

EVIDENT CONSIDERATIONS ON THE PREPARATION OF TRAFFIC STUDIES ON HIGHWAY CONCESSIONS



Sharing the road

JULIÁN SASTRE GONZÁLEZ

Doctor in Civil Engineering

JuliánSastre
CONSULTORÍA DE TRANSPORTES Y URBANISMO





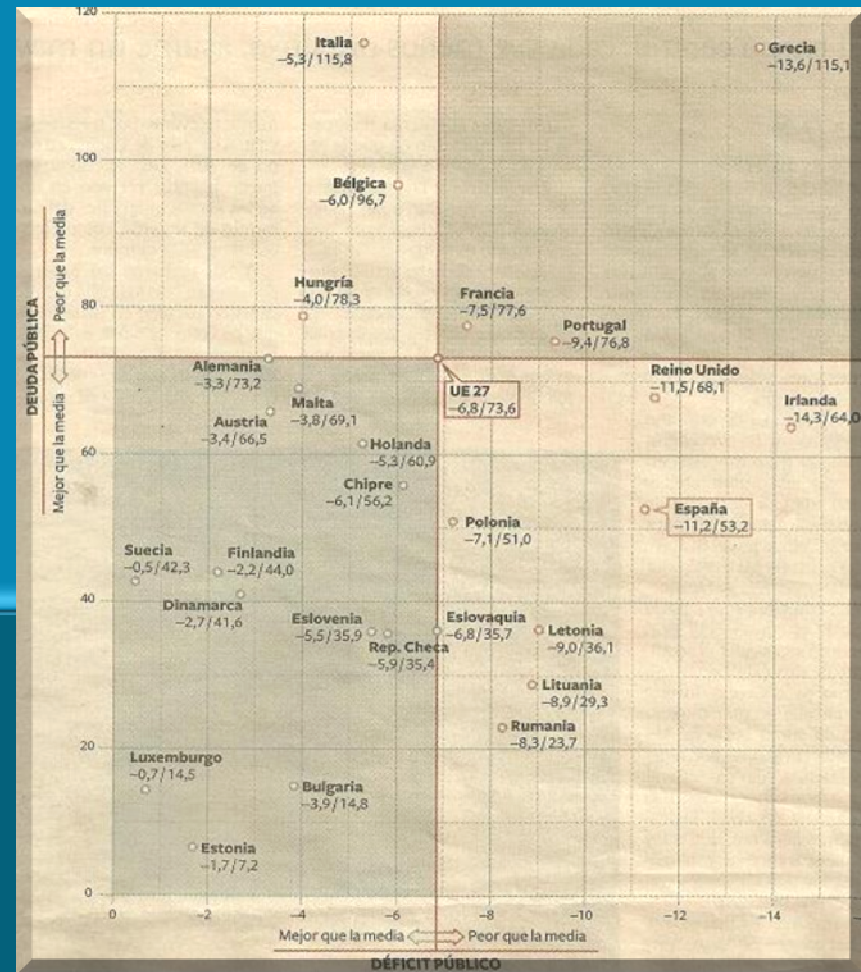
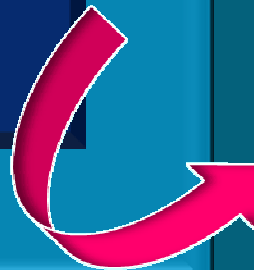
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One of the **main risks** which a **concessionaire must assume** is that of traffic, thus in this way this is considered to be a non-computable project in terms of public deficit and provides stimulation to create a level of quality that will ensure the attractions of user to the infrastructure / service.

