

Promises and Perils of E-taxation in Serbia

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Abstract The paradigm of collection and administration of tax revenues has been shifted in the last few decades as affected by the development of novel information and communication technologies. Governments around the world have adopted different models of e-taxation. A Serbian government has fully implemented “e-Fiscalization” as a class of e-taxation services in 2021. The aim of this paper is to examine the user satisfaction with e-Fiscalization. Based on a primary data collected from N=173 entrepreneurs, we examine the satisfaction with e-taxation ecosystem in Serbia. The results indicate that the promises made by governmental authorities have not been properly accepted by taxpayers. The study concludes that these perils might be viewed as temporary if the issues of full deployment of e-taxation were addressed adequately.

Keywords: • e-taxation • taxpayer expectation • digitalization • Serbia

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1 Introduction

Tax administration around the globe has been rapidly digitalizing in the last few decades. A myriad of different sophisticated e-services has been used to enhance the taxpayer experience (Bassey, Mulligan & Ojo, 2022). Almost all authorities (local, national, and international) are advocating for the improvements in the ICT infrastructure of tax administration in order to fully change the tax collection paradigm. However, the straightforward influence of the digitalization of tax administrations on tax revenue mobilization and revenue collection efficiency is far from being empirically proven (Mallick, 2021). Some studies even find adversarial effects and lower tax reporting after the implementation of the digital solution in taxation (Mascagni, Mengistu & Woldeyes, 2021).

As for the case of Serbia, the tax administration has made the first steps toward the full digitalization of taxation and majority of efforts have been invested into developing the infrastructure for such a process. Nonetheless, all the effort aside, public revenue collection system in Serbia is still at the very beginning of the transformation process (Pitić et al., 2019). As stated by the tax administration officials, the new model of fiscalization will result in the decrease in taxpayers' operating costs (data transfer, cash register control tape, archiving costs, maintenance, and defiscalization), improve administration and create better business environment, which will utterly lead to the decrease of shadow economy (Serbian Tax Administration, 2022). Other benefits might also appear during the process of implementation. For instance, Naritomi (2016) implies that the digitization of fiscalization process allows consumers to act as tax auditors. Then, employees might contribute to the overall benefits of the eFiscalization as potential whistleblowers, as suggested by Kleven, Kreiner and Saez (2016).

The promises of the benefits of e-Fiscalization made by the Tax Administration have never been empirically confirmed. Given that Serbian administration in general lacks proper mechanism to control for potential failure in innovations (Milanović, Milosavljević & Milošević, 2019), and that most of the innovations are simple replications of other EU experiences (Milosavljević et al., 2021), there is a large potential research gap for examining the attitudes of taxpayers toward the e-Fiscalization.

The aim of this paper is to fill the lacuna in the present body of knowledge. In specific, we aim to explore how the main stakeholders (Ministry of Finance - Tax Administration, owners of SMEs in Serbia and suppliers of e-cash registers) affect the quality of deployment of novel technology for e-Taxation. To address this aim, we first provide a theoretical supposition for the technology acceptance of public sector innovations. Then, drawing on the operationalization given in Cicvaric Kostic et al. (2013), we examine the attitudes of entrepreneurs towards this digital transformation.

To the best of our knowledge, a study that examines a taxpayers' satisfaction with e-taxation in Serbia has never been conducted before. Satisfaction of taxpayers in general has been a vastly explored topic (Holbrook & Heideman, 2022). However, globally, there has been only a handful of studies examining taxpayer satisfaction with e-taxation. For instance, Haruna et al. (2021) develop a conceptual model of e-taxation satisfaction without any empirical confirmation for the model. Some studies examine the satisfaction with the platform for e-taxation or other technical features related to public revenue collection (Maharjan, Chang & Shrestha, 2020) or the effects of e-taxation on revenue collection (Nnubia et al., 2020).

The remainder of this paper is organized in the following order. Section 2 reviews the literature and explains the background of the research. Section 3 delineates the methodology of the paper – the research instrument, variables and measures, sampling procedure, data collection and data processing. Section 4 explains the findings of this study. Section 5 contextualizes the findings of this study, explains the main contributions, and policy implications. Section 6 is reserved for conclusions, limitations, and further recommendations.

