax morale when it comes to people who are married, who have children, who own their own home, who have a university degree and are employed as compared to the people belonging to the opposite categories. This study finds no significant relationship tax morale and gender.

Daude et al. [2] reached the same conclusions regarding the relationship between the level of education, employment and tax morale. In addition, they show that those who claim a faith or religious identity have more positive attitudes towards paying taxes. Related to gender, the results of this study point out that women exhibit higher levels of tax morale.

As for the influence of institutions on people's willingness to pay taxes, the empirical study developed by Frey and Torgler [4] on 30 West and East European countries proves a strong positive correlation between institutional quality and tax morale. Also, it has been proven that tax moral is higher in more developed countries with stronger legal systems and less corruption and with higher levels of state intervention in the form of both taxation and expenditure [13]. Besides, citizens who consider redistribution as an essential characteristic of democracy show higher tax morale [2].

The relationship between trust in government and people's willingness to pay taxes has also been largely investigated in literature, the results showing positive correlation [8; 9; 4]. The relationship between the taxpayers and the state takes the form of a "psychological tax contract" [3]. If the state is perceived as acting in a trustworthy way, developing positive actions, this enhances citizens' commitment and support and tax compliant behaviour is likely to increase [7; 10].

Research design.

3.1. Hypotheses

Based on the existing literature, we establish the following research hypotheses:

H1. *The quality of institutions is associated with people's intrinsic motivation to pay taxes, no matter the level of development.*

H2. *Individuals' negative perception on the capacity of the government to efficiently allocate is negatively associated with their motivation to pay taxes, at all levels of development.*

H3. *Institutional factors associated with tax morale vary according to the level of development.*

3.2. Data

Data on the level of Tax morale were retrieved from World Value Survey, 2010-2014 wave, and it has been constructed on the basis of the respondents' positioning to the following item: "Justifiable: Cheating on taxes if you have a chance". For the purpose of this paper we kept in the analysis only the "always justifiable" (which, in our paper, stands for low tax morale) and "never justifiable" (high tax morale) assessments.

Since Tax morale is about individuals' intrinsic motivation to pay taxes, all variables describing institutional framework are subjective indicators of individuals' perceptions. They were collected from various editions of World Competitiveness Report [15], World Bank governance indicators [14] and also World Value Survey [16] (Table 1).

Table 1. Explanatory institutional factors associated with tax morale

| Variable | Code | Definition | Source |
|--|-----------------|--|------------------------------|
| Confidence in government | Confidence_Gov | The cumulative percentage of respondents' declaring a great deal of confidence and quite a lot of confidence in their government | World Value Survey |
| Trust in people | Trust_People | The percentage of respondents' stating that "Most people can be trusted" | World Value Survey |
| Preference for redistribution | Redistrib | The percentage of respondents' who consider that "Governments tax the rich and subsidize the poor is an essential characteristic of democracy" | World Value Survey |
| Diversion of public funds | Div_Publ_Funds | The respondents' answers to the following: In your country, how common is diversion of public funds to companies, individuals, or groups due to corruption? (1 = very commonly occurs; 7 = never occurs) – weighted average assessment | World Competitiveness Report |
| Wastefulness of government spending | Waste_Gov_Spend | The respondents' answers to the following: In your country, how efficiently does the government spend public revenue? (1 = extremely inefficient; 7 = extremely efficient in providing goods and services) – weighted average assessment | World Competitiveness Report |

| Variable | Code | Definition | Source |
|--------------------------|-----------|--|----------------------------------|
| Government effectiveness | Gov_Eff | People' perceptions of the quality of public and civil services and policy | World Bank governance indicators |
| Rule of law | Rule_Law | People' perceptions of the quality of the existing rules and the extent to which agents have confidence in these rules | World Bank governance indicators |
| Control of corruption | Ctrl_Corr | People' perceptions of the extent to which public power is exercised for private gain and state capture | World Bank governance indicators |

