## Which are the Key Factors Affecting the Performance of Port Infrastructure Projects?

Eleni MOSCHOULI<sup>1</sup> and Thierry VANELSLANDER<sup>1</sup>

<sup>1</sup> University of Antwerp/Department of Transport and Regional Economics, Antwerp, Belgium

Abstract—The aim of this research is to identify the factors that affect the performance of port infrastructure projects. Six port projects from three European countries are tested: Greece, Spain and Portugal. The methodology used is the fuzzy set Qualitative Comparative Analysis (fsQCA) because it allows identifying combinations of conditions that affect an outcome. Four outcomes (dependent variables) are tested; cost, time, traffic and revenues. Findings showed that 1) for cost: 92% of the port projects being on cost can be explained by a low financing scheme, 2) for time: 64% of the port projects being over time can be explained either by a low remuneration scheme or by the combination of low financing scheme and low remuneration scheme, 3) for traffic: 94% of the port projects being on traffic can be explained by a low financing scheme and 4) for revenues: 86% of the projects on revenue are explained by a low financing scheme. Limitation of this research is the number of cases tested, which is small; 6 cases. QCA normally needs 12 cases to show significant results. However, these results can provide useful indications to scholars and practitioners.

Key words—Fuzzy set Qualitative Comparative Analysis, Port infrastructure projects' performance.

## **AUTHORS**

**Eleni Moschouli** is a researcher and PhD student at the University of Antwerp, Prinsstraat 13, 2000, Antwerp, Belgium (e-mail: eleni. moschouli@uantwerp. be).

**Prof. dr. Thierry Vanelslander** is a professor at the Department of Transport and Regional Economics at the University of Antwerp, Prinsstraat 13, 2000, Antwerp, Belgium (e-mail: thierry. vanelslander@uantwerp. be).