2 Background

Users' attitudes towards digitalization and acceptance of newly implemented technologies have been examined extensively within many disciplines, with public administration being no exception. Governments are moving from digitizing single administrative unit or service towards full-scale digital transformation of processes and operations (Janowski, 2015).

Recent studies revealed that tax administrations across the globe are investing significant resources in digital solutions, striving to ease the administrative burden, expand their service portfolio with completely digital services, improve tax compliance and tax collection efficiency (Nazarov, Mikhalaeva & Chernousova, 2019). To achieve expected benefits of digital transformation, this shift should focus on “simplifying procedures and permanently bringing taxpayers into the e-filing, e-payment, and e-document ecosystem” (Estevão, 2021).

According to the latest report of OECD (2022), over 90% of business taxpayers in 58 OECD countries filed their tax return electronically in 2021. The same report revealed that the “COVID-19 crisis accelerated the shift to digital services with a 30% increase in digital contacts in 2020” (OECD, 2022).

However, intensity, scope and performance of these initiatives differs drastically among public administrations. Recent literature stresses that the rationale lies in a lack of digital strategy on a national level, misguided public administration reforms, funding constraints and dissonance of the efforts across different levels of government (Scupola & Mergel,

2022). In addition, many scholars are advocating for the lack of users' technology acceptance as one of the essential causes of failing in unlocking full potential of digital transformation (Di Vaio et al., 2021).

The importance of taxpayers' acceptance of new technologies in tax administration has been growing in both industry and academia. The success of implementing any public service digital transformation initiative is contingent upon users' willingness to accept proposed innovations (Carter & Bélanger, 2005).

The existing body of knowledge abounds with empirically tested theoretical models for investigating drivers that substantially affect users' decisiveness to use novel technologies in various environments (Williams et al., 2015; Milanović et al., 2020). Nevertheless, most of these studies imply that users can individually decide whether to use new technology or not on a strictly voluntary basis. This opened a vivid discussion among scholars about pertinence of their results and conclusions for understanding technology acceptance in a mandatory environment.

Digital transformation of tax administration and related services mostly relies on technology innovations which, once they are fully integrated, become inevitable and mandatory for all stakeholders, including taxpayers and tax authorities. In such an environment, where most of novel technology usage is mandatory, it is challenging to identify if such use genuinely reflects users' (taxpayers) both positive and negative attitudes towards innovations (Hwang, Al-Arabiati & Shin, 2016).

Understanding why taxpayers accept or refuse certain technology in tax administration domain remains to be a challenging issue even for countries with highest e-government rankings. For example, Fu, Farn and Chao (2006) conducted large-scale nationwide research to investigate Taiwanese taxpayers' behavioral intentions to use electronic tax-filing services. The study discovered that taxpayers are pragmatic and concentrated on the usefulness of digital tax-filing service, but despite well-perceived benefits of e-tax services, over 60% of all taxpayers were unwilling to leave the old, paper-based system. Such findings in one of the world's leaders in e-governance (Biberman, 2021) may affect less developed countries' (un)realistic expectations from their own e-taxation initiatives. Another study conducted in Indonesia finds that trust, effort expectancy, and performance expectancy positively affect taxpayers' intention to use e-taxation services (Hermanto, Windasari & Purwanegara, 2022). These study, nonetheless, observe digitization as an option, rather than as a mandatory requirement.

Nevertheless, the proponents of digitalizing tax administration unequivocally emphasize that tax administrations should continue to accelerate their digital transformation and to introduce digital innovations. In addition to importance of taxpayers' technology acceptance, Martínez, Arzoz and Arregui (2022) suggest that tax administrations should take significant efforts and measures to assist taxpayers in adopting and utilizing these

technological advancements, having in mind that governments are still facing severe problem of under-utilization (Diller, Asen & Spät, 2020).

