

## **The Effect of the Construction Contract System by Simulating the Comparative Costs of Capital to the Financial Feasibility of the Construction of Toll Bali Mandara**

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**Abstract :** Ability of government to meet the needs of infrastructure investment constrained by the size of the budget commitments for other sectors. Another barrier is the complexity of the process of land acquisition. Public Private Partnership can help bridge the investment gap by including the amount of funding from the private sector, shifted the responsibility of financing, construction of the asset, and the operation and post-project design and care to them. In principle, a construction project implementation always requires the investor as a party to provide resources in the form of funding which it must be contained in a successor agreement in the form of a contract. In general, construction contracts consist of contracts which passed in Indonesia and contract International. One source of funding used in the implementation of construction projects comes from funding that comes from the collaboration between the government and the private sector, for example with the system: BLT (Build Lease Transfer), BOT (Build Operate Transfer), BTO (Build Transfer Operate) and BOO (Build Operate Own). And form of payment under a construction contract can be distinguished several ways: monthly payment, payments based on progress and payment after completed projects (Turn Key). One of the tools used to analyze the feasibility of the investment is to use financial models. The financial model describes the relationship between different variables and assumptions used. From a financial model will be known how the cash flow structure of the project, which includes revenues, expenses, liabilities to creditors and the payment of taxes to the government. Net cash flow generated from the project will be used as a basis for analyzing the feasibility of investment source of project financing Public Private Partnership could come from equity or debt. The proportion of funding according to its source is a comparison of a number of investment funds originating from each source of financing for a total investment cost during the construction period by selected the contract system and several alternative financing percentage ratio determined according to sources will generate cash flow structure that is different. Of the various possibilities for the structure of the cash flow generated will be analyzed by software is to test T Paired to compared the contract system used by various alternatives comparison of financing to determine the effect of the contract system and the comparison of such financing for the feasibility of investment toll road construction project for the economic life of 20 (twenty) years. In this use case studies of toll road construction project Bali Mandara. And in this analysis only covered two systems contracts, namely Build Operate Transfer and Turn Key. Based on the results obtained by analysis of the variable investment feasibility of the NPV, BCR and IRR between the contract system Build Operate Transfer and contract system Turn Key on the interest rate of 9%, 12% and 15%.

**Keywords :** contract system, financing, internal rate of return, net present value

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