Our sample consists of 47 countries, grouped in three categories –developed (11 countries: Australia, Cyprus, Estonia, Japan, Netherlands, New Zealand, Poland, Romania, Slovenia, Spain, United States), developing economies (30 countries: Algeria, Argentina, Brazil, Chile, China, Colombia, Egypt, Ghana, Hong Kong, India, Jordan, Kuwait, Lebanon, Malaysia, Mexico, Morocco, Nigeria, Pakistan, Peru, Philippines, Rwanda, Singapore, South Africa, South Korea, Thailand, Trinidad and Tobago, Tunisia, Turkey, Uruguay, Zimbabwe) and economies in transition (6 countries: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Ukraine), according to UN World Economic Situation and Prospects country classification.

These countries were selected based on data availability for Tax morale.

3.3. Methods

Descriptive statistics and PCA are used as methods and the analysis was carried out at country group level. The first method provides an overview of the variation of the variables both within the country group and across the groups. Using PCA, we highlight the resemblances and the differences between the countries belonging to the same stage of development.

Results. 4.1. Descriptive Statistics.

Table 2 presents the results of the descriptive statistics for the three analysed groups of countries.

Table 2. Descriptive statistics

| Country group | Variable | N | Mean | Max | Min | Std. Deviation | Coef. of variation |
|-------------------------|-----------------|---------|---------|-------|--------|----------------|--------------------|
| Developed | Low_tax_morale | 11 | 1,236 | 3,9 | 0,2 | 0,9678 | 78,30 |
| | High_tax_morale | 11 | 66,918 | 83,8 | 52,9 | 8,5433 | 12,77 |
| | Confidence_Gov | 11 | 28,964 | 52,8 | 7,7 | 13,2713 | 45,82 |
| | Trust_People | 11 | 32,618 | 66,1 | 7,5 | 19,3703 | 59,39 |
| | Div_Publ_Funds | 11 | 4,51 | 6,5 | 2,5 | 1,1480 | 25,45 |
| | Waste_Gov_Spend | 11 | 3,264 | 4,5 | 2,2 | 0,7514 | 23,02 |
| | Redistrib | 11 | 13,727 | 23,1 | 5 | 6,1195 | 44,58 |
| | Gov_Eff | 11 | 1,214 | 1,88 | -0,31 | 0,6302 | 51,91 |
| | Rule_Law | 11 | 1,239 | 1,91 | 0,02 | 0,5512 | 44,49 |
| | Ctrl_Corr | 11 | 1,218 | 2,34 | -0,26 | 0,7576 | 62,20 |
| Developing | Low_tax_morale | 30 | 2,020 | 12 | 0,2 | 3,0130 | 149,16 |
| | High_tax_morale | 30 | 60,1733 | 86 | 32 | 14,2206 | 23,63 |
| | Confidence_Gov | 30 | 47,7367 | 84,6 | 17,8 | 16,3988 | 34,35 |
| | Trust_People | 30 | 17,9167 | 60,3 | 3,2 | 13,0897 | 73,06 |
| | Div_Publ_Funds | 30 | 3,4733 | 6,1 | 1,8 | 1,1200 | 32,25 |
| | Waste_Gov_Spend | 30 | 3,2367 | 5,9 | 1,4 | 1,0503 | 32,45 |
| | Redistrib | 30 | 20,0233 | 51 | 8,9 | 10,3899 | 51,89 |
| | Gov_Eff | 30 | 0,12 | 2,15 | -1,36 | 0,7669 | 639,08 |
| | Rule_Law | 30 | -0,09 | 1,77 | -1,78 | 0,7923 | -880,33 |
| | Ctrl_Corr | 30 | -0,10 | 2,15 | -1,38 | 0,8193 | -819,30 |
| Economies in transition | Low_tax_morale | 6 | 1,700 | 3,8 | 0,2 | 1,3023 | 76,61 |
| | High_tax_morale | 6 | 64,550 | 84,4 | 48,2 | 14,7132 | 22,79 |
| | Confidence_Gov | 6 | 51,4833 | 80,1 | 25,4 | 22,8609 | 44,40 |
| | Trust_People | 6 | 22,0333 | 38,3 | 8,8 | 12,8115 | 58,15 |
| | Div_Publ_Funds | 6 | 3,050 | 4,5 | 2,1 | 0,8140 | 26,69 |
| | Waste_Gov_Spend | 6 | 3,1333 | 3,8 | 2,2 | 0,7146 | 22,81 |
| | Redistrib | 6 | 23,7667 | 34,2 | 6,7 | 10,5135 | 44,24 |
| | Gov_Eff | 6 | -0,3783 | 0,48 | -0,81 | 0,4956 | -131,01 |
| | Rule_Law | 6 | -0,6133 | 0,20 | -1,23 | 0,4823 | -78,64 |
| Ctrl_Corr | 6 | -0,6783 | 0,74 | -1,15 | 0,7206 | -106,24 | |