Given that user's technology acceptance and their satisfaction significantly affect the success of technological innovations, this study scrutinizes the taxpayers' satisfaction with e-taxation ecosystem in Serbia using the example of e-Fiscalization model. From a strictly technological point of view, the model implies the integration of new electronic registers and abandoning conventional fiscal cash registers with control paper tapes. The new fiscalization model has been promoted through a comprehensive campaign named "Be eFiscalized". The Government announced to subsidize the purchase of each fiscal device with 100 EUR and additional 100 EUR per retail facility. Below is a shortlist of the key milestones of e-Fiscalization process:

- December 29, 2020: the New Law of Fiscalization came into the force (Official Gazette No. 153/2020)
- September 20, 2021: Decree for granting e-Fiscalization subsidies
- October 1, 2021: registration of retail facilities and fiscal devices on "ePorezi" portal
- October 15, 2021: opening of applications for subsidizing transition to the new fiscalization system
- November 1, 2021: the beginning of transition period of six months
- January 1, 2022: implementation of the Law
- April 30, 2022: the deadline for reporting entities to complete transition to the new fiscalization system.

After the abovementioned deadline, self-employment and corporate income taxpayers are obliged to record any transactions through newly installed electronic registers. Here the existence of the Decree on determining the activities in which there is no obligation to record retail trade through an electronic fiscal device must be noted, which thoroughly regulates the exceptions to the abovementioned rules.

3 Materials and methods

In this section, we thoroughly delineate the methodology of this study. For the purpose of this study, we collected primary data using a questionnaire as a research instrument. Accordingly, we first explain the structure of the questionnaire, variables, and operationalized measures. Then, we explain the sampling procedure, data collection process and data processing.

3.1 Research instrument, variables, and measures

For the purposes of this study, a specific questionnaire was constructed. The questionnaire was divided in four parts presented in detail below.

The first part of the questionnaire was aimed at collecting the demographic data on respondents. Specific questions were related to age, gender, professional experience, and industry in which the company (SME) operates.

The second part of the questionnaire was focused on collecting the evidence on the success of the Tax Administration of the Republic of Serbia in deploying the process of eFiscalization. The construct was multi-itemed and consisted of five inquiries presented in Table 1.

Table 1: Multi-itemed construct for the role of Tax Administration in deploying eFiscalization

<i>Code</i>	<i>Inquiry</i>	<i>Reference</i>
TAdm_1	Sufficient time for the implementation	Inspired by: Oats & Tuck, 2019; Savic et al., 2015
TAdm_2	Information security system is simple and efficient	
TAdm_3	Transparency of the process	
TAdm_4	Sufficient effort by the tax administration	
TAdm_5	Support (servers, sites, communication) of the tax administration was efficient	

The third part of the questionnaire was aimed at collecting evidence on the capabilities of entrepreneurs in implementing the process of eFiscalization. This variable was also complex and consisted of 11 individual items presented in Table 2.

Table 2: Multi-itemed construct for the capability of entrepreneurs in deploying eFiscalization

<i>Code</i>	<i>Inquiry</i> <i>[I find the eFiscalization to be...]</i>	<i>Reference</i>
Entr_1	Incentivizing for startup	Developed following the conclusions of Radosavljević, Babin & Erić, (2023) and Savic et al., 2015
Entr_2	Cost-saving solution	
Entr_3	Supporting efficiency of the business	
Entr_4	Simplified solution	
Entr_5	Environmental friendly	
Entr_6	Tech-savy	
Entr_7	Transparent	
Entr_8	Tax-easy	
Entr_9	Minimazing gray economy	
Entr_10	Positive macroeconomic effects	
Entr_11	Untressful transition	

The final part of this questionnaire was aimed at collecting evidence in the quality of suppliers of ICT solutions (both hardware and software) for the eFiscalization. This variable is multi/itemed and consists of six different questions. These items are displayed in Table 3.

Table 3: Multi-itemed construct for the efficiency of suppliers in deploying eFiscalization

<i>Code</i>	<i>Inquiry</i>	<i>Reference</i>
Suppl_1	Software is simple and intuitive	Self-developed
Suppl_2	On-time delivery	
Suppl_3	No hidden costs	
Suppl_4	Customer support quality	
Suppl_5	Lag-free device	
Suppl_6	Monthly subscription is fair	

All the items from questionnaire parts 2-4 were measured on a Likert-type scale ranging from 1 (I completely disagree) to 5 (I absolutely agree).

3.2 Sampling procedure, data collection and data processing

Sampling procedure was based on a snowball sampling procedure. This procedure is based on the creation of referral chains (Damnjanovic, Proud & Milosavljevic, 2020). The initial list of participants was created from the official list of SMEEs in Serbia retrieved from the Agency of Business Registers. As this sampling procedure might be fragile due to the potential invasive sub-clustering, the referral chain was actively controlled. All the questionnaires were coded, following the principles given in Radonic, Vukmirovic and Milosavljevic (2021).

