

THE IMPACT OF TAX CHANGES ON THE LIQUIDITY OF CONSTRUCTION COMPANIES IN THE DEVELOPING MARKET

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Abstract

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Studies to date show that taxes have a very high impact on company liquidity (Law & Yuen, 2019; Drogalas, Lazos, Koutoupis, & Pazarskis, 2019). The International Monetary Fund (IMF, 2022) shows the need to release tax procedures and their monitoring in the Republic of Kosovo. Kosovo law is such that it disables the timely liquidity of construction companies which has an impact on the reduction of construction companies' projects. The main purpose of this paper is to describe the effects of changing the tax laws, namely the law on corporate income tax, personal income, and value-added tax (VAT) on the liquidity of construction companies in Kosovo. For this paper, we employ survey data collected from accountants and financial managers who through the questionnaire have reflected on the need to change the law on personal income, corporate income, and VAT. The models for measuring latent variables are structural equation models 1 and 2 (SEM1 and SEM2) and the ordinary least squares (OLS) models. The empirical results of the SEM1 and first OLS model (OLS1) reveal that the current law on corporate income tax and the law on personal income tax have negative effects on the liquidity of construction companies in the Republic of Kosovo and the empirical results from the SEM2 and second OLS model (OLS2) show that the current law on value-added tax has significant negative effects on the liquidity of construction companies in the Republic of Kosovo.

Keywords: Liquidity, Construction Companies, Value-Added Tax (VAT), Corporate Income Tax, Personal Income Tax, Investments

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1. INTRODUCTION

Construction companies have a very high development trend in the Republic of Kosovo. The investments that are being made in the Republic of Kosovo are mostly in the field of construction. This paper will be of interest to the Government of the Republic of Kosovo to analyse and look at

changes in tax laws that would facilitate the work of construction companies in the liquidity aspect. The interest of the Government of the Republic of Kosovo is to be as close as possible to this sector to establish a joint partnership with these companies because the Government will have the opportunity to benefit from lower costs in capital investment projects if they make these legal changes.

Data from the Kosovo Agency of Statistics (*Ajencia e Statistikave të Kosovës*, ASK) shows that of all investments made in Kosovo construction investments have the largest share of 55.71% (ASK, 2020).

All construction companies during the investment phase make the financial planning for a construction project. Planning includes taxes that they have to pay in a planned manner during the monthly and quarterly tax periods.

The current legislation, which is applied, is creating difficulties for doing business for construction companies because with this legislation they are having higher construction costs. Therefore, the change of the mentioned laws would affect the liquidity of these enterprises to be higher and costs will be lower because higher liquidity will create supplies at lower prices.

Legal changes in Kosovo are necessary for this sector because construction companies in relation to other companies are discriminated against in terms of implementing the law on value-added tax, the law on corporate income tax, and the law on personal income tax. Companies in Kosovo are obliged to apply and enforce the aforementioned laws depending on the status of the enterprise and the form of organization. Since we are elaborating on construction companies, these companies depending on the status and form of organization are obliged to apply and enforce the law on value-added tax. The difference in status and form of the organization lies in the laws on corporate income tax and personal income tax. If the enterprise has the status of a limited liability company or a joint-stock company, it is categorised as a legal entity and is obliged to apply and enforce the law on corporate income tax in addition to the law on value-added tax. If the enterprise has the individual business status or general partnership, it is categorised as a natural entity and is obliged to apply and enforce the law on personal income tax in addition to the law on value-added tax. This paper takes into account the laws that have cost-sharing for construction companies excluding the cost of pension contributions paid by companies to employees.

The European Commission has also taken such initiatives in relation to the changes of directives in the construction sector due to the low liquidity of construction companies. The analytical report, therefore, looks at the quantitative indicators of late payment in the construction sector from five European countries, namely France, Ireland, Italy, Spain, and the United Kingdom. Furthermore, the report illustrates specific policy responses to late payment issues across the European Union (EU) Member States (European Construction Sector Observatory [ECSO], 2020).

Therefore, based on the fact that liquidity shows the solvency of companies to fulfill all short-term obligations, the payment of taxes during the construction phase before the construction project is completed affects the reduction of liquidity of construction companies. For the liquidity of construction companies to be as high as possible, legal changes must be made for this sector. The necessary legal changes that need to be made are in the following laws: the law on value-added tax, the law on corporate income tax, and the law on personal income tax. Value-added tax (VAT) for construction companies is applied at the rate of 18% for business premises while for residential buildings and garages it is at the rate of 0%, so they are

considered exempt revenues for VAT issues (Law No. 05/L-037 of 2015). Whereas corporate tax is applied at the rate of 10% of applied income (Law No. 06/L-105 of 2019).

The main purpose of this paper is to describe the effects of changing the tax laws, namely the laws on corporate income tax, personal income, and VAT on the liquidity of construction companies in Kosovo.