Analysing the above data, we notice that, on average, when compared with the other two categories of countries, the developed ones are characterized by higher levels of tax morale, higher trust in people, lower diversion of public funds, higher government effectiveness, higher rule of law and a higher control of corruption. The citizens in these countries also declare lower confidence in their governments and lower preference for redistribution.

The results also point out major variations within the country groups. The coefficient of variation shows that the developed countries have the most homogenous behaviour regarding almost all the issues. The most heterogeneous

behaviour is manifested by the developing countries, having extreme differences of opinions regarding the government efficiency, the rule of law and the control of corruption.

4.2. Results of PCA for developed countries.

The results of PCA for developed countries show an association between low tax morale, confidence in the government, trust in the people, diversion of public funds, wastefulness of government spending, government efficiency, rule of law, control of corruption and preference for redistribution. This combination of variables explains over 85% of the total variance through the first two components (Table 3).

Table 3. Total variance explained by the initial solution

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 6,599 | 73,318 | 73,318 | 6,599 | 73,318 | 73,318 |
| 2 | 1,071 | 11,899 | 85,216 | 1,071 | 11,899 | 85,216 |
| 3 | ,828 | 9,197 | 94,413 | | | |
| 4 | ,195 | 2,166 | 96,579 | | | |
| 5 | ,130 | 1,443 | 98,022 | | | |
| 6 | ,118 | 1,312 | 99,334 | | | |
| 7 | ,045 | ,503 | 99,837 | | | |
| 8 | ,015 | ,163 | 100,000 | | | |
| 9 | 1,194E-005 | ,000 | 100,000 | | | |

Extraction Method: Principal Component Analysis.

All of the variables (except for Confidence_gov) have significant contribution to the first component, with which low tax morale and redistribution are negatively correlated, and the other variables are positively correlated (Table 4).

Table 4. Component matrix

| | Component | |
|-----------------|-----------|-------|
| | 1 | 2 |
| Confidence_gov | ,591 | ,682 |
| Trust_people | ,882 | ,126 |
| Div_publ_funds | ,972 | ,129 |
| Waste_gov_spend | ,892 | ,343 |
| Gov_eff | ,936 | -,182 |
| Rule_Law | ,965 | -,156 |
| Ctrl_corr | ,963 | -,127 |
| Redistrib | -,791 | ,180 |
| Low_tax_morale | -,609 | ,591 |

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

Figure 1a and Figure 1b. below show variables and, respectively, countries positioning in the first two factorial axes.

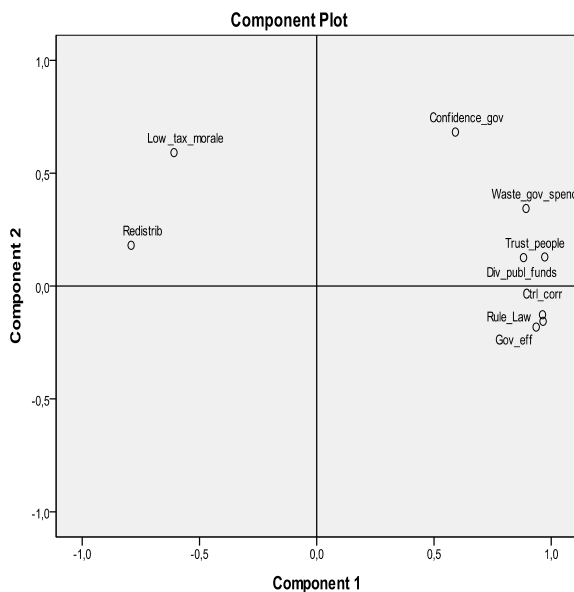


Fig. 1a. Component plot

Source: Output obtained in SPSS.

