Impact of Transport Infrastructure on International **C**ompetitiveness of **Eu**rope
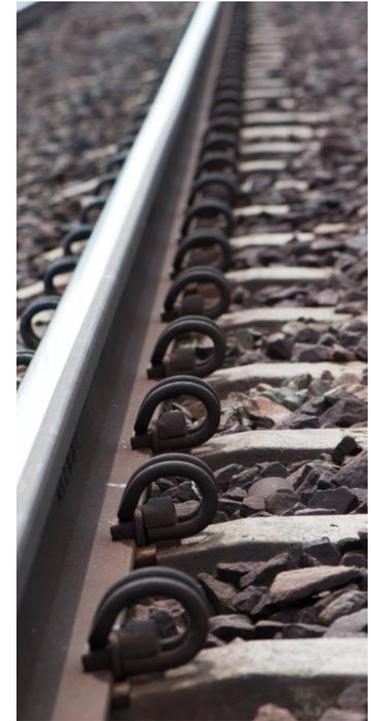
The role of wider economic impacts in the assessment of transport infrastructure investments in Europe

Ofelia Betancor, Aday Hernández and Pilar Socorro
(University of Las Palmas and Fedea)

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Our website at www.i-c-eu.eu

Project Partners:

- Transport & Mobility Leuven (TML), Belgium

- Panteia Bussiness Unit (NEA), The Netherlands

- VU University Amsterdam (VU), The Netherlands

- Fraunhofer Center for Maritime Logistics and Services (CML), Germany

- Uniwersytet Gdanski (UG), Poland

- Fundación de Estudios de Economía Aplicada (FEDEA), Spain

WP2. Objectives

- <u>Objective 1</u>: Compilation of data about infrastructure projects in selected European countries for which CBA is available.

- <u>Objective 2</u>: Revise current infrastructure project assessment practice in Europe regarding impacts on competitiveness and growth.

- <u>Objective 3</u>: Screening of projects to determine the conditions under which these impacts could be important.

- <u>Objective 4</u> : Analysis of particular cases and production of estimates in order to illustrate the methodology.

Objective 1

Compilation of data about infrastructure projects in selected European countries for which CBA is available.

- [List projects](#).
- Template to compile information.
- 12 out of 25 projects include the treatment of wider economic impacts
- Fulfilled in D2.1.

Revise current infrastructure project assessment practice in Europe regarding impacts on competitiveness and growth.

• These projects rarely use literature references to justify their methodological approach to the treatment of wider economic impacts.

• Gap between applied models of economic appraisal of wider economic impacts and the works in the literature.

• Some follow a standard CBA approach

• Others concentrate on the impact of the infrastructure on the economy as given by macroeconomic variables.

• Fulfilled in D2.2.

Objective 2

- Within the I-C-EU data base of case studies it is possible to distinguish four different approaches to the treatment WEIs:

  1. German case studies: emphasis on the impact of infrastructure on employment and on the benefits derived from promoting international accessibility.

  2. Other case studies assessments are based on quantitative or qualitative analyses (e.g. Amsterdam Orbital and Öresund Bridge). Analysis of business changes and office rental prices, housing prices and commuting.

3. Cases with GEM: HSL Zuid and Corridor 22, which respectively apply the ATHENA and EDIP models. Focus on the impacts on GDP, welfare and social impacts, consumption or aggregate employment effects.

4. Department for Transport of the UK: Crossrail and the HS2. Focus on the impact of infrastructure on imperfect competition and on labour markets.

Screening of projects to determine the conditions under which these impacts could be important.

•What projects in the I-C-EU database are expected to have important or relevant wider economic impacts and therefore are also expected to have important or relevant effects on competitiveness and growth?

• These will be the projects that deserve further attention in WP3 and additional effort in terms of modelling.

• Fulfilled in D2.2.

Screening criteria

1. Funding body's objective.

2. Nature of project.

3. Robustness of direct effects estimates.

4. Assessment results based on direct effects.

5. Overview of wider economic impacts: first approach and expected importance or relevance.

6. Relevance for international and/or regional competitiveness.

Results

Nevertheless these results are contingent on data availability and applicability of models.

Analysis of particular cases and production of estimates in order to illustrate the methodology.

Econometric approach to estimate the impact of HSR on employment:

- Geo-reference data for HSR lines in Spain.

- Concentric circles around HSR stations allow to limit its area of influence concerning employment.

- Variables of interest of the different municipalities.

$$Denemp_{it} = f\left(population_{it}, vehicles_{it}, finance_{it}, retail_{it}, HSR_{it}, ... \right)$$

Analysis of particular cases and production of estimates in order to illustrate the methodology.

The impact on Tourism

• High potential for economic growth.

• Further explore the link between transport infrastructure, tourism and international competitiveness and economic growth.

• Select some case studies from the list of candidate projects for further analyses (e.g. Málaga airport).