ELIMINATION OF TAX COMPLEXITY ISSUES THROUGH FINANCIAL LITERACY

Fuad Bahramov*
University of Oradea, Oradea, Romania

Abstract
Modern taxation systems often experience complexity and investigations have attempted to define whether the tax complexity has an impact on the compliance of taxpayers. A low level of literacy can be an obstacle in the tax system. This paper will examine the impact of financial literacy on tax revenues to prove the relationship between literacy and taxation. The study will also provide suggestions for developing financial literacy which may reduce the negative influence of tax complexity on tax compliance. The educational systems do not provide taxation as a subject at any stage, however, tax knowledge is required for understanding taxes and for implementation of tax calculations and those skills directly affect the finances of individuals and the performance of businesses. A low level of financial education and tax knowledge in society affects the financial attitude of individuals and households which can lead to lower tax compliance and eventually, create a fertile environment for tax evasion. The tax complexity concerns not only people and businesses but also governments and tax administrations, because it also decreases tax revenues in the end. The study will use a simple regression model as a method in order to find out the relationship between financial literacy and taxation, as well as it will support suggestions to eliminate tax complexity issues. The main tax variables will be taken from the Eurostat database and financial literacy variables will be sourced from the OECD survey of financial competencies. Every individual and country must take financial education into serious consideration to avoid the anticipated consequences in personal life and negative results in economic development.

Keywords
financial literacy, tax literacy, tax complexity, taxation, tax systems.

JEL Classification
H2; H26; H52

* Corresponding author, **Faud Bahramov** – fuad.behremov.96@gmail.com.

Introduction

Financial education and tax literacy are significant for a comprehensive, effective, and healthy economic life. Daily decisions of people financially impact not only their personal life but also their household situation. The economic and financial crises and problems often remind us that there is a requirement to boost financial knowledge and abilities.

Generally, individuals need financial literacy in the 21st century for several reasons such as complicated financial products and the increase of those products through globalization. Unfortunately, financial ignorance may cause significant expenses. The skills and capacity to understand financial information and to draw financial plans are important to achieve goals. The studies have examined that a high level of financial literacy affects the national economies, positively.

The first objective of research is to define the impact of financial literacy level on taxation by implementation of own empirical analysis and providing examples of previous studies from different authors in the literature. In this study, financial literacy as a context contains not only basics such as debts, assets, inflation, and decision-making risks but also tax knowledge. Secondly, some recommendations will be provided for developing financial education level and literacy which finally, can eradicate or reduce the impact of tax complexity issues on tax compliance and taxation.

Complicated tax legislations, reforms, and frequent changes of regulations lead to tax complexity and taxation turns hard to understand for both individuals and households. Therefore, financial literacy and tax awareness are used as tools in countries to reduce and eliminate complexity. Moreover, tax literacy has a firm connection not only with the financial situation of society but also with government revenues and spending.

Tax complexity reduces tax compliance and thus, it may lead to the creation of opportunities for corruption, tax avoidance, and evasion in the end. Being a fertile tax system for corruption and evasion also depends on the cultural features of countries. Complexity increases the administrative costs of tax systems. Generally, tax complexity is not an inevitable issue, and tax administrations can overcome it through financial education and tax literacy.

1. Review of the scientific literature

The significant role of financial education in economic and social life increased interest in that topic and many studies investigate financial and tax literacy with different methods. Financial literacy may change the financial attitude of people. (Amonhaemanon and Sitta, 2020). Individuals need awareness of the economic environment and an understanding of basics such as interest rates, inflation, credits, purchasing power parity (PPP) etc.

Financial education or financial knowledge was also defined as financial literacy in literature. Although financial education and financial literacy are closely linked contents, their meanings are not the same. Financial education is the process, courses, and tasks which lead to financial literacy. Thus, education generates literacy. According to the author, financial literacy contains not only financial calculations, basic theories, and concepts, but also tax knowledge.

Kempson et al. (2005) define financial literacy as obtaining, understanding, and evaluating financial information by individuals. The term has also been conceptualized as a set of abilities, skills, and knowledge that impact the financial behavior of society. Obviously, it also affects tax compliance.