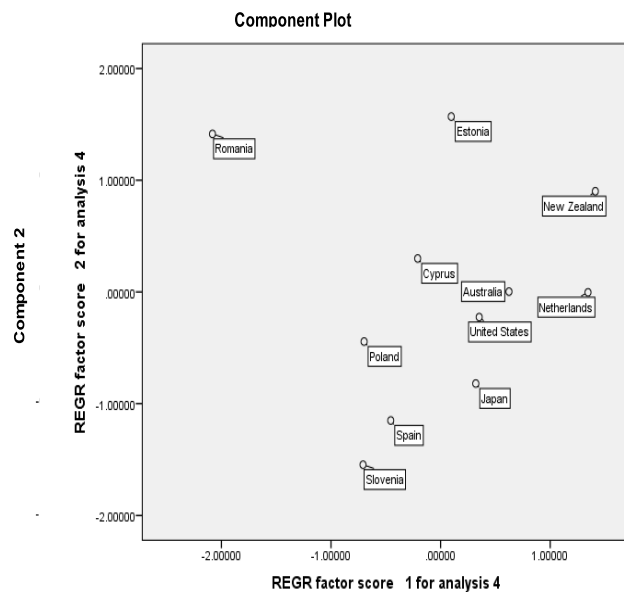


Fig. 1b. Components' score

Source: Output obtained in SPSS.

From Figure 1a there can be noticed a positive association between low tax morale and high preference for redistribution and a negative one between these two variables and the institutional indicators. Countries' positioning in Figure 1a shows that Romania has an opposite behaviour as to the rest of the developed countries, its citizens manifesting a low intrinsic motivation to pay taxes and a high preference for redistribution. At the same time, in Romania the institutional quality is low, the citizens perceive the government as ineffective, the wastefulness of public

money and the diversion of public funds as high and they declare a low level of interpersonal trust.

4.3. Results of PCA for developing countries.

The results of PCA for the group of the developing countries show the same association of variables as for the developed countries, except for the preference for redistribution. This combination of variables explains over 75% of the total variance through the first two components (Table 5).

Table 5. Total variance explained by the initial solution

Total Variance Explained

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 4,661 | 58,260 | 58,260 | 4,661 | 58,260 | 58,260 |
| 2 | 1,418 | 17,720 | 75,980 | 1,418 | 17,720 | 75,980 |
| 3 | ,754 | 9,428 | 85,408 | | | |
| 4 | ,592 | 7,395 | 92,804 | | | |
| 5 | ,325 | 4,062 | 96,866 | | | |
| 6 | ,139 | 1,738 | 98,604 | | | |
| 7 | ,064 | ,803 | 99,407 | | | |
| 8 | ,047 | ,593 | 100,000 | | | |

Extraction Method: Principal Component Analysis.

The variables that have significant contribution to the first component are confidence in government, diversion of public funds, wastefulness of government spending, government effectiveness, rule of law and control of corruption, and all of them being positively correlated with

the first component. The low tax morale and the trust in people contribute significantly to the second component. Low tax morale is positively and trust in people is negatively correlated with the second component (Table 6).

