FACTORS AFFECTING THE AUDIT QUALITY OF ROAD CONSTRUCTION PROJECTS IN VIETNAM PERFORMED BY THE STATE AUDIT

Cao Hong Loan^{1*}, Nguyen Phu Giang²

^{1,2}Thuongmai University

^{1*}loan-ktkt@tmu.edu.vn; ² phugiang-ktkt@tmu.edu.vn

Abstract:

This paper presents the impact of variables on the quality of audit quality of road construction projects in Vietnam conducted by the State Audit of Vietnam. The study uses a regression model after testing the Cronbach Alpha scale and exploratory factor analysis EFA. The research data is based on the survey results of 232 subjects belonging to the Department of General, State Audit of Region I, and specialized IV and V of the State Audit of Vietnam. The result shows that six factors have a positive influence on the audit quality of road traffic construction projects, including (1) Legal environment for the audit of road construction projects in Vietnam, (2) The factor belongings to the audit unit are the investor units, (3) the auditor, (4) the working conditions of the state auditor of Vietnam, (5) the time audit, (6) Quality control of audits of road traffic construction projects by the State Audit of Vietnam.

Keywords: influencing factor; audit quality; road construction project, state audit

1. Introduction

Capital construction investment is an important field, contributing to socio-economic infrastructure development and promoting economic growth. Technical and socio-economic infrastructure has been increasingly developed, perfected, and changed the face of many localities throughout the country. The speed and scale of capital construction investment increase make an important contribution to the annual GDP growth rate, the potential growth of the economy, and the improvement and enhancement of the people's material and spiritual life.

Besides, capital construction investment also contributes to economic restructuring towards industrialization and modernization, significantly increasing new production capacity: gradually increasing the proportion of industry, construction, expanding and restructuring the service industry, reducing the balance of agriculture and forestry. There was also continuous structural changein each sector. Many projects and works have been completed and put into use, which has increased production capacity for the economy.

In recent years, not only in our country in particular but also in the world in general, the amount of investment capital in public construction, especially road traffic construction projects, accounted for an important role in GDP and the State budget (State budget). In our country, the

demand for investment in the construction of particular roads from the state budget increases and has brought many practical socio-economic benefits. Every year, the state investment capital increases and the expenditure on road construction projects account for a large proportion of the total social expenditure.

Over the past time, the investment activities of construction projects of the SAR have made many positive changes, creating an important and relatively modern infrastructure system, creating favorable conditions to promote socio-economic development, and ensuring security and defense. The State's investment in road construction projects has created many vital arterial roads, bringing many practical socio-economic benefits. However, there are still many shortcomings and limitationsin implementing investment activities of road construction projects. Most notably, the state of scattered, prolonged, and inefficient investment, high outstanding debt in investment, has become a pressing issue today. Negative phenomena are still quite common in road traffic construction projects, directly affecting the quality of works and causing significant losses of material, which is a matter of deep concern.

As in the Constitution in 2013, the responsible for "auditing the management and use of public finances and assets" is one of the State Audit's projects to contribute and enhance transparency, preventing loss in implementing investment projects for public agencies. In recent years, the State Audit has focused on auditing to point out the shortcomings and limitations in the regimes and policies in managing investment projects, clarifying mistakes, shortcomings, and responsibilities of relevant agencies. Then, it has proposed to the National Assembly and the Government many solutions improve mechanisms and policies to close gaps in the management of road traffic construction projects.

The State Audit has made positive contributions to the inspection and control of the investment of road construction projects with its position and role. The State Audit has issued the "General audit process" and other specialized audit processes, including the "Investment project audit process," to make the work more scientific and effective auditors. However, the situation of loss and misspend is increasing, and audit work has appeared shortcomings and inadequacies, containing many risks. The audit process needs amending and supplemented according to the introduction of the Law on Construction, the Law on Bidding.

2. Theoretical basis

Concept of construction works, construction investment projects

Construction works are products created by human labor, materials, and equipment installed in the works, linked and positioned with the soil, including the underground part and the upper part ground, below water and above water, built according to design. Construction works include civil, industrial, traffic, agriculture and rural development, technical infrastructure, and other works.