Financial knowledge is measured by objective and subjective evaluations or assessment tests. People's self-assessment of their financial literacy defines subjective financial knowledge according to the number of evaluation questions used by the National Financial Capability Survey (NFCS) of the USA. For the measurement of subjective knowledge, a question from NFCS was used by Xiao et al (2014): "How would you find your general financial education?".

Objective assessment is not related to the personal assessment of people by themselves, it refers to the measurement of financial knowledge by evaluating the level of understanding of different financial indicators and products such as savings, investments, debts, assets, etc. (Leskinen & Raijas, 2006). The basic fields for financial knowledge measurement are as follows according to Lusardi and Mitchell (2014): ability and numeracy to do estimations connected to interest rates, awareness of risk diversification, and understanding of inflation.

The financial literacy level is necessary because of its connection with decision-making. Additionally, as an element of financial literacy, tax literacy reduces tax complexity. All those facts can directly affect the financial situation of individuals and the financial performance of businesses. The higher financial performance or higher profits of companies equals a higher level of taxes which should be paid to the government budget. Thus, it also affects the tax revenues of the government.

The group of all taxes which are levied as a rule at the specific government, country, and territory creates the tax system. (Koštuříková, 2011). Every individual in the society should have a basic knowledge of taxation. Lewis, (1982) defines the influence of a high level of tax knowledge on behavior toward taxation which can have important effects on tax compliance. Furthermore, his study also finds out that negative attitudes towards taxation might cause a decrease in tax knowledge in society.

Tax knowledge or a high level of tax literacy as a part of financial education can bring the barriers down in understanding taxation and in overcoming tax complexity. Tax complexity occurs when the tax law tends to have increased sophistication. It might be classified as effective simplicity and legal simplicity. The legal one identifies whether the tax law is readable and comprehensive, however, the effective one refers to skills to find out tax liabilities accurately. Tax complexity reduces tax compliance. Obviously, if the tax system is easy to understand and follow, the taxpayers will probably comply. Thus, the complex system can mislead taxpayers intentionally or inadvertently from complying (Isa, 2014).

High complexity means a low level of tax compliance which can later lead to tax evasion. If increased tax literacy may solve the complexity problem, it will lead to increased tax compliance and tax revenues. Several researchers have found an important relationship between complexity and tax compliance. Obtaining much information about taxation increased compliance and reduced tax evasion according to the survey by Eriksen and Fallan (1996). The relationship between tax literacy and taxation and its influence on tax compliance was studied in the case of Malaysia by Ahmed, et al, 2005. The data of their research was based on a survey that contains questions related to basic tax knowledge. The results show that 88% of business owners who are not literate in taxation cannot complete their own tax files.

Government revenue administrations consider tax compliance and methods to increase that compliance as one of the important tasks in modern tax systems. Administrations have a management system that contains significant approaches (simple legislations and procedures, assistance, and training for taxpayers) to create optimal compliance (Russel, 2010). Therefore, application programs, software, sample practices, and tax literacy that empower the communication and connection between the tax administration and payers turn out to be the main tool for making effective tax systems in developed countries.

Additionally, there are also several modern studies that show the relationship between tax literacy and taxation. *Nichita et al*., (2019) examined the influence of tax literacy on tax compliance by surveying 358 taxpayers from Romania and moderation analysis was implemented in the research. The survey regarding the taxation concepts helped to define the literate taxpayers and regression analysis showed that higher tax literacy equals higher tax compliance and the tax revenues are high when the tax literacy is high. Another recent study on literacy and tax compliance had been done by Shamana et al., (2020) in the case of Wolaita Sodo town in Ethiopia. That study also carried out a survey that contained questions regarding basic tax rules. The study defines that the compliance behavior of taxpayers can be developed by increasing tax knowledge. Mat Jusoh et al., (2021) examined the relationship of tax compliance with tax complexity, tax knowledge, and tax morale among employees in Malaysia by using a non-probability sampling method and data collection based on questionaries. The study proved the negative impact of complexity, and positive impact of tax knowledge and morale on tax compliance attitude, empirically.