Table 6. Component matrix

Component Matrix^a

| | Component | |
|-----------------|-----------|-------|
| | 1 | 2 |
| Confidence_gov | ,646 | -,388 |
| Trust_people | ,498 | -,618 |
| Div_publ_funds | ,925 | ,013 |
| Waste_gov_spend | ,820 | ,011 |
| Gov_eff | ,886 | ,263 |
| Rule_Law | ,899 | ,249 |
| Ctrl_corr | ,929 | ,227 |
| Low_tax_morale | -,228 | ,572 |

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

Analysing the results, we notice that in those countries with high confidence in government, the diversion of public funds rarely occurs, the government efficiently spends

public revenues, and rule of law and control of corruption are high. Also, countries with low trust in people have low tax morale (Figure 2a and 2b).

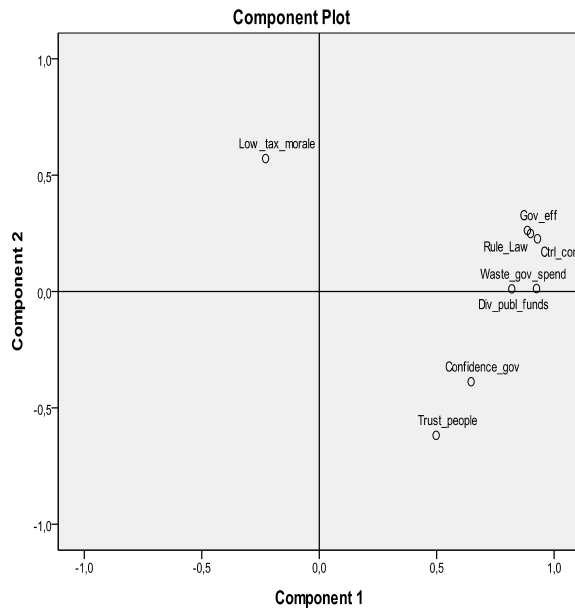


Fig. 2a. Component plot

Source: Output obtained in SPSS.

The display of the countries according with the two components' score show, for the first component, a somewhat similar behaviour of China, Hong Kong and Singapore, with high values for confidence in government, government efficiency, rule of law and control of corruption, lower diversion of public funds and lower wastefulness, as opposed to the other developing countries.

Also, from the second component we observe that China has an opposite behaviour as to the other countries, having

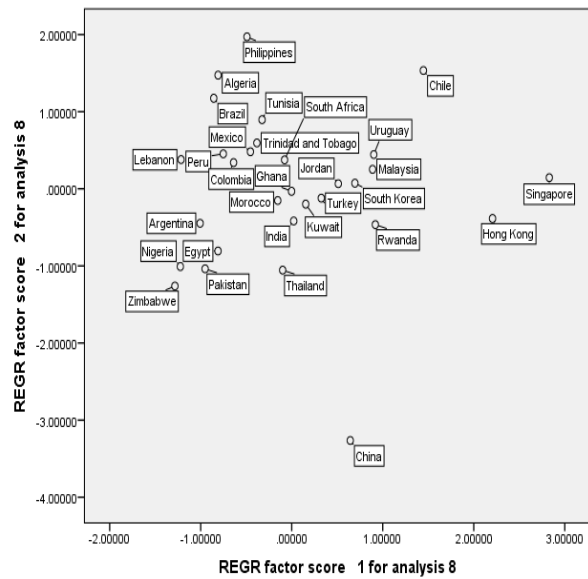


Fig. 2b. Components' score

Source: Output obtained in SPSS.

high trust in people and high tax morale. The different culture and the political regime may explain China's positioning among the developing countries.

4.3. Results of PCA for economies in transition

The PCA performed for the group of economies in transition relies on the same combination of variables as for the developing economies, which explains about 85% of the total variance through the first two components (Table 7).

Table 7. Total variance explained by the initial solution

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 4,901 | 61,259 | 61,259 | 4,901 | 61,259 | 61,259 |
| 2 | 1,885 | 23,558 | 84,817 | 1,885 | 23,558 | 84,817 |
| 3 | ,792 | 9,900 | 94,717 | | | |
| 4 | ,293 | 3,666 | 98,383 | | | |
| 5 | ,129 | 1,617 | 100,000 | | | |
| 6 | 1,009E-013 | 1,106E-013 | 100,000 | | | |
| 7 | 1,001E-013 | 1,017E-013 | 100,000 | | | |
| 8 | -1,002E-013 | -1,019E-013 | 100,000 | | | |

Extraction Method: Principal Component Analysis.