The approach used to collect data was CAWI (computer aided web interviewing). The main rationale behind the selection of this approach was the cost effectiveness (see Benkovic et al., 2022). Data was collected in the period August-September 2022. Data was collected directly by one of the authors of the study. After the data was collected, it was entered into the Statistics Kingdom (online calculator). Pre-analysis was conducted in MS Excel.

Demographic data were analyzed with statistics: percentages, means and standard deviation. For multiple comparisons the study used analysis of variance and standard deviation. Interdependence of determinants and customer satisfaction was determined by correlation (Pearson moments two tailed correlation coefficient analysis) and multiple regression.

4 Results

In this section we dissected the results of the empirical survey. First, we explored the sample features. Then, we conducted pre-analysis, including the descriptive statistics, internal reliability testing for composite constructs, and correlation matrix. Finally, we conducted the regression analysis.

4.1 Sample features

We first analyzed the main characteristics of the sample. In total, we collected 173 valid responses. As for the gender split, the sample was highly unbalanced. More than two third of the sample were female respondents (68.21%). When it comes to the function they act in the company – majority of the sample consisted of owners (76.30%), whereas the remainder were managers (see Table 4).

Table 4: Sample features – gender and position in the SME

<i>Gender</i>	<i>Total</i>	<i>%</i>	<i>Role</i>	<i>Total</i>	<i>%</i>
Female	118	68.21%	Owner	132	76.30%
Male	55	31.79%	Manager	41	23.70%
Other	0	0.00%	Other	0	0.00%
Total	173	100.00%	Total	173	100.00%

As for the experience (both life and professional), the sample was balanced. The youngest respondent was only 19 years old, and the eldest one was of the age of 70. Mean and median were around 40 years. As for the professional experience, in average respondents were engaged in the company they represent (either as owners or as managers) for approximately 12 years (Mean=11.95, STD=9.276). Interestingly, the most experienced entrepreneur was the owner of a company for 50 years (see Table 5).

Table 5: Sample features – the age of respondents and the experience in the SME

<i>Age</i>		<i>Experience</i>	
Mean	39.90	Mean	11.95
STD	9.736	STD	9.276
Median	40	Median	10
Min	19	Min	1
Max	70	Max	50

As for the predominant industry of the SME represented by the respondents, this was an open-ended question. Majority of respondents operated in the field of commerce – retail or wholesale (33%), followed by bookkeeping or consulting services (16%), and beauty salons (9%). The other industries were represented with less than 5% in the sample. In general, we found that the sample was adequately structured, particularly when compared to the demographics of the Republic of Serbia.

4.2 Pre-analysis

Next, we pre-analyzed the results. For this purpose, descriptive statistics (means and standard deviations) were analyzed for both individual items and multi-itemed constructs. This is displayed in Table 6.

Table 6: Descriptive statistics for the individual items and composite variables

	<i>Mean</i>	<i>STD</i>		<i>Mean</i>	<i>STD</i>
TAdm_1	3.202	1.524	Entr_1	1.855	1.079
TAdm_2	3.734	1.281	Entr_2	1.861	1.189
TAdm_3	3.006	1.292	Entr_3	2.110	1.251
TAdm_4	2.260	1.284	Entr_4	2.173	1.288
TAdm_5	2.329	1.286	Entr_5	2.659	1.488
TAdm_Avg	2.906	1.012	Entr_6	2.948	1.378
Suppl_1	2.965	1.334	Entr_7	3.272	1.352
Suppl_2	3.162	1.561	Entr_8	3.006	1.375
Suppl_3	3.497	1.500	Entr_9	2.555	1.537
Suppl_4	2.988	1.478	Entr_10	2.191	1.246
Suppl_5	3.000	1.462	Entr_11	1.671	1.060
Suppl_6	2.590	1.334	Entr_Avg	2.391	0.942
Suppl_Avg	3.034	1.106			

As displayed in Table 6, the effectiveness of the tax administration in deploying eFiscalization solution has been graded as ‘moderate’ (Mean=2.906, STD=1.102). Information security and safety has been marked as the best in this category (Mean=3.734, STD=1.281), whilst customer (taxpayer) support received the lowest score (Mean=2.329, STD=1.286).