Almost all studies prove the positive influence of literacy on tax compliance and tax revenues. In author’s opinion, tax systems have complicated structures which are difficult to understand for every individual, however that complexity issue can be reduced and the level of understanding can be increased by provision of effective financial and tax education from early ages.

2. Research methodology

The empirical part of research will define the relationship between literacy and taxation by simple regression model:

$$Y=\alpha+\beta X+\varepsilon \tag{1}$$

Where:

X − independent indicator and shows the financial literacy,

Y − the dependent variable which shows the tax revenues,

ε − refers to the error term.

The relationship will be shown on a graph for the cases of different countries. The main data for financial literacy was extracted from the OECD survey of adult financial literacy competencies (OECD, 2020). The indicators of tax revenues will be collected from Eurostat and OECD databases.

The countries are selected not only from Europe but also from other continents for an effective comparison.

The overall financial literacy score is calculated based on simple financial skills, knowledge, attitudes, and behaviors. According to a survey by the OECD, people who participated in that from various countries scored 12.7 or 61% of the maximum point of financial literacy (OECD, 2020). The survey contains questions related to basic financial knowledge such as interest rate calculations, inflation, and risk diversification.

The set of questions about long-term financial planning, savings, tracking cash flows and purchases addressed to the participants was intended to find out the potential financial behaviors of individuals. Finally, to define the financial attitudes the questions which mainly requires the answer of agreement or disagreement with given statements had been applied in the survey. Awareness of tax liabilities and deductions had also been taken into consideration. However, specific rules about taxation were not part of the international questionnaire, because each government has different tax laws.

3. Results and discussions

The following table shows the scores of financial knowledge, attitudes, behaviors, and overall financial scores for selected countries.

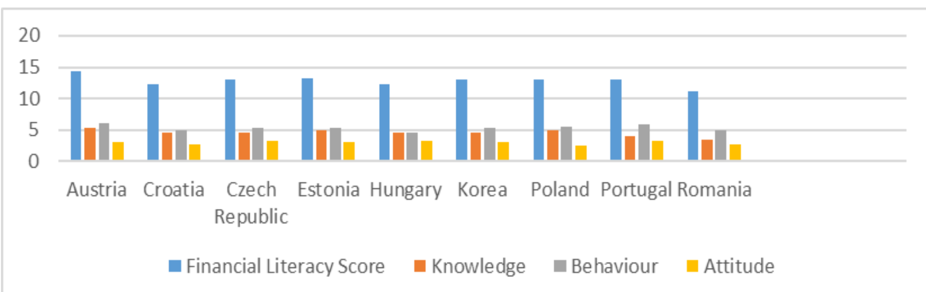

Chart no. 1. Financial Literacy Scores, 2020
Source: Authors' representation based on OECD (2020), OECD/INFE 2020 International Survey of Adult Financial Literacy

Austria and Estonia have high financial literacy scores which are around 14, the value being also higher than the average of eleven OECD countries. Financial behavior contributes more than other components in Austria and Estonia. Generally, financial attitude of adults is weaker in comparison to knowledge and attitude in most of those selected countries for survey. The highest average financial literacy score was recorded in Austria among the selected countries and Romania was having a score of 11 (OECD, 2020). Poland has a high level of financial knowledge, despite the overall score of financial literacy is lower because of low level of financial attitude and behavior.

The same organization implemented a similar survey in 2016 and the results were so close with the year 2020. It explains that the countries could not achieve to change in literacy level in 4 years.