Considering the challenges faced by construction companies as a result of unfavourable laws in construction companies, this paper provides answers to the following research questions:

RQ1: Do changes in corporate income and personal income tax laws have positive effects on the liquidity of construction companies in Kosovo?

RQ2: Do changes in VAT law have positive effects on the liquidity of construction companies in Kosovo?

The paper analyses the following hypotheses:

H1: Changing the laws on corporate and personal income tax has positive effects on the liquidity of construction companies in Kosovo.

H2: Changing the VAT law has positive effects on liquidity in construction companies in Kosovo.

This paper is important for construction companies because based on the data received from construction companies, we have noticed that the current tax legislation is complicating their liquidity and increasing the cost of projects due to the subsequent payments they are making for supplies. Therefore, the change of tax legislation would increase their liquidity and at the same time reduce their costs. Moreover, this paper will be necessary for the Kosovo Chambers of Commerce and the Ministry of Finance of the Republic of Kosovo, where Chambers of Commerce would recommend to the Ministry of Finance to initiate legal changes to the law on value-added tax, the law on corporate income tax and the law on personal income tax.

This paper has addressed issues regarding the legislation for construction companies only. So, the limitations of the study have been other manufacturing, trading, and service companies. The reason why construction companies were taken into account was that only during 2020, which was emphasized above, the investments that have participated in Kosovo in all companies are 55.71%.

The rest of the paper is structured as follows. Section 2 reviews the relevant literature on taxation and liquidity effects in different sectors of companies in Kosovo, the region and beyond. Furthermore, the current law on taxes and VAT was presented in this section. Section 3 of this paper specifies adequate models for measuring the working hypotheses and the latent variable such as the ordinary least squares (OLS) model and the structural equation model (SEM). In Section 4, the results of the work collected from 131 construction companies are analysed and discussed. Section 5 presents the empirical conclusions of the paper.

2. LITERATURE REVIEW

2.1. Theoretical and empirical studies

Theoretical and empirical studies have analysed the determinants of corporate liquidity. The main purpose of keeping cash or cash equivalents is for business transactions. The practice of holding

money reserves is driven by one of two motives: speculative motives or preliminary motives. In the first case, a company holds the excess liquidity so that it can take advantage of future profitable investment opportunities. The preliminary motive suggests that companies maintain excess liquidity to meet contingencies. The cost of external financing is an essential factor when deciding how much money to reserve (Shanthirathna, 2019).

Liquidity can be defined in three contexts, we can distinguish assets, working capital, and cash aspects of financial liquidity. The aspect of financial liquidity assets, which is the financial liquidity of the company assets is the ability to convert assets into cash in the shortest possible time, at the lowest possible costs, and without losing their value. As the protection of the enterprise against loss of financial liquidity, we have adequate sources of liquid assets, including cash (Bolek & Wiliński, 2012).

The construction sector is vulnerable to economic changes, especially during periods of recession due to high levels of spending, capital, cost flexibility, and high price-limiting competition. Changes in the business environment are often accompanied by lack of funding, exchange rate fluctuations, and political instability is affecting the growth of construction projects with financial risks (Purnus & Bodea, 2015).

One stage in the capital budgeting process is the evaluation of investments. This rating has the following characteristics ("Menaxhmenti Financiar," 2018): 1) estimating the level of expected returns earned for the level of expenses incurred; 2) estimating future costs and benefits over the life of the project.

Financial liquidity affects the profitability of construction companies, the more money a construction company has secured, the higher its profit (Bolek & Wiliński, 2012).

Capital structure, profitability, and growth have a positive and significant effect on equity gain shares in construction companies. Thus, construction companies are expected to improve their capital structure to be able to maximize profits and increase shares through capital gain (Ardila, Abubakar, & Sirojuzilam, 2020).

Financial risk is one of the critical risks faced by any construction industry. Financial failures can lead to the full rapprochement of the company leading to huge losses (Kolhatkar & Dutta, 2013).

To have higher liquidity, construction companies in Kosovo need to have as much money available during the investment phase because during the investment phase they can buy different materials for construction projects at cheaper prices, i.e., reserve materials in advance to suppliers so that when they need those materials at the construction stage, they are already paid in advance.

According to the Statistics on Office Business Dynamics by the Registry Office, nearly two out of three construction businesses fail within a 5-year period, which is worse than retail, mining, agriculture, manufacturing, and wholesale. There is really only one reason that the construction business fails, namely running out of cash. When working capital is mismanaged and accounts receivable are accumulated due to late payment, short-term debt can become long-term debt by placing the construction company in a weak capital position to grow (Mukherjee & Rao, 2020).

Liquidity is a complex concept, as it must be known which asset accounts must be put to trading for the risk to be minimal (Galvani & Ackman, 2021).