The variables that have significant contribution to the first component are high tax morale, government effectiveness, rule of law, control of corruption, diversion of public funds, positively correlated, and trust in people which is negatively correlated with the first component.

The confidence in government and wastefulness of public spending are significantly and positively correlated with the second component (Table 8).

Table 8. Component matrix

Component Matrix^a

| | Component | |
|-----------------|-----------|-------|
| | 1 | 2 |
| Confidence_gov | -,332 | ,900 |
| Trust_people | -,780 | ,033 |
| Div_publ_funds | ,952 | ,102 |
| Waste_gov_spend | ,451 | ,805 |
| Gov_eff | ,896 | -,188 |
| Rule_Law | ,962 | -,081 |
| Ctrl_corr | ,930 | -,283 |
| High_tax_morale | ,691 | ,542 |

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

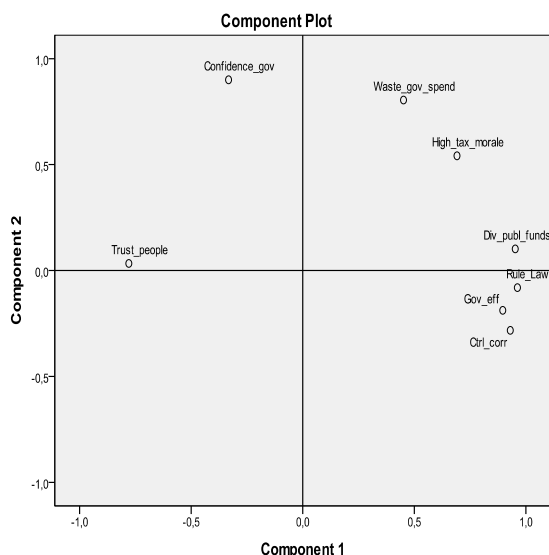


Fig.3a. Component plot

Source: Output obtained in SPSS.

The display of the countries according with the two components show that Georgia, which has a high tax morale, is opposed with the other countries (with a low tax morale, a low government effectiveness, low control of corruption and low rule of law, and with high level of trust in people).

According to the second component, we observe that Georgia is associated with low wastefulness of government spending and with low confidence in the government, as opposed to Azerbaijan, which has high confidence in the government and low wastefulness of government spending.

Discussions and conclusions. This paper aimed at identifying the institutional factors associated with tax moral at country- group level and at highlighting the resemblances and the differences between the countries belonging to the same level of development.

The descriptive statistics results show that the group formed by the developed countries clearly distinguishes from the other two by higher tax morale, higher trust in people, lower diversion of public funds, lower wastefulness of government spending, higher government effectiveness,

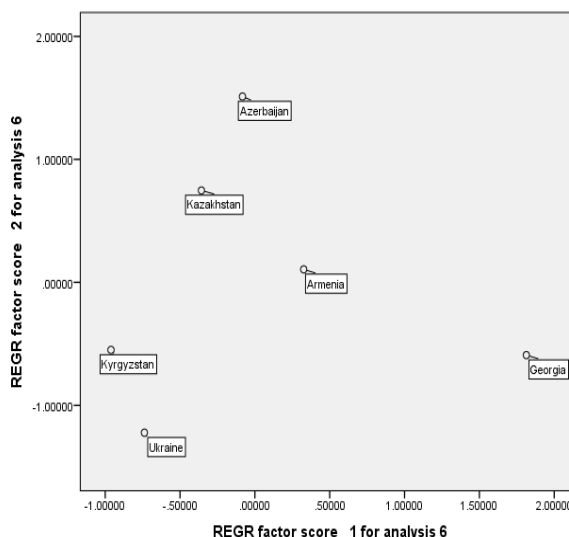


Fig.3b. Components' score

Source: Output obtained in SPSS.

rule of law and control of corruption, and lower confidence in government and lower preference for redistribution.