The results presented in Table 6 also show that readiness of entrepreneurs for the digitalization and potential benefits of the system received the lowest total score (Mean=2.392, STD=0.942). Among the items of this construct, the lowest score was attributed to the level of stress associated with the process of eFiscalization – Entr_11 (Mean=1.671, STD=1.060) This was followed by remarks that the process is not incentivizing for the startup phase – Entr_1 (Mean=1.855, STD=1.079), and that it requires additional financial resources and raises total costs – Ent_2 (Mean=1.861, STD=1.189).

Finally, when it comes to the suppliers of cash registers and equipment, they received the best relative score (Mean=3.034, STD=1.106). Respondents claimed there no hidden costs were recorded (Mean=3.497, STD=1.500). Not surprising, however, respondents claimed that monthly fee is unfair (Mean=2.590, STD=1.334).

Afterwards, we examined the internal reliability. The aim of this step is to assess whether singular items can be measured as complex, multi-itemed phenomena. The Cronbach

Alpha (CA) test was used for this purpose (see Table 7). For all the observed variables, CA was above the traditional threshold of $CA > 0.700$ ($CA_1 = 0.799$; $CA_2 = 0.901$; $CA_3 = 0.854$ respectively).

Table 7: Descriptive statistics, internal reliability, and correlation matrix for the observed variables

	<i>Mean</i>	<i>STD</i>	<i>CA</i>	<i>1</i>	<i>2</i>	<i>3</i>
TAdm_Avg	2.906	1.012	0.799	1		
Entr_Avg	2.391	0.942	0.901	0.501**	1	
Suppl_Avg	3.034	1.106	0.854	0.533**	0.372**	1

Note: ** $p < 0.01$

4.3 Main analysis

After conducting pre-analysis, we moved forward to the regression analysis. Linear regression is based on a normality of residual errors. In our analysis, Shapiro Wilk p-value is equal to $2.22e-16$ which indicates that our data did not show normal distribution.

As displayed in Table 8, p value is below the threshold $p < 0.01$. The White test p-value equals 0 ($F = 131.716321$). It is assumed that the variance is not homogeneous. The coefficients' estimators are unbiased but inefficient estimators with large inaccurate standard errors, hence the statistical tests over the model and the coefficients are not accurate. In the discussion section of this paper, we will thusly inform the readers on potential limitations of the model.

Table 8: ANOVA

Source	DF	Sum of Square	Mean Square	F Statistic	P-value
Regression (between \hat{y}_i and \bar{y})	2	10883063.85	5441531.926	100.47996	0.000
Residual (between y_i and \hat{y}_i)	343	18,575,300.58	54,155.395		
Total (between y_i and \bar{y})	345	29,458,364.43	85,386.563		

Results of the multiple linear regression indicated that there was a strong collective significant effect between the X_1 , X_2 , and Y , ($F(2, 343) = 100.48$, $p < .001$, $R^2 = 0.37$, $R^2_{adj} = 0.37$). The individual predictors were examined further and indicated that X_1 ($t = 6.741$, $p < .001$) and X_2 ($t = 7.618$, $p < .001$) were significant predictors in the model. R^2 was 0.369. Accordingly, the predictors of our study (X_i) explained approximately 37% of the variance of the dependent variable. Adj. R^2 was 0.366. Accordingly, we can assume that the predictive power of our independent variables models is high (see Table 9).

Table 9: Coefficient Table (adjusted R-squared = 0.366)

	Coeff	SE	t-stat	Stand Coeff	p-value	VIF
b	62.604	16.440	3.808	0	0.000	
X1	0.325	0.048	6.741	0.331	0.000	1.310
X2	0.355	0.0466	7.618	0.374	0.000	1.310

As for the goodness of fit, the data for the overall regression are as follows: right-tailed, $F(2,343) = 100.47996$, $p\text{-value} = 0$. Since $p\text{-value} < \alpha (0.05)$, we reject the H_0 . The linear regression model, $Y = b_0 + b_1X_1 + \dots + b_pX_p + \varepsilon$, provides a better fit than the model without the independent variables resulting in, $Y = b_0 + \varepsilon$. All the independent variables (X_i) are significant. The Y-intercept (b): two-tailed, $T = 3.808012$, $p\text{-value} = 0.000165934$. Hence b is significantly different from zero.