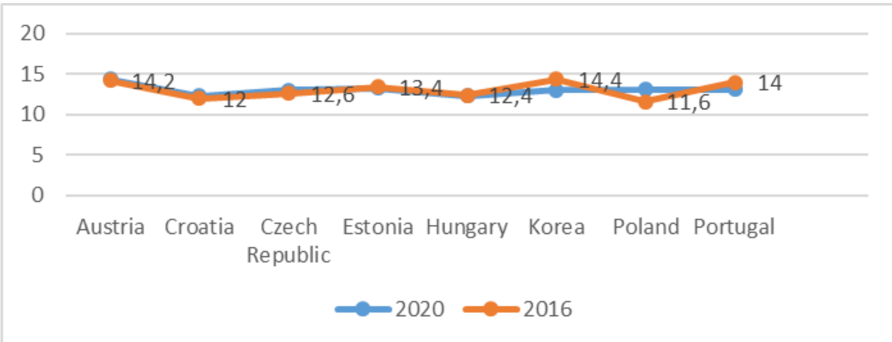

Chart no. 2. The Financial Literacy Scores, 2016
Source: Authors' representation based on OECD (2016 and 2020), OECD/INFE International Survey of Adult Financial Literacy.

The literacy level in Austria among adults had changed only with 0.2-point increase according to the surveys. The same trend is applicable for other selected countries. Overall, the graph demonstrates that the changes were less than 1.0 point, and the highest changes were observed in Korea, Poland, and Portugal. Poland has an increased level of literacy, while Korea and Portugal have a decrease in financial literacy level among adults. The average scores of literacies in given years were 12.99 and 13.03, respectively. The almost unchanged situation of financial literacy level in 4 years allows us to predict the following years.

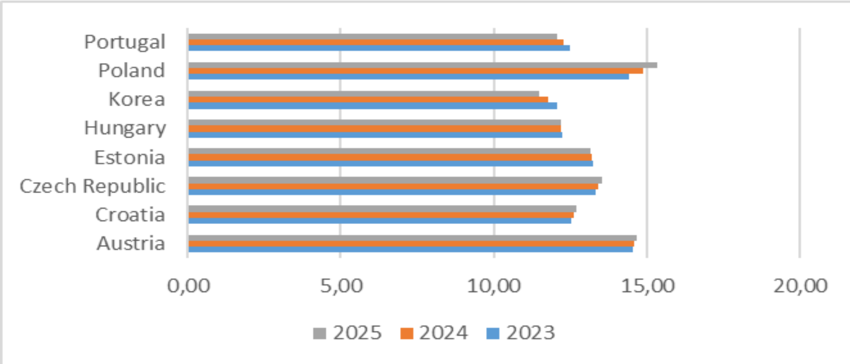

Chart no. 3. Predictions of financial literacy, 2023-2025.
Source: Author compilation

The prediction of literacy scores was estimated according to the growth rates of literacy levels in 4 years. The result shows that Poland will have a score of 14.41 in 2023, because of the higher growth rate in the given period. On the other hand, Korea will have a bigger decrease, and the score will be 12.07 in 2023.

The following chart demonstrates the relationship between literacy and taxation. Obviously, countries which have higher financial literacy score achieved efficient collection of tax revenues.

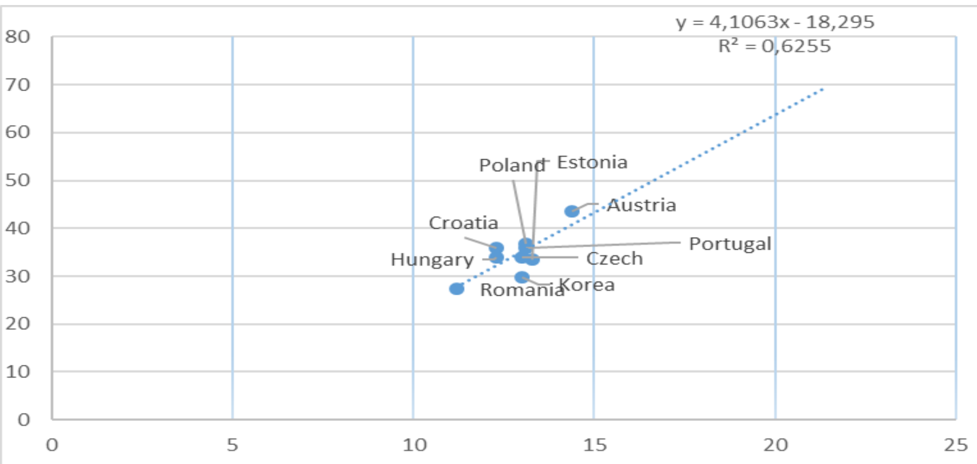

Chart no. 4. Financial literacy and tax revenues.
Source: Authors' representation based on OECD adult financial literacy scores, Eurostat database for tax revenues(available at https://ec.europa.eu/eurostat/data/database accessed in 12.03.2023) and OECD data of tax revenues(available at https://data.oecd.org/tax/tax-revenue.htm accessed in 12.03.2023)