Our research hypotheses are confirmed by the results obtained with PCA. No matter the level of development, people' intrinsic motivation to pay taxes can be associated with good institutions and government ability to efficiently allocate public funds. The institutional factors consistently associated with tax morale are confidence in government, trust in the people, diversion of public funds, wastefulness of government spending, government efficiency, rule of law, control of corruption. The results also show that the individuals' preference for redistribution can be associated (positively) with low tax morale only in the developed countries. This variable is not an explanatory one when it comes to developing and transition economies.

Each country group displays one country with a different behaviour from all the rest: Romania (belonging to the group of developed countries) – low tax morale and high preference for redistribution; low confidence in the government; low trust in the people; high diversion of public funds; high wastefulness of government spending; low

government efficiency, low rule of law and control of corruption; China (a developing economy) – high tax morale, high trust in people, high confidence in government, high perceived institutional quality (government effectiveness, rule of law and control of corruption), lower diversion of public funds and lower wastefulness of public spending; and Georgia (economy in transition) – high tax morale, high government effectiveness, high control of corruption and high rule of law, but low trust in people.

The obtained results also confirm the results of previous studies in this field. Institutional factors that shape individuals' attitudes towards paying taxes are related to the "perceptions regarding institutions, the use of tax revenues such as the quality of public services, and the strength of democracy" [2].

Also, the results obtained for countries' characterisation are consistent with other studies in the field. For example, when analysing tax morale in Asian countries, Torgler [9] found that Japan, China and India have high tax morale values and, furthermore, these are higher than for OECD countries. The same study also shows that tax morale is very low in Philippines.

The limits of this research derive from two main issues: data subjectivity and data coverage. Referring to the first one the attitudes expressed in public opinion surveys do not necessarily predict actual behaviour. For example, according to an article published by Forbes magazine, "79% of Americans say it's morally wrong to cheat on their taxes. Yet, it's estimated that over 1.6 million individuals cheat on their taxes each year" [6]. When it comes to data coverage we can conclude that further research should take into consideration a more in-depth country analysis in order to provide inspiring solutions for policy reform.

References:

- Cummings, R. G., Martinez-Vazquez, J., McKee, M. and Torgler, B., 2009. Tax Morale Affects Tax Compliance: Evidence from Surveys and an Artefactual Field Experiment. *Journal of Economic Behavior & Organization*, 70 (3), pp.447-457, DOI: 10.1016/j.jebo.2008.02.010
- Daude, C., Gutiérrez, H. and Melguizo, A., 2012. What Drives Tax Morale? Working Paper No. 315. OECD Development Centre: URL : http://www.oecd-ilibrary.org/development/what-drives-tax-morale_5k8zk8m61kzq-en.

3. Feld, L.P. and Frey, B.S., 2007. Tax Evasion, Tax Amnesties and the Psychological Tax Contract. *International Studies Program Andrew Young School of Policy Studies Georgia State University*: <http://icepp.gsu.edu/files/2015/03/ispwp0729.pdf>.

4. Frey, B. S. and Torgler, B., 2007. Tax Morale and Conditional Cooperation. *Journal of Comparative Economics*, vol. 35, pp.136-159, DOI: 10.1016/j.jce.2006.10.006.

5. Iacobuta, A.O., Viorica, E.D. and Asandului, M., 2016. Institutional Factors Associated with Tax Morale. Paper presented at the 20th International Conference "Ethics in Economic Life". Lodz, Poland. Abstract published in *Proceedings (2016)*. Lodz University Press, vol. 69.

6. Morin, A., 2016. Study Says Cheating May Help You Get Ahead, But You'll Lose More in The End. *Forbes Magazine*: URL : <https://www.forbes.com/sites/amymorin/2016/05/07/study-says-cheating-may-help-you-get-ahead-but-youll-lose-more-in-the-end/#13a9b06965ef>.