A construction investment project is a collection of proposals related to the use of capital to conduct construction activities for new construction, repair, and renovation of construction works to develop, maintain and improve the construction quality of works or products or services within a

defined period cost. The project is expressed through the construction investment pre-feasibility study report or the investment technical report at the project preparation stage.

Concept of road traffic works

Road traffic works include roads, road bridges, road tunnels, road ferry terminals.

Investment project on construction of road traffic works is understood as a collection of proposals related to capital expenditure for new construction, expansion, or improvement of road traffic works for development, maintain and improve the quality of road traffic works within a certain period.

Quality of audit performed by the State Audit

To date, the concept of audit quality is still a matter of debate. Based on many research results, the author considers the quality of audit performed by the state audit in terms of:

The quality of audit performed by the state audit is the satisfaction level of the users of the audit results about the correctness, honesty, objectivity, and timeliness of the audit assessments and ensure the legal basis and adequacy of the audit recommendations.

Factors affecting audit quality of road construction projects

According to Vietnam Auditing Standard No. 220 (VSA 220),auditing quality control is the level of satisfaction of the users of the audit results regarding the objectivity and reliability of the audit, and satisfy the auditee's desire for the auditor's comments to improve business performance in a predetermined time at a reasonable cost.

There are many factors affecting audit quality in general and audit quality of road construction projects in particular. Based on the results of interviews with auditors and audit leaders, factors are divided into two factors, namely, group of external factors and group of internal factors.

Group of external factors

The group of external factors is understood as the factors that do not belong to the auditor and the state auditor but impact the quality of financial and accounting information on the investment capital settlement reports, and thus it affects audit quality. According to many studies, the attribution in the group of external factors influence audit quality, especially when financial and accounting information becomes more and more complex; the socio-economic situation is increasingly volatile and rapidly changing and the trend of legal documents.

Accordingly, the external factors include the legal environment for the audit of road traffic construction projects from the state budget and the factors belonging to the audited entity.

The legal environment for the audit of road traffic construction projects from the state budget: Attributes measuring the impact of the legal environment for the audit of traffic construction projects. Road traffic from the state budget includes the suitability of the state audit standard system, the suitability of the legal document system related to road traffic construction projects from the state budget in Vietnam, relevancy of audit guidelines related to state budget road traffic construction projects in Vietnam, relevancy of audit procedures for traffic construction projects from the state budget in Vietnam by the state audit.

Factors belonging to the audited entity: The attributes measuring the factors belonging to the audited entity include: Quality of internal control of the investor unit, Compliance of the investor unit, The cooperation of the entity being audited.

Group of internal factors

The internal factors affecting the audit quality of road construction projects from the state budget are the factors belonging to the State Audit and State auditors. This is considered the most important group of factors affecting the audit quality of road construction projects from the state budget.State auditors are those who directly perform the audit, based on their ability to detect material irregularities, draw conclusions and recommend handling of errors in the financial statements, invested capital (reporting material misstatements based on its independence) in compliance with applicable laws. Therefore, it is considered as a determinant of audit quality, including:

Auditor includes attributes Auditor's professional knowledge related to construction of road traffic works from the state budget in Vietnam, Auditor's certificates and degrees related to road construction. Road traffic from the state budget in Vietnam, Annual knowledge update of the State Auditor, auditors' working skills, Compliance with professional ethics of auditors, auditors' ability to coordinate work in auditing, business audit experience of road construction projects from the state budget in Vietnam.

Working conditions of the State Auditor include the following attributes: Personal working facilities of the State Auditor, Application of audit software (application of information technology in auditing activities), Working mode Fees for the State Auditor, the reward system for the State Auditor, Sanctions for handling violations of the State Auditor.

Auditing time includes the following attributes: Time to survey and plan the audit, Time to perform the audit, Time to make audit report and check recommendations.

Quality control of the audit of road traffic construction projects of the State Audit Office includes the following attributes: Audit log of the State Auditor, Quality control of the specialized/regional State Audit, Quality control of the State Audit. Auditing of the Accounting - Auditing Management Department, Control of other functional departments.

3. Literature review

The studies of Mock and Samet (1982) and Sutton and Lampe (1990), Carcello et al. (1992) all show that characteristics related to the audit team are generally considered to be more important to the quality of the audit team compared with the characteristics related to the audit firm.

