



Impact of Transport Infrastructure on International Competitiveness of Europe

Newsletter no 4 – November 2014

Editorial

Welcome to the fourth issue of I-C-EU project newsletter!

I-C-EU project consortium has organized its final workshop. Despite this project end, the consortium will keep on updating interested stakeholders with more news especially in relation to exploitation of project results and findings.

This last newsletter issue contains a brief project presentation, a summary of the final workshop, and a summary of project's outcomes.

What is I-C-EU?

I-C-EU - *Impact of transport infrastructure on international competitiveness of Europe* – is a research project conducted on behalf of the European Commission (EC) Directorate-General for Research & Innovation 7th Research Framework Programme.

On June 17th, 2010 European Union adopted Europe 2020 Strategy. Replacing the previous Lisbon Strategy (2000 – 2010), the transition process between the two strategy plans happens exactly in the time when Europe is undergoing its hardest economic crisis since its formation. In line with this Strategy, White Paper 2011 has summarized the main objective of European transport strategy which is to help establish a system that underpins European economic progress, enhances competitiveness and offers high quality mobility services while using resources more efficiently. In consequence it is essential first to clarify the relationship between the transport sector and the economic growth and the competitiveness and second, to elaborate a working framework so that transport policy intervention can effectively improve European economic growth and competitiveness.

I-C-EU clarifies the relationship between transport infrastructure investment and its wider economic impacts, namely competitiveness and economic growth in particular. During its two year duration, this clarification has been made possible by exploring the state-of-the-art of the theoretical methodology of the assessment tools, analysing current situation of European economic and competitiveness as well as its present and future challenges and taking into account current European strategy being set to improve its economic performance and competitiveness. Using this triad of concepts has allowed I-C-EU to provide recommendations to the European Commission on making political intervention in order to enhance competitiveness of Europe both externally and internally.





Final workshop summary

Twenty eight people attended this meeting organized on September 15th, 2014, at the European Commission, Madou Tower - Brussels, Belgium.



The workshop started with presentation of I-C-EU project results. Five consortium members presented project results in relation to work package themes. Project's background was first presented, followed by presentations on problematic issues, project's scope and inputs obtained from the different stakeholders via the different events organized during the project. Finally, the consortium presented also (i) how I-C-EU contributes to the improvement of understanding of relation between transport infrastructure investment, its indirect effects and wider economic impacts (ii) how I-C-EU contributes in term of improving approaches for project assessment, (iii) how these approaches should be integrated into models and tools and (iv) how to improve policy approaches to capture wider economic benefits for improving competitiveness.

Second, three keynote speakers gave speeches in different themes, enriching project final results. The keynote speakers were: **Tony Venables** (University of Oxford) on *"Transport investment and economic performance: implications for project appraisal"*, **Frank Bruinsma** (VU University Amsterdam) on *"How to deal with 'soft factors' in the case of infrastructure and regional economic development?"* and **Phillipe Montfort** (EC- DG Regio) on *"The impact of Cohesion Policy interventions in infrastructure – a model based simulation using Rhomolo"*.



Third, a round table was organized involving previous keynote speakers, advisory committee members and European Commission representatives. Here several themes have been discussed, i.e. the fact there is no single

solution to assess the different impacts of transport infrastructure investments in the different cases, the importance of conducting at least a correct CBA on every transport infrastructure project, the need to capture the impact of transport infrastructure investments on other sector, the need to understand the mechanisms between transport infrastructure investment and their impacts, and finally the need on research on other related topics in the future.

More detailed information on final workshop results, minutes and presentations is available at: <http://www.i-c-eu.eu/workshopsmeetings/index.htm>

I-C-EU main outcomes

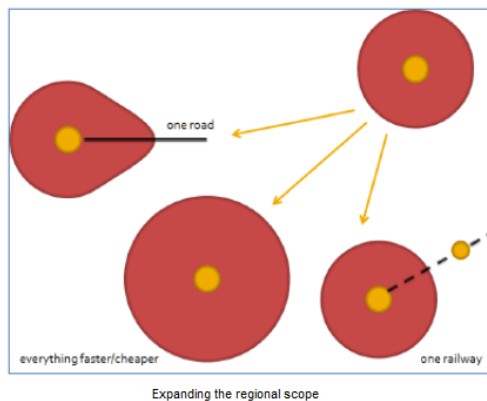
First: a synthesis of the relationship between transport infrastructure investment, competitiveness and economic growth.