The final model is presented below:

$$\hat{Y} = 62.604035 + 0.325411 \text{ TAdm_Avg} + 0.355187 \text{ Suppl_Avg}$$

5 Discussion

In this section we first put an emphasis on the main findings of this study. Afterwards, we contextualize our findings with the extant research and explain the contributions and policy implications of our study. Finally, we draw attention to the limitations of this study as well as some agenda for future research.

5.1 Key findings

In this paper, we examined the taxpayer attitudes towards the e-Fiscalization process in Serbia. We examined how three important stakeholders (tax authority, entrepreneurs, and suppliers of ICT infrastructure) affect the deployment of novel technologies in taxation. To address this purpose, primary data was collected from $N=173$ entrepreneurs.

From the grand scheme of things, the respondents marked e-Fiscalization as poorly prepared and deployed process. Contrary to our belief, the respondents mostly stigmatized themselves in this process with the lowest grade. Nonetheless, the other two actors have not been marked as the 'role models' as well. Having in mind the existence of statistically significant correlation between the observed variables, the whole process of the digitalization of taxation could potentially be explained with other exogenous variables. Although it might be speculative, one of the reasons for a number of perils brought about with e-Fiscalization could be low transparency and responsiveness of the Serbian public authorities (Milosavljevic, Milanovic & Benkovic, 2017).

This study confirms that in practice, the whole model does not work as intended, that is, it seems that the idea was good until the system itself works in the best way. According to the opinions of entrepreneurs, e-Fiscalization did not contribute to the reduction of business costs, efficiency, or the reduction of the shadow economy, which through the lens of were listed as key advantages by the competent authorities. Of course, as seen the interviewed entrepreneurs, there are also good sides of e-Fiscalization. The entire business operations will be more transparent and the tax calculation will be automated, which is simpler compared to the previous tax model.

5.2 Contributions and policy implications

An important part of the tax administration reform in Serbia is the implementation of the e-Fiscalization model. The transition period of this reform es demanding and will certainly produce a number of challenges. the main promises behind such a reform are economic efficiency safety and environmental protection. Thanks to the new fiscalization model, the Tax Administration now has real-time data on turnover generated by the economy, and these data are comparable both by territory and by activity, as well as by the time of issue. It is possible to easily compare the recorded turnover with the cash receipts issued by the taxpayer. The flow of data from fiscal cash registers ensures better risk analysis and easier detection of irregularities in the business of our taxpayers, but also creates new ways of controlling the issuance of fiscal invoices because the validity of these invoices can be checked by simply scanning the QR code on them.

This study adds to the concurrent knowledge on e-Fiscalization with particular emphasis on issues in the early adoption and deployment of a such technology. A current body of knowledge mostly advocates e-Fiscalization as a preferable solution for the digitalization of taxation and improved transparency (Cobović, Katolik & Novak, 2013) This transparency will supposedly improve tax collection and decrease shadow economy, although the measurement of such impact is questionable (Zidková & Tepperová, 2017).

This study provides a number of policy implications for e-Fiscalization. We will concentrate only on the most important implications:

- Our study shows that technical requirements for the implementation of e-Fiscalization have not been fully met in the Republic of Serbia. With e-Fiscalization, there are several technical problems (lack of guidelines in Serbian language, lack of trainings, system testing and preparation were needed before the start of implementation). At the same time, however, the impression has been created that the primary effect (suppressing the shadow economy) will not be achieved, because "who until now he didn't work according to the regulations, he won't do it now either".
- From the ICT infrastructural point of view, in some parts of Serbia (primarily the east and southwest, there is a problem of internet connection and data flow, which significantly complicates business and compliance with new regulations.

- The results of this study show that the time required for the preparation of e-Fiscalization was insufficient. When it comes to the implementation of legal acts that affect SMEs, policymakers should consider delayed implementation of tax-related measures for the SME sector. Unlike their large counterparts, SMEs are highly vulnerable to external dynamics and require active governmental policies. Thus, the regulation would be first introduced to the financial sector and large companies, and only after that (when ‘child diseases’ pass by) the regulation should cover SMEs.
- Constant changes of regulation increase the risk for the SME sector. Whenever a policy measure is implemented, it should be preceded by the education of affected business. Any transition to new rules, systems and novel technologies related to taxation are seldom too complicated for small business.