The importance of liquidity is quite large on the part of investments and purchase of shares of all companies because the higher the liquidity of an enterprise, the higher the value of that enterprise. Moreover, the market price of that enterprise is also higher (Jihadi et al., 2021).

Mach (2018) in his paper concludes that tax rates have an impact on business activity and the volume of tax revenues. This connection is generally known as the Laffer curve. In this article, data on VAT rates and revenues in the Czech Republic between 2006-2015 are used to estimate the Laffer curve and to find tax rates that maximize revenue. It has been shown that the standard VAT rate in the Czech Republic lags behind the rate of income maximization and that lowering the rate would help taxpayers as well as the state budget.

Bubić, Mladineo, and Šušak (2015) in the paper on VAT rate change and its impact on liquidity analysed tax changes in the Republic of Croatia. The conclusions in this paper show a possible impact of the overall change in the VAT rate on liquidity. Tax changes in Croatia from 22% to 23% affected the decline in company liquidity but were not a major factor in the bankruptcy of some companies as the results were not significant.

In their paper titled "Financial analysis and corporate governance of AA: A case study", Law and Yuen (2019) analysed the liquidity of this company as the main indicator. The analysis was made for the period from 2010 to 2012 from a total of 12 reports. As a result, financial performance increases from short-term debt coverage by liquid assets.

Santosuosso (2017) analysed cash flow net of cash from investing activities (CFINVA), which is correlated with the net income for a sample of 189 Italian listed firms from 2011 to 2015. The results showed that the corporate tax burden is positively affected by profitability and firm efficiency, but is negatively affected by leverage. More specifically, the research findings revealed positive correlations between corporate tax burden under income tax and firm profitability and between the same corporate tax burden and CFINVA.

Brodzka, Biernacki, and Chodorek (2017) analysed the impact of taxation on the effective income tax rates paid by Polish companies. The authors present the results of a study conducted on the largest firms, listed on the Warsaw Stock Exchange and included in the WIG20 index. In the research, they bring closer the concept of tax aggressiveness looking at the effective tax rates (ETR) achieved by the companies WIG20 in the years 2010-2014. According to the results, high taxes in Poland have affected companies to lose their international competitive position due to low liquidity.

Drogalas et al.'s (2019) results showed that the adoption of the International Financial Reporting Standards (IFRS) increased the value of the firm, while a lower level of profit could affect the quality of accounting and could be further considered as a red flag for profit manipulation. The current study, as a recent empirical result of the impact of the IFRS and taxation on the construction sector in Greece, may be useful for policymakers, tax, and other government authorities or managers.

Maliqi and Pozhegu (2014) analysed the impact of the tax regime on the development of four manufacturing sectors in Kosovo: metal, wood, textile, and food processing. The empirical conclusions from this report show that the main problem in tax policy-making is the existence of a high degree of informality in the tax administration of Kosovo. The subsequent consequences of informality are lower opportunities to obtain credit, it also makes them vulnerable to the arbitrariness and extortion of tax officials, creates conditions that are conducive to unfair competition, and further increases their cost of doing business. This report contains some limitations as only 4.4% of the budget in Tax Administration of Kosovo (TAK) consists of these four sectors.

Asllani and Statovci (2018) analysed the effect of the change in VAT rates in certain categories of goods on the fiscal stability of Kosovo, mainly basic food goods and luxury goods. The methodology used in this paper is linear regression and the analysis period is from 2013 to 2016. The results of the analysis show that the reduction of VAT from 16% to 8% for basic products and the increase of VAT from 16% to 18% for luxury products has had a positive impact on budget revenues and Kosovo's gross domestic product (GDP) growth.

According to IMF (2022), it is recommended that Kosovo simplify tax procedures and improve monitoring and enforcement. A tax system that is easy to navigate and enforced by constant monitoring and sanctions, such as fines and penalties, makes informality more costly. Monitoring the implementation and payment of taxes will increase the country's GDP, which will then enable the reduction of informality and the reduction of the tax base. This recommendation is in the process of application by TAK but the conditions have not yet been met to reflect on the reduction of the tax base.

Since the importance of liquidity is quite high, the change of the aforementioned laws would have a significant impact on increasing the liquidity of construction companies.

2.2. Current law

All companies in Kosovo, depending on the form of organization, whether they are individual businesses, general partnerships, limited liability companies, or joint-stock companies, are obliged to pay taxes. The following are direct and indirect taxes paid by companies:

- personal income tax and VAT are paid by individual businesses and general partnerships (companies with unlimited liability);
- corporate income tax and VAT are paid by limited liability companies and joint-stock companies (limited liability companies).