Francis (2011) gave six factors affecting audit quality including: Input factors; Process factors; audit firms; Audit market; Institutions and Economic consequences of Audits.

DeFond and Zhang (2014) argued that audit quality is an elusive concept because users of financial statements can never fully comply with the level of assurance that auditors actually

provide. The author's research provided a research framework on audit quality that show the relationship between the needs and capabilities of the clients, the capacity and ability to provide the audit firm and the intervention and regulation of the audit firm by authorities to create supply and demand for audit quality in the market.

Cuong (2017) with the study "Auditing ODA-funded investment projects performed by the State Audit of Vietnam" has come up with a system of 09 factors affecting the audit quality of the projects ODA-funded projects implemented by the State Audit of Vietnam. Analysis results based on valid survey questionnaires obtained from 168 leaders and state auditors show that internal factors belong to the State Auditor and State Audit such as professional expertise, time audit, professional attitudes and external factors including: the legal environment and the audited entity have an important influence on the audit quality of ODA projects. The author has identified and tested the factors affecting the audit quality of the State Audit in auditing construction investment projects using ODA capital.

Nhung (2021) with her study "Factors affecting the audit quality of the State Audit", gave 11 factors affecting the audit quality of the State Audit and made conclusions about the extent of the audit. the influence of each factor on the audit quality of the state audit. The author mainly focused on researching for two traditional types of auditing, namely financial audit and compliance audit. For operational audit, which is a relatively young type of audit at the State Audit of Vietnam, it is a type of audit that requires auditors to have analytical and synthesis skills and a deep understanding of many fields. in social life, along with appropriate policies and mechanisms of the State Audit to be able to effectively apply the type of performance audit and bring about many valuable audit results.

4. Research methodology

The author has proposed a research model based on the theory of previous studies and qualitative research results through interviews with experts. The author develops and selects the factors affecting the audit quality of road construction projects to include in the research model:

Group of external factors: Legal environment for the audit of road traffic construction projects in Vietnam, Factors belonging to the audit unit are the investor units.

Group of internal factors: Auditor, Working conditions of the State Auditor, Auditing time, Quality control of audit of road traffic construction projects of the State audit.

From there, the author proposes a model of factors affecting the audit quality of road construction projects as follows:

Dependent variable: Audit quality of road construction projects

The independent variable includes two groups of factors:

External factors include:

(1) Legal environment for the audit of road traffic construction projects in Vietnam (MTPL)

(2) Factors belonging to the audit unit are the investor units (DVKT)

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Internal factors include:

(3) Auditor (KTV)

(4) Working conditions of the State Auditor (DKLV)

(5) Auditing time (TGKT)

(6) Quality control of the audit of road traffic construction projects of the State Audit (KSCL)

The proposed hypotheses and its impact on the audit quality of road construction projects include 6 hypotheses H1, H2, H3, H4, H5, H6 as shown in Table 1.

| Hypotheses | Content | Impact |
|------------|---|--------|
| H1 | The legal environment for the audit of road traffic construction projects in Vietnam affects the audit quality of road construction projects. | (+) |
| H2 | The factors belonging to the audit unit are the investor units that have an influence on the audit quality of the road construction project. | (+) |
| НЗ | Auditors have an influence on the audit quality of road construction projects. | (+) |
| H4 | Working conditions of State auditors have an influence on the audit quality of road construction projects. | (+) |
| H5 | The auditing time has an effect on the quality of the road traffic construction project. | (+) |
| H6 | Quality control of audits of road traffic construction projects by the state audit has an influence on the audit quality of road construction projects. | (+) |

| Table | 1: | Hypotheses | in | the | study |
|-------|----|------------|----|-----|-------|
|-------|----|------------|----|-----|-------|