5.3 Limitations and further recommendations

This paper has number of limitations that might potentially jeopardize the generalizability of the findings. First, the study is geographically constrained since it only examined the experience of e-Fiscalization in Serbia. Having in mind the cultural and historical background, the study findings might be indicative for the countries of the West Balkan region, particularly the ones lagging behind Serbia in the process of e-Fiscalization, such as Albania (van Brunschot et al., 2021), Bosnia and Herzegovina, Montenegro or North Macedonia). Accordingly, a new stream of research might be focused on cross-country analyses of e-Fiscalization adoption.

Second, this study examines the attitudes of entrepreneurs on a process that has only recently been adopted. When a technology is adopted on a voluntary basis – trailblazers react differently than late adopters (Milosavljevic, Joksimovic & Milanovic, 2019). From a limitation of the sampling procedure described previously, we can never tell how many ‘trailblazers’ or ‘late adopters’ were captured in this study. Nonetheless, we can only speculate that technology acceptance in Serbia is generally moderate (Milanović et al., 2020). Additionally, capturing a single moment in the deployment of any technology is questionable. An avenue for further research is the analysis of intertemporal changes in attitudes of entrepreneurs towards e-Fiscalization and e-Governance in general.

Third, this study is quantitative. As such, it only outlines the most important factors and stakeholders affecting the adoption of e-Fiscalization. Some technical limitation related to the statistical processing of the data have already been mentioned in the results section of this paper. Follow-up studies and projects should encompass a qualitative side of this phenomenon and extend the current body of knowledge with case studies and real-life examples of benefits and downsides of e-Fiscalization adoption.

6 Conclusions, limitations and further recommendations

This paper describes the fiscalization process as an integrated process in the development of the digital infrastructure of the Tax Administration of the Republic of Serbia. The implementation of the fiscalization process had the task of increasing transparency, minimizing business costs and creating a basis for the sustainable development of the tax system.

The Republic of Serbia is still at the beginning of the digitization and reform of the tax system. However, from the existing process of fiscalization, it is necessary to increase the level of its realization. It is concluded that digitization could help the tax system of the Republic of Serbia, which should close the gap and quickly approach the highest standards of the European Union.

Some interrogatives of the e-Fiscalization process remain unanswered. The power of digitization is high, and it is hard to believe that the speed of digitization is going to slow down in the near future. Nonetheless, there are always going to be some groups of entrepreneurs and SME owners that may never use modern technology. To name a few - the elderly, people living in remote rural areas with limited access to the Internet, SMEs in those industries that operate in labor-intensive rather than tech-intensive manner, old craftsman and late adopters of technologies in general. The tax administration must find a way to solve the problems of this group of taxpayers.

How digitization will affect the "morale" of taxpayers might also be further discussed. It rises the question whether transparent, secure and responsive e-taxation system affects taxpayers' intentions to evade taxes? It became with e-Fiscalization that the tax authorities decided to combat against the grey economy.

The closing issue, but not the least, is related to security. It is far genuine that technology innovations can boom performance and transparency, but what happens if majority of taxpayers are not ready and prepared to exchange information of the extent of paid taxes? Likewise, having all the facts on-line makes agencies greater uncovered to feasible fraud. Current examples have shown more records disclosures than ever before. The question is whether digitization and novel technology additionally convey a new stage of protection or not? The answer to that query continues to be not clear.

This paper has a number of flaws which might jeopardize the generalizability of its main findings. First, the study only examined a couple of factors with the most obvious and direct effect on taxpayer attitudes toward the eFiscalization. Other studies should incorporate other factors, particularly those behavioral by nature. Second, the study is based on a relatively small sample. Other studies should be nation-wide and include a number of different demographics. Finally, this is a cross-sectional rather than time-series analysis. Perceived perils of the implementation of any technology are seldom just a

mirage rather than a solid and real downside of technology. Accordingly, a similar study should be re-run in a near future to capture on a time-related differences.

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