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Deterministic Modelling to Estimate Economic Impact from Implementation and Management of Large Infrastructure

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Abstract : It is widely recognised that the assets portfolio development is helping to enhance economic growth, productivity and competitiveness. While numerous studies and reports certify the positive effect of investments in large infrastructure investments on the local economy, still, the methodology to estimate the contribution in economic development is a challenging issue for researchers and economists. The key question is how to estimate those economic impacts in each economic system. This paper provides a compact and applicable methodological framework providing quantitative results in terms of the overall jobs and income generated into the project life cycle. According to a deterministic mathematical approach, the key variables and the modelling framework are presented. The numerical case study highlights key results for a new motorway project in Greece, which is experienced economic stress for many years, providing the opportunity for comparisons with similar cases.

Keywords : quantitative modelling, economic impact, large transport infrastructure, economic assessment
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