Source: Author's survey

After building the research model and hypotheses, the author carried out an in-depth survey through a questionnaire with 25 observed variables and measured by a five-level Likerts scale to evaluate, specifically: 1 . Very low -2. Low -3. Moderate -4. High -5. Very high. The questionnaire is designed to include general information about individual respondents; assessment of audit objectives; audit quality of road construction projects, groups of influencing factors and attributes of factors according to Likert scale with levels from 1 to 5. Subjects to send the questionnaire: are the audit team leader, team leader, audit team member (auditors) who directly conduct audits of road traffic construction projects, and appraisal leaders and officers, audit quality control. The purpose of collecting this questionnaire is to collect quantitative data through which to run the model to determine the degree of influence of factors on audit quality of road traffic construction projects by the state audit. Thus, the interviewees are those directly involved in the

audit, directly signing/reviewing the quality of the audit, thus having an understanding of the audit process as well as the factors affecting the quality of the audit. the amount of audit work performed by themselves, thus ensuring the reliability of the research results.Within the scope of this research, the author does not conduct interviews with the users of the information on the audit report because the purpose of the survey is not to consider the satisfaction level of agencies, units and individuals using the information on the financial statements, audit report evaluates the factors affecting audit quality based on the detection ability (depending on the auditor's capacity) and the auditor's report (depending on the auditor's independence)about a material error in the investment capital settlement statement; in compliance with applicable laws.

The research was carried out in a short time and the cost did not allow, so the author statistical sampling with a minimum level but still ensured performed statistical significance.Currently, there are many different views on the selection of survey sample size in quantitative research. According to Hair and partners (1998), the sample size should be at least 100 to 150.Gorsuch (1983) suggested that factor analysis requires at least 200 observations. In the view of Bollen (1989), the minimum sample size is 5 observations for a question to be estimated, or the minimum sample size = number of observed variables * 5 (i.e. according to Bollen, the minimum sample size of the model). The research model of the thesis will be 25 variables * 5 = 125). The author sent the questionnaire via Google Docs and filled it in directly. To improve the reliability of survey information, the thesis selects the largest sample for the research model according to one of the above principles. Thus, the minimum sample size of the research model based on Gorsuch's point of view (1983) is 200 samples. In order to achieve the minimum sample size for the above research model, the author has distributed 250 questionnaires to the auditors of the Department of General, State Audit of Region I and specialized state audit IV, V of state audit. The number of questionnaires is 250, represented for the overall population, consistent with the number of auditors performing audits of road traffic construction projects.

The author uses EFA exploratory analysis and regression analysis using SPSS 22 software to determine the relationship between factors affecting the audit quality of accounting estimates.

| Number | Properties | Encryption |
|--------|--|------------|
| Α | The external factors | |
| 1 | Legal environment for the audit of road traffic construction projects in Vietnam | MTPL |
| 1.1 | Conformity of the state audit standard system | MTPL1 |
| 1.2 | The suitability of the legal document system related to the construction projects of road traffic works from the state budget in Vietnam | MTPL2 |

 Table 2. Summary of factors and observed variables

| 1.3 | Relevancy of audit guidelines related to state budget road traffic construction projects in Vietnam | MTPL3 |
|-----|--|-------|
| 1.4 | The suitability of the audit process of road construction projects from the state budget in Vietnam by the state audit. | MTPL4 |
| 2 | Audited units are investors | DVKT |
| 2.1 | Quality of internal control of the investor unit | DVKT1 |
| 2.2 | Compliance of the investor unit | DVKT2 |
| 2.3 | The cooperation of the audited unit | DVKT3 |
| B | The internal factors | |
| 3 | Auditors | KTV |
| 3.1 | Professional knowledge of auditors related to the construction of road traffic works from the state budget in Vietnam | KTV1 |
| 3.2 | Certificates and degrees of auditors related to the construction of road traffic works from the state budget in Vietnam | KTV2 |
| 3.3 | Update the annual knowledge of the state audit | KTV3 |
| 3.4 | Auditor's working skills | KTV4 |
| 3.5 | Compliance with professional ethics of auditors | KTV5 |
| 3.6 | Ability to coordinate the work of auditors in auditing, experience in auditing road construction projects from the state budget in Vietnam | KTV6 |
| 4 | Working conditions of the State Auditor | DKLV |
| 4.1 | Personal means of work of State auditors | DKLV1 |
| 4.2 | Application of audit software (application of information technology in auditing activities) | DKLV2 |
| 4.3 | Working-trip fee regime with State auditors | DKLV3 |
| 4.4 | Reward system with State auditors | DKLV4 |
| 4.5 | Sanctions for violations of State auditors | DKLV5 |
| 5 | Auditing time | TGKT |