But these days, things are changing

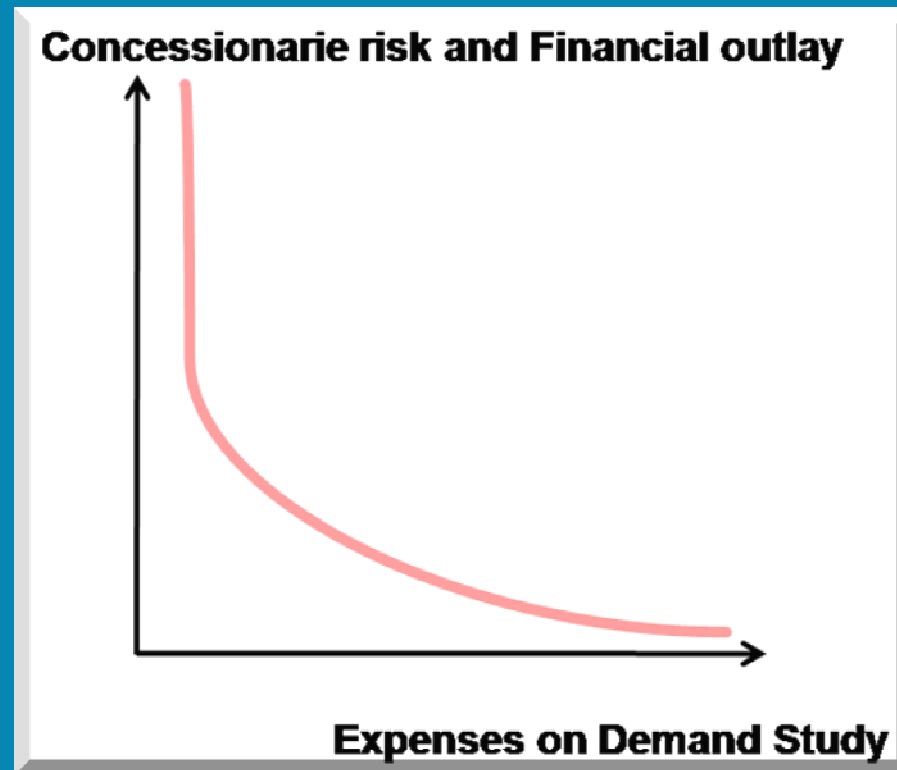


Availability risk



DEFICIT AND NATIONAL DEBT OF THE EU COUNTRIES

Yet concession candidates, in some cases, are opposed to spend sums of money on rigorous studies, based on the compilation of wide-ranging data, even taking into account that this allows for risk delimitation and may even result in a reduction of the financial outlay.



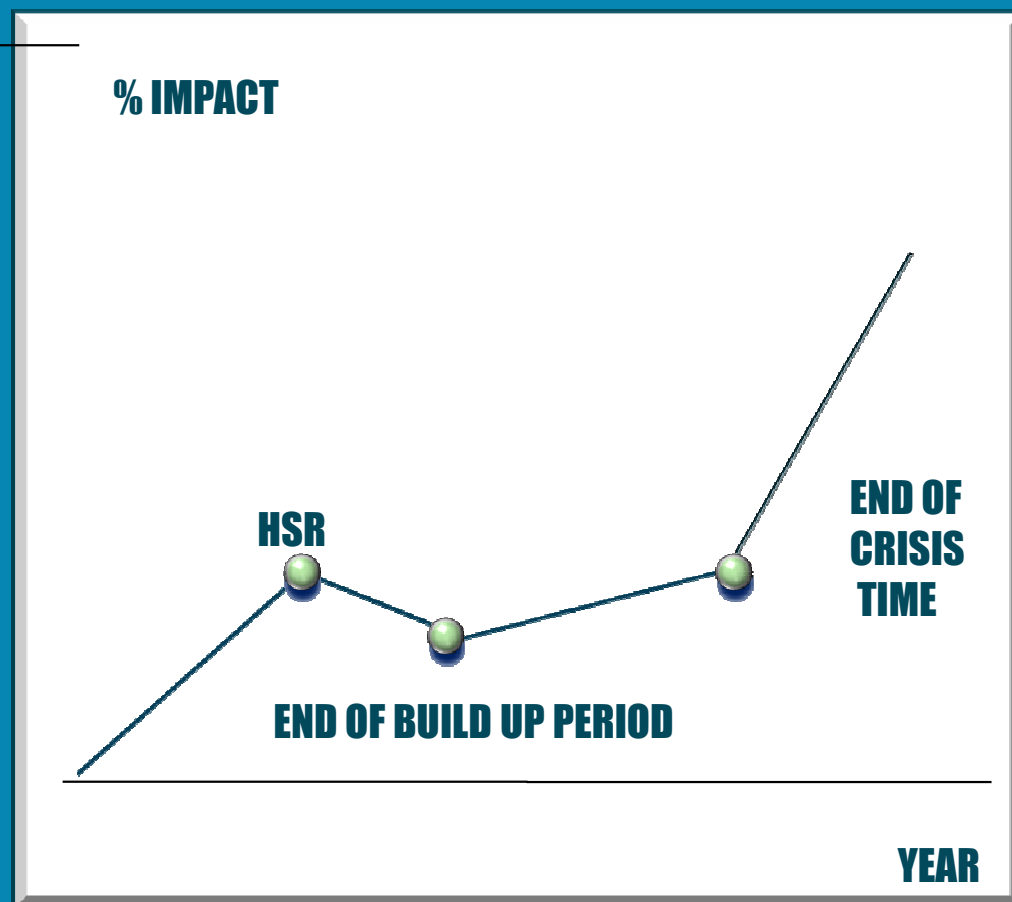
Traffic studies for splitting of the current alignment on to dual carriageways are more conventional studies whose key points are:

- ❑ Temporal forecasting according to the predictable evolution of socio-economic factors.
- ❑ Adequate definition and estimation of the impact of new infrastructures which may affect attracting passengers.



In these studies the most critical aspect is, to gauge correctly:

- ☐ The year of the impact.
- ☐ The level of the impact, be it positive or negative.



What about toll motorways?

Whilst in the previous cases there is a certain amount of captive market, for toll motorways (not for shadow tolls) the response of the users will depend also on:

- ❑ The definition of the product,
- ❑ Of the quality and the conditions of the project as well as the fare policy.



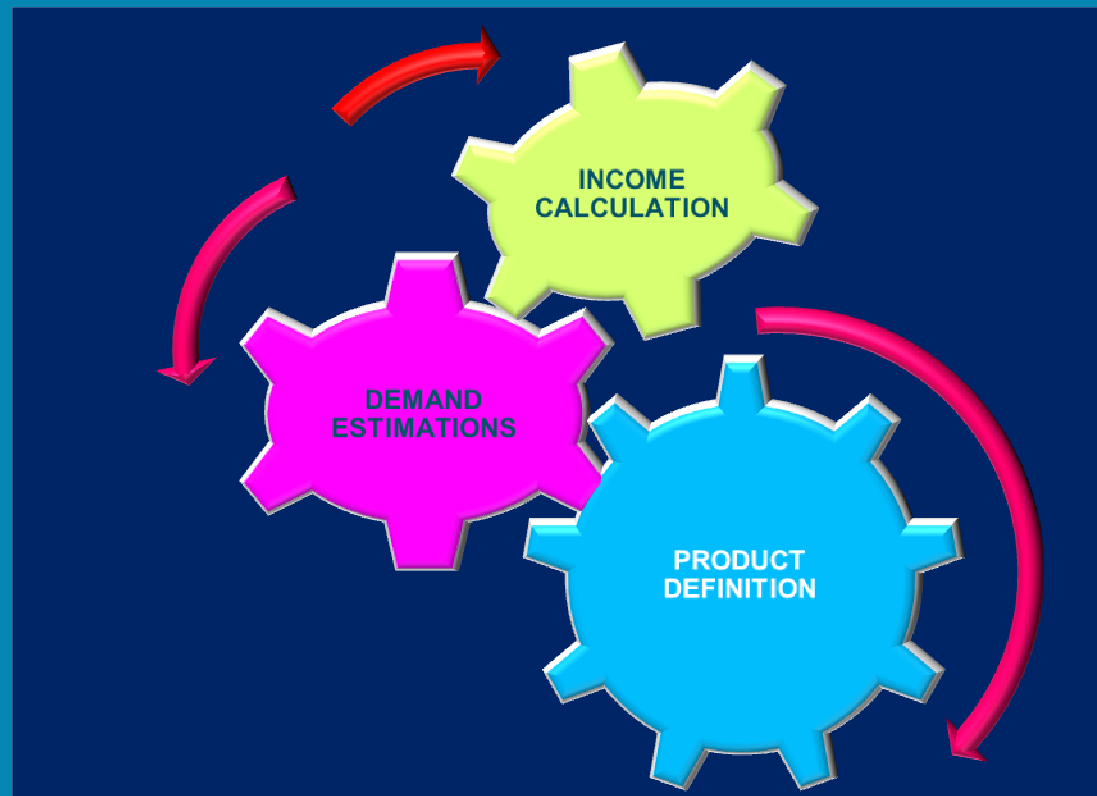
In short, a demand study for a toll motorway is a market research study which must entail:

- ☐ Product definition (new component for scenario definition)
- ☐ Demand estimations
- ☐ Income calculation.



All this must be done within a process of **continuous feedback** as the three factors are dependent on others.

In this sense, it is fundamental to determine, amongst others the solution to **optimise incomes**.