Personal income tax is a tax paid by all companies that have unlimited liability. The tax is paid as follows: for annual taxable income of nine hundred and sixty euros (€960) or less, zero percent (0%); for taxable income over nine hundred and sixty euros (€960), up to three thousand euros (€3,000), including the amount of three thousand euros (€3,000), four percent (4%) of the amount of over nine hundred and sixty euros (€960); for taxable income over three thousand euros (€3,000), up to five thousand four hundred euros (€5,400),

including the amount of five thousand four hundred (€5,400), eighty-one points six euros (€81.6) plus eight percent (8%) of the amount of over three thousand euros (€3,000); for taxable income over five thousand four hundred (€5,400), two hundred and seventy-three point six euros (€273.6) plus ten percent (10%) of the amount of over five thousand four hundred (€5,400) (Law No. 05/L-028 of 2015). The tax rates mentioned above are rates that are calculated for one year, but this tax is paid every three months and the rates mentioned above are divided into 4 quarters.

Corporate income tax is a tax paid by all limited liability companies. The tax payment is 10% for all taxable income (Law No. 06/L-105 of 2019). This tax is paid every three months and at the end of the fiscal year, the payments are reconciled in relation to what should be overpaid or reimbursed. So, the tax balance for 2021 must be reported by March 31, 2022.

All companies are obliged to collect VAT from consumers. Then, they are obliged to pay the difference they receive from consumers in relation to what has been paid. This type of tax is paid and reported monthly.

VAT tax rates are 0%, 8%, and 18%, depending on how the products are categorised by law. Construction companies in this case have 18% for business premises while 0% for residential buildings (Law No. 05/L-037 of 2015).

We have other taxes which are paid by companies in Kosovo, but the focus of this paper is to change only these three laws.

3. RESEARCH METHODOLOGY

In order to determine the effects of the change in the laws on personal and corporate income tax on the liquidity of the construction companies in the Republic of Kosovo, firstly a survey was conducted. The total number of respondents, thus construction companies operating in the Republic of Kosovo that have completed the survey, is 131. Moreover, the first section of the questionnaire is regarding some general information about the respondent and the company, such as job position, age of the company, size of company compared to the number of the employees as well as the number of project investments done so far. The rest of the questions are separated into two groups. The first group defines the variables related to the effects of corporate and personal income tax laws on the liquidity of construction companies. In this section, we have the following variables: *q7* (current corporate income tax law has a negative impact on the company liquidity); *q8* (current personal income tax law has a negative impact on the liquidity of the company); *q9* (payments for corporate tax and personal income tax during the investment phase have a negative impact on liquidity); *q10* (if the laws on corporate and personal income tax were changed, the liquidity in the companies would increase significantly); *q11* (increased liquidity will reduce the cost of the project because cash purchases will decrease the prices). In this regard, the first model of this paper employs the structural equation model (SEM1), in order to investigate the effects of the corporate and personal income tax laws on the liquidity of the construction companies in the Republic of

Kosovo since we cannot observe the dependent variable (effects of changes in the laws on corporate and personal income tax), while the measurement variables that define the latent variable in this model are: *q7*, *q8*, *q9*, *q10*, and *q11*.

Moreover, Table 1 presents the statistics of the variables that are included in the first model

described above, regarding the number of observations, mean, standard deviation, median, and mode. The answers to the questions vary from 1 (strongly agree) to 5 (strongly disagree). In addition, the tables regarding the cumulative percentages are included in Appendix.

Table 1. Descriptive statistics (SEM1)

Variable	Obs.	Mean	Std. Dev.	Median	Mode
<i>q7</i>	131	2.847328	1.303683	3	4
<i>q8</i>	131	2.480916	1.217508	2	2
<i>q9</i>	131	2.450382	1.191081	2	2
<i>q10</i>	131	2.679389	1.38268	2	2
<i>q11</i>	131	2.656489	1.379916	2	2

Source: Authors' calculations.

The second group defines the variables related to the effects of the VAT law on the liquidity of the construction companies. In this section, we have the following variables: *q12* (the current law on the form of VAT payment is not well defined and as such has negative effects on the liquidity of the company); *q13* (changing the VAT law will significantly reduce costs in the company); *q14* (the law on deductible VAT is better to calculate the coefficient from square meters), *q15* (the law of deductible VAT is more favourable for businesses to calculate the coefficient from the financial value of the investment in the local business); *q16* (changing the VAT law will increase the liquidity of construction companies). In this regard, the second model of this paper employs also the structural

equation model (SEM2), in order to investigate the effects of the VAT law on the liquidity of the construction companies in the Republic of Kosovo, since we cannot observe the dependent variable (effects of changes in the VAT law), while the measurement variables that define the latent variable in this model are: *q12*, *q13*, *q14*, *q15*, and *q16*.

Moreover, Table 2 presents the descriptive statistics of the variables that are included in the second model described above, regarding the number of observations, mean value, standard deviation, median, and mode. The answers to the questions vary from 1 (strongly agree) to 5 (strongly disagree). In addition, the tables regarding the cumulative percentages are included in Appendix.