Competitiveness is among one of the wider economic benefits of transport infrastructure investment. In this framework we have defined competitiveness as *the extent to which firms in a particular region can compete with those elsewhere*. Competitiveness itself is revealed in many aspects. Among the most significant aspects are labour productivity, employment and gross regional product.

Based on economic literature works including formal spatial economic theory and other results of economic researches such as IMD World Competitiveness, WEF's Global Competitiveness Index, and Cambridge Econometrics we can focus the role of transport infrastructure investment on competitiveness on questions of accessibility and connectivity.

Finally, in term of relationship between transport infrastructure investment-competitiveness and economic growth, we have tried to organize them into four main strands: (i) regional effects, (ii) effects on labour markets, (iii) agglomeration economies, and (iv) imperfect competition.

On the one hand, consumer concentration may generate agglomeration economies due to the existence of economies of scale in the delivering process. On the other hand, transport infrastructure improvements may also modify workers behaviour, i.e. increasing the productivity because there is a better matching between workers and firms. Moreover, new workers may appear in the labour market affected by changes in the commuting costs.



Reduction of transport costs also allows moving final products from one region to another without the need of being located close to the consumption centres, increasing the competition level of regions and reducing the deadweight loss associated to non-competitive markets. We consider this as the impact of the investment on imperfect competition. Transport is also needed to move inputs affecting businesses decisions on location what may generate agglomeration economies because of economies of scale in the spatial dimension.

All these previous effects may have impacts at aggregate level if and only if there is mobility of factors between regions that we consider as regional effects. In addition, transport infrastructure is an essential element to get the mobility of workers, consumers, inputs and products but it is not the only aspect. Legal requirements and some barriers to entry may condition and affect the final magnitude of effects.

Second: an improvement of the methodology used to assess the impacts of investment in transport infrastructures especially on competitiveness and economic growth.

Our proposed improvement on methodology used to assess the impacts of investment in transport infrastructure can be summarized into three points: (i) combination of micro-macro modelling, (ii) use of screening methodology to position the different projects in term of their wider economic impacts, and (iii) suggestion to focus on the linkage between transport and final markets and on the impacts on labour surplus.

First on micro-macro modelling: micro-models and macro-models have a mutual interest in each other. On one side CBA as a micro-model is in general simple and straightforward but tends not to see the benefits of macroeconomic analysis. On the other hand assessment of wider economic effects requires the use of complicated macroeconomic models.

Second, on screening methodology: we have developed a six-criteria based methodology that allows also to position the different transport infrastructure project investments with regard to their wider economic impacts namely competitiveness and economic growth.

On the linkage to final market: we point out two cases in which we should care about the transport project effects upon final markets: (i) when the final market is not competitive so that projects will have an impact on the inefficiency of those markets and (ii) when the affected consumers are not of interest from the point of view of project assessment according to the nature of funding.



Finally in term of project impacts on unemployment: we suggest that analysis emphasizes on the labour force surplus, and rather than on the number of workers. This is a very important distinction for the purpose of project assessment. Moreover, if all economic agents involved in the project assessment are equally weighted the society will observe a welfare increase as long as the sum of different surpluses increases, with the labour surplus being just one component.

Third: a synthesis of recommendations on assessing EU policy in transport infrastructure investment in respect of competitiveness and economic growth.

Our recommendations can be summarized in two terms, i.e. modelling and policy documents' goals.

On modelling: First to focus on archiving model, input, documents and model results that will allow future reproduction or recalculation of the results and making them available to public especially for large infrastructure projects. Second, to use a good modelling practice (GMP) that takes into account five aspects, i.e. model organization, model project, model development, model testing and model application.

On the goals on policy documents: (i) to include competitiveness objective as a primary goal while removing contradictory goals from policy documents, (ii) to review transport sector policies in view of competitiveness objective as well as to identify policies which will support competition policy and establish interrelation between them, i.e. competitiveness and transport infrastructure, (iii) to standardize current assessment methodology whenever possible to include wider economic effects in the procedures including the condition when to assess the effects and to make it operational at country or regional level, and finally (iv) to propose the use of an elaborated set of measures and indices in order to assess the relation between transport infrastructure investments and competitiveness and to monitor the achievements in these measures.

Interested to know more about I-C-EU results and news? Please contact:

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Most of I-C-EU deliverables have been accepted by the Commission and are now downloadable!



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