

Analysis Of The Impact Of Budget-Refocusing Policies On The Sustainability Of Construction Services Companies

Aasniari^{1*}, Ruslin Anwar², Arief Rachmansyah³

^{1,2,3} Civil Engineering Faculty, Brawijaya University, Malang, 65145, Malang, Indonesia

*Corresponding Author:

Email: aasniari@student.ub.ac.id

Abstract.

Business actors in the construction sector in the pre-pandemic period showed good performance, the projects obtained were on target, contract values rose, and operating income increased, until stable liquidity there was no minus, so, before the pandemic, projects were planned according to their schedules, the right targets, to the appropriate cost plan, but after the pandemic, hence the emergence of the government's policy on diverting the project budget for disasters (Covid 19), where this policy is called budget refocusing, the regulation is contained in the 'Regulation of the Minister of Finance of the Republic of Indonesia Number SE-6 / MK.02 / 2020'. During the pandemic, construction work can hinder the implementation of the proposed project to show declining performance. The purpose of this study is to find out the factors that influence consultants in construction management activities and also to find out the impact of government policies on budget refocusing on construction project planning. Data collection was carried out by survey through a questionnaire, the respondents to this study were those in a Surabaya consulting company that was directly involved in the field of building construction that was affected by budget refocusing. As for the results of factor analysis in the correlation analysis test, one factor that significantly influences consultants in construction management activities is the factor of high labor wages with a correlation of 0,709. And for the impact of budget refocusing on construction project planning on cost factors, where the indicator is the untimely payment with a test value of 4,369.

Keywords: Budget Refocusing, Building Projects, Construction, and Government Policy.

I. INTRODUCTION

The pandemic disaster during construction works may hamper the implementation of the proposed project, for example, some of the workforces cannot report activities due to obstruction of mobility, on the other hand, accelerated infrastructure development contributes greatly to creating a construction services market in Indonesia, Construction companies are given a schedule by which the project must be completed (Yustika, 2020). In the pre-pandemic period, business actors in the construction sector showed good performance. The projects obtained were on target, the contract value increased, the business income increased, and there was no stable liquidity. So, before the pandemic, the planned projects were by schedule, the right target, and the appropriate cost plan.

Then the pandemic came, which caused problems in the construction industry during the pandemic (Indriani, 2021). Government policies to reduce the movement of people or the gathering of people in a location have an impact on physical construction development activities that require direct worker activities at the project site, activities and movements cause delays that have a negative impact considering that project activities cannot be postponed (Gamil, 2020). From this case, the researcher wants to research the analysis of the impact of budget-refocusing policies on the sustainability of construction service companies. The purpose of this assessment is to determine the factors that influence consultants and determine the impact of government policies on refocusing budgets in the implementation of construction projects.

II. METHODS

Before that, it's good to know what budget Refocusing is, many meanings define Refocusing. Budget refocusing is centralizing or refocusing the budget, while in terminology, budget refocusing is concentrating or refocusing the budget for activities that were not previously budgeted through budget changes. The goal of refocusing the budget during this pandemic is to reallocate the budget, such as Refocusing the State Budget (APBN) for Covid-19 (Ministry of Finance, 2020) This research stage begins with a literature study related to the problem taken by the researcher, then makes a composition of several questions that will be used as a questionnaire, then tested first by several people to find out how the shortcomings of the questionnaire are

until the questionnaire is feasible to be shared with respondents related to the implementation of construction projects, respondents to this study have experience of construction that is clarified from the length of work experience and immediately felt the influence of Covid-19 and the impact of government policies on budget refocusing.

Data collection by distributing questionnaires in the form of written statements to parties that have been targeted in Surabaya, questionnaires are presented in quantitative form using a Likert scale of 1 to 5 as a measuring tool. The instruments used as measurements in this study are indicators of each variable, after the data is collected, then the data processing process is carried out using a method to get the appropriate research results. In other words, at this stage, all data is processed so that it can produce answers to the formulation of research problems, one software that will be used to help analyze statistical data is SPSS (Statistical Package for Social Science). Data processing begins with conducting data testing, data testing using validity and reliability tests, testing this data is useful for the feasibility of questionnaire data that will be used for subsequent analysis. After that, the next step is to determine the influence factor in this study using the Partial correlation analysis method which aims to determine the level of variable relationship on indicators. The next step is to find out the shape and magnitude of a variable to build an equation and use the equation to make an estimate using the multiple regression analysis methods.

III. RESULT AND DISCUSSION

Research Respondent Data

The research survey is carried out using a questionnaire that is distributed to parties related to carrying out construction projects. Of the total 35 questionnaires distributed, the returning questionnaires totaled 34 questionnaires. All respondents in this study immediately felt the influence of Covid 19 and the impact of government policies, namely refocusing the budget in the city of Surabaya.

Table 1. Position of Respondent

Position	Resp.	(%)
Company Director	3	9%
Project Manager	5	15%
Site Manager	4	12%
Operational Manager	3	9%
Supervisor	3	9%
Quality Surveyor	3	9%
Drafter	4	12%
Administration	6	18%
Logistics	3	9%
Sum	34	

Validity Test

This test was performed with Pearson Correlation or by comparing the data can be seen if whitening is greater than table with sig 5% / 0.05. If $r_{table} < r_{count}$ then it is declared valid, and if conversely $r_{table} > r_{count}$ then it is declared invalid. In this study r_{table} with N=34 which is 0.0339 (seen from the validation table).

