

CHAPTER V

CLOSING

5.1 Conclusion

The ex-post value for money assessment of the Jatiluhur I water project in Indonesia has achieved its main objective. The background of this research centers on a critical review of the Value for Money assessment from an ex-ante and ex-post perspective. The research aims to uncover the dynamics and factors influencing the VfM outcome of this infrastructure project, which is critical to improving the water supply system in Indonesia. By delving into the comparative evaluation of ex-ante and ex-post VfM assessments, this research seeks to provide a better understanding of the project's financial and operational performance, which will help address the challenges faced in developing water infrastructure through PPPs and mitigate the risk of cost overruns and optimism bias and can provide insights that can guide future infrastructure development initiatives.

The Jatiluhur I Water Project resulted in a negative ex-post VfM. The negative result of this analysis indicates that the PSC or traditional procurement option may be more profitable than the PPP option, given the changing conditions and realization that did not match the initial expectation. The total ex-post VfM for this project is -98,010 which is lower than the ex-ante estimates of 34,747. Both ex-ante and ex-post PPP options still showed positive values, but the total VfM dropped sharply from positive ex-ante to negative ex-post. While PPP projects were

initially thought to provide better value, due to changing conditions, PSC or traditional procurement options became more favorable.

The main reasons identified for the gap in value for money included revenue-related risks due to the availability of alternative water sources, which was identified as the most significant factor affecting the project's value for money outcome at the ex-post stage, contributing 94.10% to the variability. This emphasizes the importance of accurate demand forecasting and efforts to secure a reliable customer base to mitigate revenue shortfalls. Although the risk of raw water quantity shortage is not as great as the revenue risk at 5.90%, the risk of operation failure due to insufficient raw water availability was also identified as a factor that could potentially affect the financial performance of the project. This highlights the need for continuous monitoring of raw water availability and implementation of contingency plans. These findings suggest that although the Jatiluhur I project was able to achieve a positive VfM outcome, addressing the identified risks and gaps between ex-ante and ex-post assessments will be critical to improving the VfM outcomes of future water infrastructure projects in Indonesia.

This research makes a significant contribution to the understanding of Value for Money specifically for water infrastructure projects in Indonesia by providing a comprehensive analysis of the Jatiluhur I Water Project through ex-ante and ex-post VfM assessments. This two-stage analysis provides a better understanding of how initial projections align with actual project outcomes, highlighting the

importance of accurate forecasting and risk management in achieving positive VfM. By examining the difference between anticipated and realized VfM, my research highlights important factors that influence the financial and operational success of Public-Private Partnership (PPP) projects in the water sector. This approach not only contributes to the academic discourse on PPPs in developing countries, but also provides practical insights for policy makers and project planners.

However, this paper has limitations. Obtaining comprehensive and reliable data is a significant challenge, especially in conducting post-value for money analysis in Indonesia due to the lack of research on this subject. This scarcity stems from difficulties in data collection, which affects the depth and breadth of analysis achieved in this study. Another limitation arises from the challenge of accurately assessing ex-post conditions, as predicting future project performance involves assumptions about various variables, including costs, revenues, and the impact of external factors. These assumptions may not always be correct, leading to differences between projected and actual results. The uncertainty inherent in estimating project outcomes poses challenges in conducting a proper ex-post value for money analysis. These limitations underscore the complexities involved in conducting a thorough value for money analysis of infrastructure projects such as the Jatiluhur I Water Supply System.

Based on the limitations identified in this study, there are several potential areas that could be explored in further research. Future research could focus on developing more effective methodologies for data collection and analysis, especially in the context of post-value for money assessment of infrastructure projects. In addition, research could lead to the development of more sophisticated models that can capture the dynamic nature of economic variables affecting infrastructure projects, improving the accuracy of ex-ante and ex-post assessments by accounting for fluctuations in economic conditions over time. In addition, further research is needed in forecasting techniques that can better predict the future performance of infrastructure projects, perhaps by developing models that incorporate more variables and potential external factors to reduce uncertainty in ex-post assessment. Finally, comparative studies involving ex-ante and ex-post value for money assessments across different infrastructure projects and sectors could also provide deeper insights into the factors that influence the success of such projects and how they can be effectively managed.

In conclusion, this study demonstrates the important role of post-VfM assessment in evaluating the effectiveness of Public-Private Partnerships (PPPs) for drinking water infrastructure projects. By analyzing the Jatiluhur I Water Project through ex-ante and ex-post lenses, this study provides valuable insights into the dynamics that influence VfM outcomes. The ex-post VfM achieved by the project was negative, despite the gap between projected and actual outcomes, highlighting

the potential economic advantages of the PPP approach. However, the study also underlines the importance of addressing revenue shortfalls and potential water scarcity to ensure sustainability of positive VfM in future projects. The limitations identified in this study, particularly data scarcity and forecasting challenges, emphasize the need for further research in developing a robust methodology for post-VfM assessment in Indonesia. By prioritizing VfM throughout the project cycle, stakeholders can make informed decisions, mitigate risks, and ensure the sustainable development of the water sector in Indonesia. The findings from this study provide a valuable foundation for future policy makers, project planners, and researchers to improve the efficiency, effectiveness, and long-term value for money of water infrastructure projects in Indonesia.

5.2 Recommendations

Based on the results of the research, the recommendations that the author can convey related to the post value for money assessment on PPP projects in Indonesia are as follows:

1. Based on the research results, it is recommended that a post value for money analysis be conducted for PPP projects in Indonesia to evaluate their actual performance and effectiveness. This will enable lessons to be learned and improvements to be made for future projects. It is also important to review policies and regulations to ensure effective government oversight and risk management in infrastructure projects. In addition, the use of

Monte Carlo simulations may be one option to support quantitative value for money assessments, to address the challenge of uncertainty in inputs.

2. Conduct thorough sensitivity analysis in financial modeling to assess the impact of potential variations in key parameters, such as construction costs, operating costs, and revenue streams. This will provide a more realistic projection of possible financial outcomes and aid better decision-making. Develop and implement a comprehensive risk mitigation strategy, particularly focusing on identified high-impact risks, such as alternative water sources and policy changes. This strategy should include early detection mechanisms, contingency plans, and collaboration with relevant stakeholders to address potential challenges.
3. The responsibility for assessing post-project value for money usually lies with the government or public sector entity overseeing the PPP project. This entity is tasked with ensuring that the project delivers the anticipated benefits and value for the resources invested. The government, in this case the GCA, as the custodian of public interests and resources, is obliged to conduct a thorough evaluation to determine the project's performance and long-term benefits. In addition, public sector entities may collaborate with independent evaluators or auditors to ensure an objective and comprehensive assessment. It is critical for governments to maintain transparency and accountability in infrastructure development, and conducting post-value for money assessments is an important part of this

process. However, other parties such as the Ministry of Finance and IIGF will also need to conduct valuations according to the urgency.

4. Regarding the monitoring of PPP projects, risk allocation needs to be monitored quantitatively, not only qualitatively. This needs to be done so that the government can know the impact of risks on project costs directly. By knowing the impact of risks on project sustainability directly, the government can take more appropriate and effective policies regarding the necessary risk mitigation. Update the risk assessment regularly throughout the project cycle. As the project progresses, new risks may emerge, and existing risks may evolve. Regular reviews will enable strategy adjustments and incorporation of lessons learned into future project phases.