| 5.1 | Audit planning survey time | TGKT1 |
|-------|--|-------|
| 5.2 | Time to perform the audit | TGKT2 |
| 5.3 | Time for making audit reports and checking recommendations | TGKT3 |
| 6 | Quality control of the audit of the State Audit | KSCL |
| 6.1 | Audit log of the State auditor | KSCL1 |
| 6.2 | Quality control of specialized/regional state audit | KSCL2 |
| 6.3 | Auditing quality control by the Accounting and Auditing Supervision Administration | KSCL3 |
| 6.4 | Control of other functional departments | KSCL4 |
| 1 | | |
| 7 | Audit quality of road traffic construction projects in Vietnam by the state audit | CLKT |
| 7 7.1 | | |
| | Vietnam by the state audit Audit quality of road traffic construction investment projects to achieve the objective of complying with | CLKT1 |

Source: Author's survey

Based on the above dependent and independent variables, based on the models of Behn et al. (1997), DeAngelo (1981), the author builds a regression model to determine the influence of these factors. Regarding the audit quality of road traffic construction projects in Vietnam conducted by the State Audit, as follows:

 $CLKT=\beta 0+\beta 1\ x\ MTPL+\beta 2\ x\ DVKT+\beta 3\ x\ KTV+\beta 4\ x\ DKLV+\beta 5\ x\ TGLV+\beta 6\ x$ KSCL + e

Inside:

| CLKT | : Audit quality (dependant variable) |
|------|--------------------------------------|
| MTPL | : Regulatory environment |
| DVKT | : Audited unit |
| KTV | : Auditor |
| DKLV | : Working condition |
| TGKT | : Auditing time |
| KSCL | : Quality control of the audit |
| β0 | : Intercept factor |
| e | : Error of the regression function |
| | |

5. Research results

5.1. The results of the evaluation of the quality of the scale

The author tested the reliability of the attributes in the group of factors, both internal and external factors.Next, based on the average results (means) to evaluate the influence of the attributes in the group of factors. Based on the results of correlation regression to determine whether the influence of different groups of factors in the research model is different.

The results of evaluating the quality of the model's scales by Cronbach's Alpha coefficient (7 scales with 28 observed variables) are shown in the following table:

Table 3: Summary table of quality assessment of the factors affecting the audit of road traffic construction projects

| Observed variables | Scale average if variable type | Scale variance if variable type | Total variable correlation | Cronbach's Alpha if variable type | | | | | |
|--------------------------------|--------------------------------------|---------------------------------------|-------------------------------|---|--|--|--|--|--|
| Audit quality (MTPL): a = .854 | | | | | | | | | |
| MTPL1 | 9.61 | 8.075 | .702 | .812 | | | | | |
| MTPL2 | 9.56 | 7.753 | .723 | .803 | | | | | |
| MTPL3 | 9.65 | 7.648 | .716 | .806 | | | | | |
| MTPL4 | 9.66 | 8.217 | .645 | .836 | | | | | |
| Audited unit (DVK | T): a =. 826 | | | | | | | | |
| DVKT1 | 6.84 | 3.598 | .687 | .760 | | | | | |
| DVKT2 | 6.91 | 3.922 | .681 | .762 | | | | | |
| DVKT3 | 6.79 | 3.994 | .685 | .759 | | | | | |
| Auditor (KTV): a = | Auditor (KTV): a = .939 | | | | | | | | |
| KTV1 | 17.35 | 21.865 | .834 | .926 | | | | | |