7. Smith, K. W., 1992. Reciprocity and Fairness: Positive Incentives for Tax Compliance. In: J. Slemrod (ed.). *Why People Pay Taxes. Tax Compliance and Enforcement*. Ann Arbor: University of Michigan Press, pp.223-258.

8. Torgler, B., 2003. Tax Morale in Transition Countries. *Post-Communist Economies*, 15(3), pp.357-381, DOI: 10.1080/1463137032000139052

9. Torgler, B., 2004. Tax morale in Asian countries. *Journal of Asian Economics*, vol. 15, pp.237-266.

10. Torgler, B., 2011. Tax Morale and Compliance Review of Evidence and Case Studies for Europe. Policy Research Working Paper 5922. World Bank: URL : <http://documents.worldbank.org/curated/en/862221468282310839/pdf/WPS5922.pdf>.

11. Torgler, B. and Schneider, F., 2007. Shadow Economy, Tax Morale, Governance and Institutional Quality: A Panel Analysis. IZA DP No. 2563: URL : <https://pdfs.semanticscholar.org/c749/7fcea37ef43552a0e848ce930120728384d6.pdf>.

12. Torgler, B. and Schneider, F., 2009. The impact of tax morale and institutional quality on the shadow economy. *Journal of Economic Psychology*, 30(2), pp.228-245. DOI: 10.1016/j.joep.2008.08.004.

13. Williams, C.C. and Krasniqi, B.A., 2017. Evaluating the individual- and country-level variations in tax morale: Evidence from 35 Eurasian countries. *Journal of Economic Studies*, 44 (5), pp.816-832. DOI: 10.1108/JES-09-2016-0182

14. World Bank: Worldwide Governance Indicators: URL : <http://info.worldbank.org/governance/wgi/#home>.

15. World Economic Forum: The Global Competitiveness Report: URL : <https://www.weforum.org/reports>.

16. World Value Survey Database: URL : <http://www.worldvaluessurvey.org/WVSONline.jsp>.

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ІНСТИТУЦІЙНІ ФАКТОРИ, ЩО ПОВ'ЯЗАНІ З ПОДАТКОВОЇ МОРАЛЛЮ: АНАЛІЗ НА РІВНІ ГРУПИ КРАЇН

Нарощувана економікою, соціологією або психологією література досліджує широкий спектр змінних, які, напевно, зможуть пояснити поведінку добровільного дотримання стандартів. Метою цієї роботи є виявлення інституційних чинників, пов'язаних із податковою мораллю, а також виявлення подібностей і відмінностей між декількома країнами світу, згрупованими за рівнем розвитку. Як методи використовуються описова статистика й аналіз основних компонентів, а саме розгляд проводиться на рівні групи країн. Основні результати показують, що, незалежно від рівня розвитку, внутрішня мотивація людей платити податки може бути пов'язана з хорошими державними інститутами і здатністю уряду ефективно розподіляти державні кошти.

Ключові слова: податкова мораль, стадія розвитку, інститути, уряд, корупція, аналіз основних компонентів.

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ІНСТИТУЦИОНАЛЬНЫЕ ФАКТОРЫ, СВЯЗАННЫЕ С НАЛОГОВОЙ МОРАЛЬЮ: АНАЛИЗ НА УРОВНЕ ГРУППЫ СТРАН

Нарращиваемая экономикой, социологией или психологией литература исследует широкий спектр переменных, которые, наверное, смогут объяснить поведение добровольного соблюдения стандартов. Целью данной работы является выявление институциональных факторов, связанных с налоговой моралью, а также выявление сходств и различий между несколькими странами мира, сгруппированными по уровню развития. В качестве методов используются описательная статистика и анализ основных компонентов, а само рассмотрение проводится на уровне группы стран. Основные результаты показывают, что, независимо от уровня развития, внутренняя мотивация людей платить налоги может быть связана с хорошими государственными институтами и способностью правительства эффективно распределять государственные средства.

Ключевые слова: налоговая мораль, стадия развития, институты, правительство, коррупция, анализ основных компонентов.