Table 2. Descriptive statistics (SEM2)

Variable	Obs.	Mean	Std. Dev.	Median	Mode
<i>q12</i>	131	2.312977	1.289508	2	2
<i>q13</i>	131	2.419847	1.264633	2	1
<i>q14</i>	131	2.374046	1.15915	2	2
<i>q15</i>	131	3.030534	1.341291	3	4
<i>q16</i>	131	2.564885	1.330698	2	2

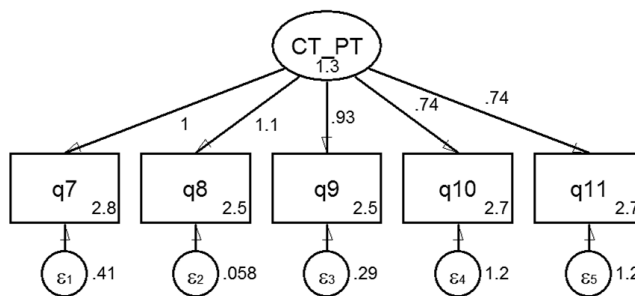
Source: Authors' calculations.

4. EMPIRICAL FINDINGS

As already mentioned in the previous section, the empirical analysis is consisted of two SEMs due to the unobserved or latent dependent variable in both of the models. Moreover, Figure 1 and Figure 2 represent the SEM1 and SEM2 regarding the path and estimations of the models, respectively.

In Figure 1, we can see the measurement variables that define the latent variable, in this case, the laws on corporate and personal income tax as well as their coefficient of the model, determining the effects that they have on the construction companies in the Republic of Kosovo.

Figure 1. The path and estimations of the SEM1

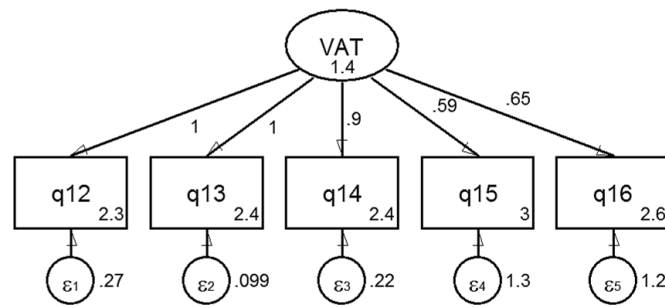


Source: Authors' calculations.

In Figure 2, we can see the measurement variables that define the latent variable in the SEM2, in this case, the VAT law as well as their coefficients

of the model, determining the effects that they have on the construction companies in the Republic of Kosovo.

Figure 2. The path and estimations of the SEM2



Source: Authors' calculations.

Furthermore, Table 3 shows the results of the SEM1 and SEM2 regarding the effects of the laws on corporate and personal income tax and VAT on the liquidity of the construction firms in the Republic of Kosovo.

Moreover, the empirical findings of the SEM1, reveal that the current laws of corporate and personal income tax have negative effects on the liquidity of the construction companies in the Republic of Kosovo. In addition, it also reveals that the payments coming from the corporate and personal income tax in the investment phase have a negative effect on their liquidity. As for the effect of the changes suggested in the corporate and personal income tax to increase the liquidity of the company, the results imply the significance of these changes on the laws of corporate and personal income tax in the liquidity of the construction firms in the Republic of Kosovo. In addition, the latent variable *ct_pt* has been predicted, and a multiple regression model with robust standard errors has been applied to determine the impact of the independent variable on the dependent variable. The results are shown in the second column of Table 3.

As for the SEM2, the empirical findings reveal that the current VAT law has significant negative effects on the liquidity of the construction companies in the Republic of Kosovo. In addition, it also reveals that changing the VAT law will significantly reduce costs of construction companies as well as that the law on deductible VAT is better to calculate the coefficient from square meters. In addition, the results imply that by changing the VAT law, construction companies will be able to increase their liquidity. In addition, the latent variable *vat_tax* has been predicted and a multiple regression model with robust standard errors has been applied to determine the impact of the independent variable on the dependent variable. The results are shown in the fourth column of Table 3.

Finally, these results imply the acceptance of the two main hypotheses of this paper: changes in the laws of personal and corporate income tax have positive effects on the liquidity of construction companies in the Republic of Kosovo, and changes in the VAT law have positive effects on liquidity in construction companies in the Republic of Kosovo.