The results of analysis show that higher literacy equals to higher tax revenues. Austria has relatively increased levels of financial education and tax revenues. Romania has the literacy score of 11.2 and tax revenue indicator is 27.3 which is less than other selected countries. Countries such as Estonia, Czech Republic, Croatia, Hungary, and Portugal have indicators between 12 and 13.3. Korea has a close score to those countries, however, it has a relatively low level of tax revenues. The R-squared of the model is 0.6255 which validates that there is a correlation between taxation and literacy, and it is strong because the indicator is over 0.5. The frequency and arrangement of patterns on the scatterplot also prove the positive correlation.

The empirical analysis explains and ensures that financial literacy is positively associated with tax revenues. Thus, it directly affects taxation, and it reduces the negative effect of tax complexity on tax compliance. If the governments provide effective financial education and increase financial literacy, they will achieve high tax collection and tax complexity will not be a great obstacle for both society and government at the same time. Increasing financial education among not only adults, but also younger people and kids will assist to create an educated background and to understand taxes, tax liabilities, and the basic rules of taxation. As a result, high literacy can reduce tax evasion and tax avoidance, which eventually will also affect tax revenues.

Conclusions

Tax complexity could be explained as difficulty in understanding, reading and interpretation of tax laws and rules. The certainty principle of taxation provides the idea that a taxpayer should know the payment terms, periods, and other details about taxes without having many difficulties. Thus, the governments should not only increase financial literacy level, but also simplify the tax laws for better understanding.

Several studies, as well as this research, define and explain that there is a positive relationship between taxation and financial literacy, because financial literacy, especially, its component tax literacy is being assets to understand tax obligations, basic rules, payment dates, and filling the tax files. Awareness of tax obligations and responsibilities does not give an incentive to taxpayers for the realization of evasion and tax avoidance. That situation concludes that a low level of tax evasion means high tax revenues.

It is a fact that financial education is the set of courses, training, and other processes which creates financial literacy and leads to an increase in its level. Therefore, countries should develop contemporary and effective techniques to provide financial education and increase financial literacy.

Firstly, financial education should be provided from young age at schools, because it will help to improve financial behavior and attitude. Furthermore, the quality of education is also necessary in that case. According to the OECD data, more teachers attending to the development of financial education in the Flemish Community in

Belgium are more than Shanghai (China), however, the financial literacy score is two times higher in Shanghai (OECD, 2012).

Secondly, digital technologies and programs must be available not only for high-income groups but also for low-income people. Digital literacy and financial literacy should be developed together to provide financial well-being to society. Surprisingly, the Covid-19 pandemic forced individuals to use technologies frequently and accelerated the adaptation of people to the digital world which resulted in a higher number of online transactions and transfers.

The practical support by the government to trainers, teachers, and educators, as well as involving the contribution of the private sector to financial education can improve the existence of a quality level of education and develop financial literacy.

In conclusion, the elimination, and reduction of the influence of tax complexity issues on modern tax systems is possible by a high level of financial literacy. However, the simplification of taxation and the understandable tax laws will also assist to educate individuals and households. High financial literacy is profitable not only for tax administrations but also for people and businesses because it helps to avoid additional costs and to increase revenues.

References

[1] Amonhaemanon, D., & Sitta, P. V. (2020). *From financial literacy to financial capability: A preliminary study of different generations in the informal labor market*. Journal of Asian Finance, Economics, and Business, 7(12), 355–363.