| KTV2 | 17.34 | 22.676 | .858 | .923 | | | | |
|------------------------------|---|----------------------|------|---------------------|--|--|--|--|
| KTV3 | 17.35 | 22.661 | .830 | .926 | | | | |
| KTV4 | 17.38 | 22.973 | .753 | .936 | | | | |
| KTV5 | 17.34 | 22.080 | .813 | .928 | | | | |
| KTV6 | 17.39 | 22.897 | .824 | .927 | | | | |
| Working conditions | Working conditions of the State Auditor(DKLV): a = .921 | | | | | | | |
| DKLV1 13.56 13.677 .746 .913 | | | | | | | | |
| DKLV2 | 13.64 | 13.521 | .850 | .892 | | | | |
| DKLV3 | 13.57 | 13.155 | .840 | .894 | | | | |
| DKLV4 | 13.64 | 14.102 | .811 | .901 | | | | |
| DKLV5 | 13.66 | 13.748 | .741 | .914 | | | | |
| Auditing time (TGH | KT): a = . 848 | | | | | | | |
| TGKT1 | 7.07 | 3.445 | .730 | .775 | | | | |
| TGKT2 | 7.01 | 3.623 | .713 | .792 | | | | |
| TGKT3 | 7.01 | 3.498 | .707 | .798 | | | | |
| Quality control of the | he audit (KSCL | <i>.</i>): a = .959 | | | | | | |
| KSCL1 | 9.98 | 9.541 | .867 | .955 | | | | |
| KSCL2 | 9.97 | 9.315 | .911 | .942 | | | | |
| KSCL3 | 9.99 | 9.069 | .925 | .938 | | | | |
| KSCL4 | 9.96 | 9.094 | .892 | .948 | | | | |
| | Audit quality of road traffic construction projects in Vietnam by the state audit(CLKT): a = .762 | | | | | | | |
| CLKT1 | 6.60 | 2.986 | .566 | .719 | | | | |
| CLKT2 | 6.67 | 3.158 | .614 | .659 | | | | |
| CLKT3 | 6.55 | 3.279 | .608 | .669 | | | | |
| | 1 | 1 | 1 | Courses Author's au | | | | |

Source: Author's survey

Reliability testing by Cronbach Alpha results shows that all attributes in each factor group are completely consistent and have high reliability. According to the scale quality assessment table, all observed variables satisfy the condition > 0.3, so the model keeps 6 factors with 26 characteristic

variables (Cronbach's Alpha coefficient of the population is greater than 0.6). The Corrected Item - Total Corelation of the observed variables is greater than 0.3).

5.2. Exploratory factor analysis results

After analyzing the reliability of the scale, the next step to determine the necessary set of variables for the research problem, the author uses the exploratory factor analysis (EFA) method to consider the degree of convergence. of the observed variables by each component and the discriminant value between the factors.

After analyzing EFA, only groups of factors that satisfy the conditions can participate in the regression run in the next analysis.

Use the method to rotate the whole angle (Varimax) of the elements. Looking at the results of the EFA analysis for the independent variables, it can be seen that the results divide into 6 groups. Statistical evaluation criteria:

KMO = 0.911, so EFA analysis is appropriate with study data.

Sig. (Bartlett's Test) = 0.000 (sig. < 0.05) shows that the observed variables are correlated with each other in the population and the data used for EFA analysis is completely appropriate.

Eigenvalues = 1,055 > 1 represents the variation explained by each factor, only factors with Eigenvalues > 1 are kept in the analytical model.

Total variance extracted = 75.977\% > 50\% satisfactory, then it can be said that these 6 factors explain 75.977% of the variation of the data.

All observed variables have load factor > 0.5

Table 4: Rotation matrix of factors

| | | Component | | | | | | |
|-------|------|-----------|---|---|---|---|--|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | | |
| KTV5 | .849 | | | | | | | |
| KTV6 | .837 | | | | | | | |
| KTV1 | .835 | | | | | | | |
| KTV2 | .833 | | | | | | | |
| KTV3 | .822 | | | | | | | |
| KTV4 | .738 | | | | | | | |
| DKLV3 | | .816 | | | | | | |
| DKLV2 | | .814 | | | | | | |
| DKLV4 | | .778 | | | | | | |

Rotated Component Matrix^a

| DKLV5 | .765 | | | | |
|-------|------|------|------|------|------|
| DKLV1 | .731 | | | | |
| KSCL2 | | .855 | | | |
| KSCL3 | | .854 | | | |
| KSCL1 | | .830 | | | |
| KSCL4 | | .819 | | | |
| MTPL3 | | | .786 | | |
| MTPL1 | | | .761 | | |
| MTPL2 | | | .761 | | |
| MTPL4 | | | .686 | | |
| DVKT3 | | | | .800 | |
| DVKT2 | | | | .798 | |
| DVKT1 | | | | .797 | |
| TGKT1 | | | | | .786 |
| TGKT3 | | | | | .779 |
| TGKT2 | | | | | .662 |

Source: Author's survey

The variables remain the same according to the original model, including 6 independent variables: Auditor (KTV), Auditing unit (DVKT), Working conditions (DKLV), Quality control (KSCL), Environment legal (MTPL) and Auditing time (TGKT). The independent variables' observed variables do not change, so the regression model will be performed according to the original independent variables.