Table 3. The results of the SEM1, SEM2, OLS1, and OLS2

Variable	SEM1	OLS1	SEM2	OLS2
Dependent variable (latent)	<i>ct_pt</i>	<i>ct_pt</i>	<i>vat</i>	<i>vat</i>
Independent variable				
<i>q7</i>	1 (constrained) (0.000)***	0.094 (0.000)***		
<i>q8</i>	1.050067 (0.000)***	0.691 (0.000)***		
<i>q9</i>	0.9334918 (0.000)***	0.122 (0.000)***		
<i>q10</i>	0.7401204 (0.000)***	0.023 (0.000)***		
<i>q11</i>	0.7386591 (0.000)***	0.023 (0.000)***		
<i>q12</i>			1 (constrained) (0.000)***	0.189 (0.000)***
<i>q13</i>			1.038199 (0.000)***	0.534 (0.000)***
<i>q14</i>			0.8980738 (0.000)***	0.208 (0.000)***
<i>q15</i>			0.5888525 (0.000)***	0.022 (0.000)***
<i>q16</i>			0.6471194 (0.000)***	0.027 (0.000)***
cons		-2.41 (0.000)***		-2.36 (0.000)***
No. of observations	131	131	131	131
Log likelihood	-856.1336		-837.18847	
LR test	236.09 (0.000)		57.44 (0.000)	

Note: *p*-values are shown in parenthesis; *, **, *** show significance at 10%, 5%, and 1%.
Source: Authors' calculations.

Taking into consideration such results, this study implies that changes need to be adopted, thus lowering the tax rates. In addition, evidence claim that one of the crucial reasons for highlighting the tax rates to be high for companies is due to their limited cash flow operation at the border of their liquidity. Further, the problems arising from high tax rates can be also noticed in the fact that many of these firms do not report all of their activities or even are operating in the informal economy. Moreover, such results are in line with the findings and suggestions of Maliqi and Pozhegu (2014) regarding the tax rate changes on companies operating in four sectors in Kosovo. In addition, they suggest that also the tax rates in Kosovo are not high compared to other developing countries in the region, they might be reduced more or even propose for no tax to be applied on holidays. Further, the positive effects of the changes in VAT and corporate and personal income tax in the case of Kosovo are also highlighted in the recent study by Asllani and Statovci (2018), emphasizing that changes in the VAT rates have positive effects on the improvement of the economy of Kosovo.

5. CONCLUSION

Accountants and managers of construction companies have maintained that the current law negatively affects the liquidity of construction companies and this then affects the non-implementation of new projects by these companies.

Therefore, this paper analyses the impact of changes in the laws on personal income, corporate income, and VAT on construction companies in Kosovo.

The paper has two main limits. First, no other industrial analysis (manufacturing, service, commerce) is taken, only construction companies, and second, the data analysis was done only through the survey of accountants and company managers for the difficulties created by the current laws on tax in the liquidity of their companies.

The results presented by the SEM1 and SEM2, the OLS1 and OLS2, the confirmation of the first and second working hypotheses shows that the current laws of personal income taxes, corporate income, and VAT have a negative impact on the liquidity of construction companies. The change in the laws will affect the liquidity of the companies that build and

carry out construction projects faster and easier. The indicators analysed in this paper such as *q7* (current corporate income tax law has a negative impact on the company liquidity); *q8* (current personal income tax law has a negative impact on the company liquidity); *q9* (payments for corporate tax and personal income tax during the investment phase have a negative impact on the company liquidity), *q10* (if the laws on corporate and personal income tax were changed, the liquidity in the company would increase significantly); *q11* (increased liquidity will reduce the cost of the project because cash purchases will decrease the prices); *q12* (the current law on the form of VAT payment is not well defined and as such has negative effects on the company liquidity); *q13* (changing the VAT law will significantly reduce costs in the company); *q14* (the law on deductible VAT is better to calculate the coefficient from square meters); *q15* (the law of deductible VAT is more favourable for businesses to calculate the coefficient from the financial value of the investment in local business) and *q16* (changing the VAT law will increase the liquidity of construction companies) are significant at 95% level and validated by Log likelihood and LR test.

As the legal changes will have a high impact on the liquidity of construction companies, these changes will affect the future to have new initiatives by other researchers for necessary legal changes in terms of income taxes and VAT.

Therefore, these initiatives will be the result of this paper and the Government will take into account the recommendations given by this paper, because reducing the costs of construction companies will indirectly bring higher public revenues for the Government from the tax of their corporate income.

It is recommended that the Ministry of Finance in the Republic of Kosovo take into account the requests of the construction companies. These requests have been addressed by the Kosovo Chamber of Commerce to the Government of the Republic of Kosovo, so these companies can have liquidity and continuity of business activities. The Ministry of Finance should prepare amendments to modify and amend the laws, to propose to the Assembly of Kosovo to approve these amendments.