Table 3. Invalid Variable Validation Test Results

Variable	Indicators	Code	Items	r count	Information
X3	Equipment	P3	Loss of work equipment	0,308	Invalid
Y1	Cost	Y1	Fluctuations in interest rates on loans in banks	0,291	Invalid
Y2	Time	W5	Improper construction/execution methods	0,233	Invalid
Y3	Quality	U6	Bad organization	0,166	Invalid

Reliability Test

The reliability test is used to determine the extent to which the measurement results remain consistent if two or more measurements are taken of the same symptoms using the same measuring device. The criterion of the variable is said to be reliable if it gives a Cronbach Alpha value of > 0.600 .

Table 4. Reliability Test Results

Variable	Cronbach Alpha (>0.600)	Conclusion
X	0.951	Reliable
Y	0.953	Reliable

Partial Correlation Test Analysis

In this study, the partial correlation test aims to determine the level of variable relationship in the indicators, which is for coefficient: 0.00-0.19 the level of relationship is very low. 0.20-0.39 the relationship level is low. 0.40-0.59 the relationship level is medium. 0.60-0.79 the relationship level is strong and 0.80-1.00 the relationship level is very strong.

Table 5. Partial Correlation Test Results

Variable	Indicators	Code	Partial Correlation	Relationship Level
Labor (X)	Reduced number of workers in each work item due to the implementation of Physical Distancing	T1	.689	Keep
	The importance of skills/certifications for the workforce	T2	.829	Strong
	Replacement of new labor	T3	.595	Keep
	Workers from outside the city must do a <i>rapid test/swab test</i>	T4	.708	Strong
	Workers' daily productivity is reduced due to restrictions	T5	.589	Keep
Material (X2)	Increase in the price of materials in the market (<i>fluctuations</i>)	M1	.620	Keep
	Limited amount of material on the market during execution	M2	.725	Strong
	Delays in the arrival of materials due to closed mobilization access	M3	.681	Keep
	Scarcity of material materials	M4	.378	Low
	Unsuitable quality of materials	M5	.630	Keep
	The occurrence of material loss	M6	.722	Strong
Equipment (X3)	Delays in equipment delivery due to closed mobilization access	P1	.575	Keep
	Equipment malfunction/ineligibility	P2	.576	Keep
	Equipment out of place	P4	.317	Low
	Low productivity of tools due to restrictions on working hours	P5	.492	Keep
Method/Solution (X4)	Performing CCO / Addendum Additions	S1	.816	Strong
	Making changes to construction methods	S2	.566	Keep
	Adding manpower	S3	.549	Keep
	Increase working hours	S4	.815	Strong
	Reallocating the budget	S5	.640	Keep
Finance (X5)	Good funding from Contractors	K1	.666	Keep
	Make Payments By The Agreement	K2	.820	Strong
	There is a change in the allocation of funds by the owner	K3	.616	Keep
	High wages of labor	K4	.709	Strong
	Money intensive for faster completion ahead of schedule	K5	.461	Keep
Cost (Y1)	Estimated project costs exceed actual costs	B2	.554	Keep
	There is an increase in implementation costs due to additional work and rework/redesign	B3	.571	Keep
	Untimely payment	B4	.688	Keep
	Proper and organized allocation of funds	B5	.700	Strong
	The occurrence of changes in the value of the contract (contract addendum)	B6	.744	Strong
	Time (Y2)	The timing of the implementation does not match the original plan	W1	.491

	The occurrence of an extension of the implementation time from the planned	W2	.852	Strong
	The abundance of additional work	W3	.852	Strong
	The owner's work plan often changes	W4	.635	Keep
Quality (Y3)	The quality of work is not up to standard	U1	.554	Keep
	Rework and dismantling of work items that have been worked on	U2	.571	Keep
	There is a defect in the resulting product not by technical specifications	U3	.688	Keep
	Errors in estimating the complexity of the project	U4	.700	Strong
	Lack of oversight of sub-contractors and suppliers	U5	.744	Strong

Pearson Correlation Test Analysis

The correlation test aims to determine the degree of closeness of the relationship between the variables expressed with the correlation coefficient (r), whether the variable X affects variable Y while knowing the degree of relationship according to the table of the level of the coefficient relationship, and knowing the type of relationship between variables X and Y can be positive and negative.

For decision-making in correlation tests where the significance value is <0.05 then correlated, if >0.05 then it is not correlated, in the guidelines the degree of relationship is determined by the degree of relationship of the correlation coefficient.