5.3. Regression analysis results

Regression analysis will determine the relationship between the dependent variable and the independent variables.

The regression model to determine the factors affecting the audit quality of road traffic construction projects performed by the state audit is as follows:

$$\label{eq:clkt} \begin{split} CLKT = b0 + b1 \ x \ MTPL + b2 \ x \ DVKT + b3 \ x \ KTV + b4 \ x \ DKLV + b5 \ x \ TGKT + b6 \ x \\ KSCL + e \end{split}$$

Dependent variable: Audit quality of road traffic construction projects in Vietnam by the state audit

Independent variables include: Auditor (KTV), Auditing unit (DVKT), Working conditions (DKLV), Quality control (KSCL), Environment legal (MTPL) and Auditing time (TGKT).

The following tables show the regression results of the model:

Table 5: Model summary

Model Summary^b

| Model | R | R | Adjusted R | Std. Error of | Change Statistics | | | | Durbin-Watson | |
|-------|-------------------|--------|------------|---------------|-------------------|------|-----|-----|---------------|-------|
| | | Square | Square | the Estimate | R Square Ch | F Ch | df1 | df2 | Sig. F Change | |
| 1 | .805 ^a | .648 | .639 | .50344 | | | 6 | 225 | .000 | 1.061 |

a. Predictors: (Constant), KSCL, KTV, DVKT, MTPL, DKLV, TGKT

b. Dependent Variable: CLKTCTGTĐB

Source: Author's survey

Table 6. Model ANOVA analysis

ANOVA^a

| Model | | Model | Sum of Squares | df | Mean Square | F |
|-------|------------|---------|-------------------|--------|----------------|-------------------|
| | Regression | 105.095 | 6 | 17.516 | 69.108 | .000 ^b |
| 1 | Residual | 57.027 | 225 | .253 | | |
| | Total | 162.122 | 231 | | | |

a. Dependent Variable: CLKTCTGTĐB

c. Predictors: (Constant), KSCL, KTV, DVKT, MTPL, DKLV, TGKT

Source: Author's survey

Table 7. Model regression

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|-------|------------|-----------------------------|------------|------------------------------|-------|------|-------------------------|-------|
| | | В | Std. Error | Beta | | | Tolerance | VIF |
| 1 | (Constant) | .088 | .164 | | .533 | .594 | | |
| | MTPL | .199 | .047 | .218 | 4.200 | .000 | .583 | 1.716 |
| | DVKT | .092 | .042 | .103 | 2.184 | .030 | .698 | 1.432 |
| | KTV | .202 | .044 | .228 | 4.569 | .000 | .628 | 1.593 |
| | DKLV | .186 | .050 | .203 | 3.718 | .000 | .526 | 1.903 |
| | TGKT | .174 | .051 | .188 | 3.428 | .001 | .520 | 1.924 |
| | KSCL | .095 | .046 | .114 | 2.057 | .041 | .510 | 1.960 |

a. Dependent Variable: CLKTCTGTĐB

Source: Author's survey

Based on the above tables, we can see:

• Check the fit of the model

Test for multicollinearity: The variance exaggeration factor (VIF) of all independent variables is less than 10 (table 4.5), so multicollinearity in the model is assessed as not serious.

Durbin - Watson coefficient used to test the correlation of residuals shows that the model does not violate when using multiple regression method.

Table 4.3 shows that the obtained Durbin – Watson value is 1,061 (ranging from 1 to 3), the model does not have correlation phenomenon of residuals.

The results of ANOVA test (table 4.4) with significance level sig = 0.000 show that the built multiple linear regression model is suitable for the data set and usable.