[2] Anca Nichita, Larissa Batrancea, Ciprian Marcel Pop, Ioan Batrancea, Ioan Dan Morar, Ema Masca, Ana Maria Roux-Cesar, Denis Forte, Henrique Formigoni & Adilson Aderito da Silva (2019), We Learn Not for School but for Life: Empirical Evidence of the Impact of Tax Literacy on Tax Compliance, Eastern European Economics, 57:5, 397-429.

[3] Eriksen, K. & Fallan, L. (1996). *"Tax Knowledge and Attitudes Towards Taxation: A Report on A Quasi-Experiment"*, Journal of Economic Psychology, 17(3), pp. 387-402.

[4] Eurostat database for tax revenues, available at https://ec.europa.eu/eurostat/data/database accessed in 12.03.2023.

[5] Isa, K. (2014). *Tax complexities in the Malaysian Corporate Tax System: Minimize to Maximize.* International Journal of Law and Management, 56(1), 50-65.

[6] Kempson, E., Collard, S., & Moore, N. (2005). *Measuring financial capability: An exploratory study (No. 37)*. London, United Kingdom: Financial Services Authority. Available at:http://www.bristol.ac.uk/media-library/sites/geography/migrated/documents/pfrc0510.pdf ,accessed in 26.02.2023.

[7] Koštuříková, I. (2011). *Corporate Tax Burden in the Czech Republic and European Union.* In: Acta academica karviniensia, 2/2011, pp. 77–89.

[8] Mat Jusoh, Yusri Huzaimi and Mansor, Farah Ahlami and Abd Razak, Siti Noor Azmawaty and Wan Mohamad Noor, Wan Nurul Basirah., (2021), The effects of tax knowledge, tax complexity and tax morale towards tax compliance behavior among

salaried group in Malaysia, Advances in Business Research International Journal (ABRIJ), 7 (2): 17. 250- 266

[9] Latiff, Ahmed & Bany-Ariffin, A.N. & Omar, Mohamad & Harjito, Dwipraptono. (2005). *Tax Literacy Rate Among Taxpayers: Evidence from Malaysia*, JAAI VOLUME 9 NO. 1, 1 – 11.

[10] Leskinen, J., & Raijas, A. (2006). *Consumer financial capability – a life cycle approach* (Consumer Financial Capability: Empowering European Consumers) (pp. 8–23). Brussels: European Credit Research Institute.

[11] Lewis, A. (1982). *"The psychology of taxation".* Blackwell.

[12] Lusardi, A., & Mitchell, O. S. (2014). *The economic importance of financial literacy: Theory and evidence*. Journal of Economic Literature, 52(1), 5–44.

[13] OECD (2016), "OECD/INFE International Survey of Adult Financial Literacy Competencies", OECD, Paris, available at www.oecd.org/finance/OECD-INFE-International-Survey-of-Adult-Financial-Literacy-Competencies.pdf accessed in 13.03.2023.

[14] OECD (2020), OECD/INFE 2020 International Survey of Adult Financial Literacy, available at https://www.oecd.org/financial/education/oecd-infe-2020-international-survey-of-adult-financial-literacy.pdf , accessed in 05.03.2023.

[15] OECD data of tax revenues, available at https://data.oecd.org/tax/tax-revenue.htm accessed in 12.03.2023).

[16] OECD (2012) PISA Financial Literacy Assessment of students', Organisation for Economic Co-operation and Development, Paris.

[17] Russell, B. (2010). *Revenue Administration: Developing a Taxpayer Compliance Program, Technical Notes and Manuals* (Washington DC: IMF), available at:https://www.imf.org/external/pubs/ft/tnm/2010/tnm1017.pdf accessed in 26.02.2023

[18] Shamana, Tizazu Toma and Alito, Woldeselassie Azige (2020) The Influence of Tax Education on Obeying Tax Liability: A Statistical Methods and Results. Journal of Economics, Management and Trade, 26 (7). pp. 38-52.

[19] Xiao, J. J., Chen, C., & Chen, F. (2014). *Consumer financial capability and financial satisfaction.* Social Indicators Research, 118(1), 415–432.