

ABSTRAK

Penelitian ini tujuannya untuk menganalisis kelayakan investasi proyek Jalan Tol Trans Sumatera ruas Betung–Tempino–Jambi dengan skema Pembayaran Berkala Berbasis Layanan (PBBL). Analisis dilakukan lewat pendekatan finansial memakai indikator Net Present Value (NPV), Internal Rate of Return (IRR), Payback Period (PBP), Debt Service Coverage Ratio (DSCR), dan Benefit Cost Ratio (BCR). Hasil analisis menerangkan bahwasanya proyek ini mempunyai NPV sebesar Rp 3,024 triliun, IRR sebesar 11,55% yang lebih tinggi dari WACC sebesar 9,55%, PBP selama 7 tahun, DSCR sebesar 1,80, dan BCR sebesar 1,9. Seluruh indikator menerangkan bahwasanya proyek ini secara finansial layak untuk dijalankan. Selain itu, penelitian ini juga menganalisis sensitivitas terhadap variabel-variabel utama seperti belanja modal (CAPEX), biaya operasional dan pemeliharaan (OPEX), serta pendapatan (revenue). Hasil menerangkan bahwasanya penurunan CAPEX dan OPEX sebesar 10% meningkatkan NPV dan IRR, sementara penurunan revenue sebesar 10% justru menurunkan kedua indikator tersebut. Temuan ini menegaskan bahwasanya efisiensi belanja dan peningkatan pendapatan sangat krusial bagi keberhasilan proyek. Penelitian ini masih mempunyai keterbatasan pada penggunaan instrumen kelayakan tambahan dan asumsi makro ekonomi yang dinamis. Oleh sebab itu, disarankan agar PT Hutama Karya (Persero), akademisi, dan pemerintah terus mengevaluasi, mendalami, dan menyempurnakan penerapan skema PBBL agar implementasi proyek infrastruktur serupa bisa memberikan manfaat optimal secara berkelanjutan.

Kata Kunci: *Kelayakan Investasi, Jalan Tol, Pembayaran Berkala Berbasis Layanan (PBBL)*

ABSTRACT

This study aims to analyze the investment feasibility of the Trans Sumatera Toll Road project, specifically the Betung–Tempino–Jambi section, using the Availability Payment scheme (Pembayaran Berkala Berbasis Layanan/PBBL). The financial analysis includes key indicators such as Net Present Value (NPV), Internal Rate of Return (IRR), Payback Period (PBP), Debt Service Coverage Ratio (DSCR), and Benefit Cost Ratio (BCR). The results indicate that the project has an NPV of IDR 3.024 trillion, an IRR of 11.55% which exceeds the Weighted Average Cost of Capital (WACC) of 9.55% a payback period of 7 years, a DSCR of 1.80, and a BCR of 1.9. These figures suggest that the project is financially feasible. Additionally, the study assesses the sensitivity of key variables such as capital expenditure (CAPEX), operational and maintenance costs (OPEX), and revenue. The results show that a 10% reduction in CAPEX and OPEX increases both NPV and IRR, while a 10% decrease in revenue significantly reduces these indicators. These findings emphasize the critical importance of cost efficiency and revenue optimization for the project's financial success. Despite its contributions, this study is limited by its reliance on historical data, macroeconomic assumptions, and the exclusion of additional feasibility metrics such as the Profitability Index (PI) and Modified IRR. Therefore, continued evaluation and refinement of the PBBL scheme by PT Hutama Karya (Persero), academics, and the government are essential to ensure the sustainability and effectiveness of similar infrastructure projects.

Keywords: *Investment Feasibility, Toll Road, Service Based Periodic Payment (PBBL)*