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APPENDIX

Table A.1. Proportions (Part 1)

Proportion estimation					
No. of observations = 131					
Variable	Answers	Proportion	Std. Err.	[95% Conf. Interval]	
q7	1	0.2366412	0.0372767	0.1628937	0.3103888
	2	0.1450382	0.0308847	0.0839366	0.2061398
	3	0.2290076	0.0368535	0.1560975	0.3019178
	4	0.3129771	0.0406696	0.2325171	0.3934371
	5	0.0763359	0.0232889	0.0302615	0.1224103
q8	1	0.2366412	0.0372767	0.1628937	0.3103888
	2	0.3435115	0.0416498	0.2611124	0.4259105
	3	0.1984733	0.0349815	0.1292666	0.26768
	4	0.1450382	0.0308847	0.0839366	0.2061398
	5	0.0763359	0.0232889	0.0302615	0.1224103
q9	1	0.259542	0.0384488	0.1834757	0.3356083
	2	0.2900763	0.0398007	0.2113355	0.3688172
	3	0.2519084	0.0380739	0.1765838	0.327233
	4	0.1374046	0.0301948	0.0776677	0.19714114
	5	0.0610687	0.0210017	0.0195193	0.1026181
q10	1	0.2366412	0.0372767	0.1628937	0.3103888
	2	0.2977099	0.0401036	0.2183698	0.3770501
	3	0.1679389	0.0327855	0.1030768	0.2328011
	4	0.1450382	0.0308847	0.0839366	0.2061398
	5	0.1526718	0.0315452	0.0902633	0.2150802
q11	1	0.2519084	0.0380739	0.1765838	0.327233
	2	0.2824427	0.0394841	0.2043283	0.3605572
	3	0.1603053	0.0321783	0.0966444	0.2239663
	4	0.1679389	0.0327855	0.1030768	0.2328011
	5	0.1374046	0.0301948	0.0776677	0.1971414

Table A.1. Proportions (Part 2)

Proportion estimation No. of observations = 131					
Variable	Answers	Proportion	Std. Err.	[95% Conf. Interval]	Variable
q12	1	0.3206107	0.0409333	0.2396291	0.4015923
	2	0.3664122	0.0422588	0.2828083	0.4500161
	3	0.0687023	0.0221849	0.024812	0.1125925
	4	0.1679389	0.0327855	0.1030768	0.2328011
	5	0.0763359	0.0232889	0.0302615	0.1224103
q13	1	0.3053435	0.0403931	0.2254305	0.3852565
	2	0.259542	0.0384488	0.1834757	0.3356083
	3	0.221374	0.036413	0.1493353	0.2934128
	4	0.1374046	0.0301984	0.0776677	0.1671414
	5	0.0763359	0.0232889	0.0302615	0.1224103
q14	1	0.2290076	0.0368535	0.1560975	0.3019178
	2	0.4274809	0.0433892	0.3416406	0.5133213
	3	0.1450382	0.0308847	0.0839366	0.2061398
	4	0.1374046	0.0301948	0.0776677	0.1971414
	5	0.0610687	0.0210017	0.0195193	0.1026181
q15	1	0.1679389	0.0327855	0.1030768	0.2328011
	2	0.2290076	0.0368535	0.1560975	0.3019178
	3	0.1526718	0.0315452	0.0902633	0.2150802
	4	0.3053435	0.0403931	0.2254305	0.3852565
	5	0.1450382	0.0308847	0.0839366	0.2061398
q16	1	0.2671756	0.0388085	0.1903976	0.3439535
	2	0.2748092	0.0391535	0.1973487	0.3522696
	3	0.1984733	0.0349815	0.1292666	0.26768
	4	0.1450382	0.0308847	0.0839366	0.2061398
	5	0.1145038	0.0279275	0.0592526	0.169755

Table A.2. SEM1

Measurement	Coefficient	OIM Std. Err.	z	P> z	[95% Conf. Interval]
Endogenous variables: Measurement: q7, q8, q9, q10, q11					
Exogenous variables: Latent: ct_pt					
Fitting target model: Iteration 0: log likelihood = -870.40492					
Iteration 1: log likelihood = -857.07344					
Iteration 2: log likelihood = -856.13843					
Iteration 3: log likelihood = -856.13361					
Iteration 4: log likelihood = -856.1336					
No. of observations = 131					
Estimation method = ml					
Log likelihood = -856.1336					
(1) [q7]ct_pt = 1					
1 (constrained)					
q7<-ct_pt_cons	2.847328	0.1134677	25.09	0.000	2.624936 3.069721
q8<-ct_pt_cons	1.050067	0.0589503	17.81	0.000	0.934527 1.165608
q9<-ct_pt_cons	2.480916	0.1059674	23.41	0.000	2.273224 2.688608
q10<-ct_pt_cons	0.9334918	0.0630206	14.81	0.000	0.8099738 1.05701
q11<-ct_pt_cons	2.450382	0.1036672	23.64	0.000	2.247198 2.653566
q7<-ct_pt_cons	0.7401204	0.937476	7.89	0.000	0.5563785 0.9238624
q8<-ct_pt_cons	2.679389	0.1203433	22.26	0.000	2.443521 2.915258
q9<-ct_pt_cons	0.7386591	0.0935846	7.89	0.000	0.5552366 0.9220816
q10<-ct_pt_cons	2.656489	0.1201028	22.12	0.000	2.421091 2.891886
Variance					
e.q7	0.4052187	0.0582871			0.3056692 0.5371891
e.q8	0.0580889	0.0327208			0.0192585 0.1752126
e.q9	0.2912256	0.0446267			0.2156718 0.3932473
e.q10	1.195288	0.1512857			0.9326897 1.53182
e.q11	1.190482	0.1504111			0.9293468 1.524992
ct_pt	1.281396	0.2044839			0.9372374 1.751932
LR test of model vs. saturated: Chi ² (5) = 236.09, Prob > Chi ² = 0.0000					