Table 6. Pearson Correlation Test Results

Variable	Factor	Variable Correlation Rate Y		
		Y1	Y2	Y3
X1	Workforce	Tall	Very High	Tall
X2	Materials	Enough	Tall	Enough
X3	Equipment	Enough	Very High	Enough
X4	Method/Solution	Tall	Very High	Tall
X5	Finance	Tall	Very High	Tall

Multiple Linear Regression Test Analysis

This study, it aims to solve the formulation of the problem in this study, namely to determine the factors that significantly affect consultants in carrying out construction management due to the impact of government policies on budget refocusing. Multiple regression analysis aims to determine the presence or absence of the influence of two or more free variables (X) on the bound variable (Y).

Decision making with: sig value $< 0.05/t$ calculate $> t$ table.

Table 7. Multiple Linear Regression Test Variable Y1 (Cost)

Variable	Code	t count	Sig
Constant		27.415	
Cost (Y1)	B2	2.309	1.327
	B3	-1.729	-0.959
	B4	7.547	4.369
	B5	10.127	6.107
	B6	-2.352	-1.303

Decision making with t table = 2,048

In the output above, a regression model is obtained as follows:

$$Y = 27,415 + 2,309 + (-1,729) + 7,547 + 10,127 + (-2,352)$$

And based on the partial t-test that has been analyzed, there are 2 indicators of the cost factor that significantly influence on consultants in carrying out construction management due to the impact of government policies on budget refocusing, with a t value calculated $> t_{table}$, as for these factors, namely:

- Factor (B4) Untimely payment, where the result is $4,369 > 2,048$ so it is declared influential.
- Factor (B5) Improper and unorganized allocation of funds, where the result is $6,107 > 2,048$ so it is declared influential.

Variable against Y1		
Indicators	t count	Sig
B4	3.207	0.000
B5	2.212	0.003

Variable X against Y2		
Indicators	t count	Sig
W1	6.167	.000
W3	8.350	.000
W4	4.595	.000

Variable X against Y3		
Indicators	t count	Sig
U3	4.369	.000
U4	6.107	.000

IV. CONCLUSION

- Factors that influence consultants in construction management activities have a very significant value and a strong level of relationship to the implementation of construction projects that will affect construction management activities, for these factors, namely :
 - In the Labor Variable, a very significant factor is the Labor expertise factor with a partial correlation value of 0.829.
 - In Material Variables, a very significant factor is the factor of limitation of the amount of material with a partial correlation value of 0.725.
 - In the Method/Solution Variable, a very significant factor is the factor of performing a CCO/ addition of an addendum with a partial correlation value of 0.816.
 - In financial variables, a very significant factor is the factor of high labor wages with a partial correlation value of 0.709.
- The impact the effect of budget refocusing on construction project planning will have an impact on cost, time, and quality factors.
 - Cost Factor :
 - Untimely payment, where the result t count is 4.369
 - Improper allocation of funds, where the calculated result is 6.107
 - Time Factor :
 - The implementation time was not by the original plan, where the calculated result was 6.167
 - The number of additional jobs for which the result t count is 8,350
 - The owner's work plan is often arbitrary, where the result t count is 6.107
 - Quality Factor :
 - There is a defect in the resulting product not by technical specifications, where the result is t 4.369
 - Error in estimating the complexity of the project, where the result is t 6.107

REFERENCES

- [1] Bsisu, K. A. D. 2020. The impact of the COVID-19 pandemic on Jordanian civil engineers and construction industry. *International Journal of Engineering Research and Technology*, 13(5), 828-830.
- [2] Gamil, Y., & Alhagar, A. 2020. The impact of the pandemic crisis on the survival of construction industry: a case of COVID-19. *Mediterranean Journal of Social Sciences*, 11(4), 122-122.
- [3] Hafnidar, A.Rani. 2016. Construction Project Management. Yogyakarta: Deepublish CV Budi Utama.
- [4] Hasibuan, S.P. 2013. Management consists of six elements (6M). Jakarta: PT. Earth Script

- [5] Jumas, D. Y., Ariani, V., & Alius, M. 2022. The Impact of the Covid-19 Pandemic on Construction Consulting Services Companies in West Sumatra. *CIVED*, 9(2), 173-183.
- [6] Likitha, K. N., et al. 2022. Impact of pandemic crisis of COVID-19 on construction industry in India. *Sustainability, Agri, Food and Environmental Research*, 12.
- [7] Maelissa, N., Gaspersz, W., & Metekohy, S. 2021. The impact of the Covid-19 pandemic on the implementation of construction projects in Ambon City. *Journal of Symmetries*, 11(1), 411-416.
- [8] Nurlela, N., & Suprpto, H. 2014. Identification and analysis of risk management in multi-storey building infrastructure development projects. *Scientific Journal of Design & Construction*, 13(2).
- [9] Shibani, A., Hassan, D., & Shakir, N. 2020. The Effects Of Pandemic On Construction Industry In The UK. *Mediterranean Journal of Social Sciences*, 11(6), 48-48.
- [10] Triyawan, A., & Fendayanti, Z. E. U. 2021. The Impact of the Covid-19 Pandemic on the Sustainability of Construction Services Companies. In *economic forum* (Vol. 23, No. 2, pp. 223-230).
- [11] Wang, Z., Liu, Z., & Liu, J. 2020. Risk Identification And Responses Of Tunnel Construction Management During The COVID-19 Pandemic. *Advances in Civil Engineering*.