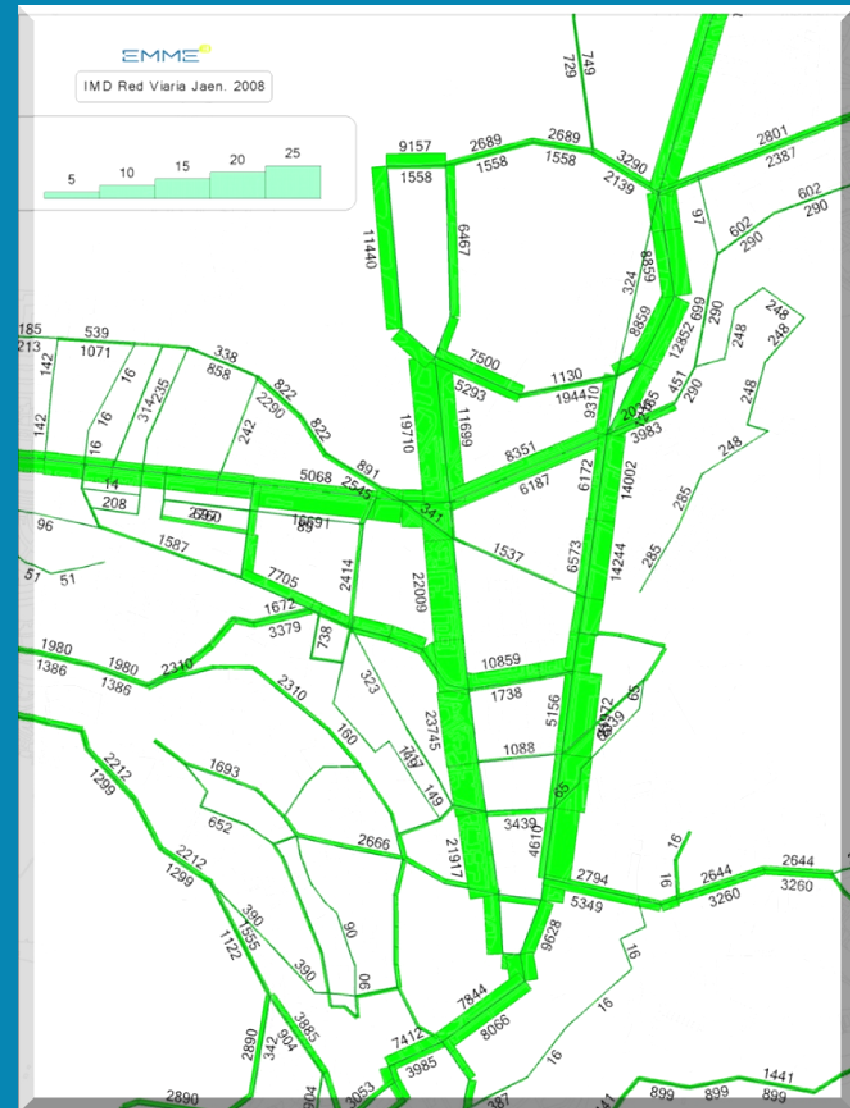


Models are tremendously useful tools, but only if :

- They work properly
- Are capable of reproducing known situations
- Provide coherent results during sensitivity analysis.

We must not believe them only
“because the model say this”,
 they must be used because they
 adjust properly to current situation
 and provide coherent results.

$$V_{ij}^1 = V_{ij}^0 \times F_i \times F_j \times \frac{\sum_j V_{ij}^0}{\sum_j V_{ij}^0 \times F_j}$$



Irrespective of the application of the models; it is necessary to delimit risk as much as possible by the use of contrast techniques. For example, application of the following is of great interest to us:

- ☐ Simulation of the scenario without toll to determine maximum demand.
- ☐ Estimate the certain demand, the demand of those whose journey is paid for, or use the road for professional reasons.
- ☐ Apply ratios from other motorways in service in similar corridors.
- ☐ Evaluate the direct results of the stated preference survey, if they are available.

To sum up, demand studies display a critical aspect and have major importance either in the planning or the stage of a concession tender. It is also important during the evolutionary process and the project lifetime whereby it is useful to learn from true results in order to:

- ❑ Correct differences “TO FIT BETTER ALL THE PIECES”
- ❑ Provide: “LESSONS LEARNT” so that future project managers can undertake these with better guarantees of success.

MUCHAS GRACIAS POR
SU ATENCION

Julián Sastre González

juliansastre@juliansastre.com

Phd. Civil Engineer

Independent Consultant