Table A.3. LR test

Fit statistic	Value	Description
Likelihood ratio: Chi ² _ms(5)	236.094	Model vs. saturated
p > Chi ²	0.000	
Chi ² _bs(10)	713.739	
p > Chi ²	0.000	Baseline vs. saturated

Table A.4. OLS1

<i>Linear regression</i>						
No. of observation = 131						
F(5, 125) = 0.0						
Prob > F = 0.0000						
R-squared = 1.0000						
Root MSE = 0						
ct_pt1	Coefficient	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
q7	0.0944109	2.22e-09	4.3e+07	0.000	0.0944109	0.0944109
q8	0.6915689	3.33e-09	2.1e+08	0.000	0.6915688	0.6915689
q9	0.1226289	2.84e-09	4.3e+07	0.000	0.1226288	0.1226289
q10	0.0236887	4.04e-09	5.9e+06	0.000	0.0236887	0.0236887
q11	0.0237374	3.52e-09	6.8e+06	0.000	0.0237374	0.0237374
_cons	-2.41156	7.93e-09	-3.0e+08	0.000	-2.41156	-2.41156

Table A.5. SEM2

<i>Endogenous variables: Measurement: q12, q13, q14, q15, q16</i>						
<i>Exogenous variables: Latent: vat</i>						
<i>Fitting target model: Iteration 0: log likelihood = -848.04252</i>						
<i>Iteration 1: log likelihood = -837.50018</i>						
<i>Iteration 2: log likelihood = -837.19176</i>						
<i>Iteration 3: log likelihood = -837.18847</i>						
<i>Iteration 4: log likelihood = -837.18847</i>						
No. of observations = 131						
Estimation method = ml						
Log likelihood = -837.18847						
(1) [q12]vat = 1						
Measurement	Coefficient	OIM Std. Err.	z	P> z	[95% Conf. Interval]	
1 (constrained)						
q12<-vat_cons	2.312977	0.112234	20.61	0.000	2.093003	2.532952
q13<-vat_cons	1.038199	0.0494055	21.01	0.000	0.9413662	1.135032
	2.419847	0.1100689	21.98	0.000	2.204116	2.635578
q14<-vat_cons	0.8980738	0.0508046	17.68	0.000	0.7984987	0.9976489
	2.374046	0.1008881	23.53	0.000	2.176309	2.571783
q15<-vat_cons	0.5888525	0.0905346	6.50	0.000	0.4114081	0.766297
	3.030534	0.116741	25.96	0.000	2.801726	3.259342
q16<-vat_cons	0.6471194	0.086506	7.48	0.000	0.4775707	0.8166682
	2.564885	0.115819	22.15	0.000	2.337884	2.791887
<i>Variance</i>						
e.q12	0.2695159	0.0426639			0.1976245	0.3675598
e.q13	0.0989739	0.0320471			0.0524696	0.1866955
e.q14	0.2198509	0.0361772			0.1592429	0.3035263
e.q15	1.306601	0.1649891			1.020137	1.673505
e.q16	1.179087	0.1485816			0.9210478	1.509417
vat	1.380621	0.2029138			1.035073	1.841527
LR test of model vs. saturated: Chi ² (5) = 57.44, Prob > Chi ² = 0.0000						

Table A.6. LR test

Fit statistic	Value	Description
Likelihood ratio: Chi ² _ms(5)	57.439	Model vs. saturated
p > Chi ²	0.000	
Chi ² _bs(10)	555.461	Baseline vs. saturated
p > Chi ²	0.000	

Table A.7. OLS2

<i>Linear regression</i>						
No. of observation = 131						
F(5, 125) = 0.0						
Prob > F = 0.0000						
R-squared = 1.0000						
Root MSE = 0						
vat1	Coefficient	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
q12	0.1891679	4.38e-09	4.3e+07	0.000	0.1891679	0.1891679
q13	0.5348005	5.79e-09	9.2e+07	0.000	0.5348004	0.5348005
q14	0.2082647	5.55e-09	3.8e+07	0.000	0.2082647	0.208247
q15	0.0229771	2.58e-09	8.9e+06	0.000	0.0229771	0.0229771
q16	0.0279815	3.66e-09	7.6e+06	0.000	0.0279815	0.0279815
_cons	-2.367509	2.81e-09	-8.4e+08	0.000	-2.367509	-2.367509