• Evaluate the level of explanation by the independent variables in the model

The coefficient R2 (R Square) = 0.648 means that 64.8% of the variation in the audit quality of road traffic construction projects of the state audit will be explained by the following factors: Independent variables were selected to be included in the model.

The research model results show that the independent variables MTPL, DVKT, KTV, DKLV, TGLV, KSCL all have a statistically significant impact (due to Sig. < 5%) on the audit quality of road traffic construction projects from the state budget.

The normalized regression equation is as follows:

 $\label{eq:CLKT} CLKT = 0.218 \ \text{MTPL} + 0.103 \ \text{DVKT} + 0.228 \ \text{KTV} + 0.203 \ \text{DKLV} + 0.188 \ \text{TGKT} + 0.114 \ \text{KSCL}$

The level of impact of the variables in order from high to low will be:

KTV (0.228) -> MTPL (0.218) -> DKLV (0.203) -> TGKT (0.188) -> KSCL (0.114) -> DVKT (0.103)

From the test results of the model, all factors have a positive impact on the audit quality of road traffic construction projects:

2 groups of external factors are the legal environment for auditing activities of road traffic construction projects (MTPL) and the factors belonging to the audited entity which are the investors (DVKT). Legal environment factors have a stronger influence on audit quality and both of these external factors have a positive impact. That means if the legal environment for auditing road traffic construction projects includes the State Auditing Standards System, the system of legal documents related to roadtraffic construction projects, Road traffic construction , Auditing guidelines related to road traffic construction projects, The audit process is compiled sufficiently and appropriately, the quality of the audit will be improved. In addition, if the Investor's capacity, professionalism, compliance, understanding, cooperation and quality of internal control are improved, it will also have a positive impact on the quality of the audit.

Besides, among the four groups of internal factors including KTV, DKLV, TGKT and KSCL, Auditor factors (KTV) have the strongest impact on audit quality, next are the factors including

working conditions of state auditors (DKLV), auditing time (TGKT) and audit quality control of state audit (KSCL). The factors belonging to the group of internal factors all positively affect the quality of the audit.

6. Conclusions and recommendations

The audit of road traffic construction projects from the state budget performed by the State Audit has basically complied with the audit process of the State Audit.However, the reality of auditing is still inadequate, affecting the quality of audits of road traffic construction projects from the state budget.Based on the research results, the author proposes some recommendations as follows:

Firstly, the Auditor is the factor that has the strongest influence on the audit quality of the road traffic construction project among the six influencing factors. The author wants to mention the professional knowledge of the State auditor, the updating of knowledge, working skills, ethical compliance and work coordination ability, and the State auditor's experience in auditingthe road traffic construction project. In order to improve the audit quality for road traffic construction projects, it is necessary to continue paying attention to solutions on training and fostering audit skills in the field of capital construction investment for auditors. The training content is aimed at approaching modern auditing methods, professional auditing skills, good auditing skills in the field of capital construction investment in general and road construction projects, especially is to promote knowledge, qualifications and skills in applying information technology in auditing activities.

Secondly, the legal environment is also a factor that has a great influence on the audit quality of road construction projects. That means if the legal environment for auditing road traffic construction projects includes the State Auditing Standards System, the system of legal documents related to road construction projects, Auditing guidelines, Audit procedures for road traffic construction projects are fully compiled sufficient and appropriate, the audit quality will be improved.

Thirdly, working conditions of auditors are also factors that affect the quality of audits of road construction projects.Being fully equipped with facilities, ensuring the working mode will make the work of the auditors more convenient and improve the quality of the audit.

Fourthly,, the audit team needs to arrange the time for planning the audit, performing the audit, making the audit report and checking the recommendations in a reasonable manner and in the prescribed time to improve the quality of the audit.

Fifthly, the audit quality control will help the road traffic construction project audit grasp the shortcomings and find ways to overcome them andlearn from experience for the next audits to achieve better quality.

Sixthly, the factor belonging to the audited unit is the external factor, which has the least influence on the audit quality of the road traffic construction project. The audited firm should develop and guide the implementation of internal control regulations, comply with clear and prudent rules and regulations, serve a basis for inspection, review and prevent deviations.

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