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Faculté des Sciences Economiques

Sources of Errors and Biases in Traffic Forecasts for Toll Road Concessions

Thèse pour le Doctorat ès Sciences Economiques

Mention Economie des Transports

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Appendix A

Forecasters' survey questions

N	Question	Possible answers if closed question
1	In which country do you work?	
2	You have been working mainly on forecasts for projects	in the country in which you work abroad
3	In which sector(s) do you work?	Private Company (Construction, concessionaire, operator,...) Public Company Government Consultancy firm/ independent consultant Academic / Research
4	You have a degree in	Engineering Economics Statistics Geography No Degree Other, specify :
5	Do you have a post-graduate degree?	Not any Master, MBA or equivalent PhD or equivalent
6	Age	< of 25 25-35 35-45 45-55 55-65 > of 65
7	Gender	Man Woman
8	How many traffic forecast studies have you conducted (or participated in)?	between 1 and 3 between 3 and 7 between 7 and 10 between 10 and 20 more than 20
9	Has the project for which you did your last traffic forecast been launched?	Yes No, it will not be No, but it will be No and I don't know if it will be
10	Your last traffic forecast study for a project which has already been launched was for	No launched projects Road / Motorway Rail Waterways Air Underground / Tramway/ Bus Bicycles Other, specify :
11	Financing	Public Private Mix
12	Operation	Public Private
13	When was this forecast made?	less than 1 year ago between 1 and 3 years ago between 3 and 5 years ago between 5 and 10 years ago more than 10 years ago
14	What is your estimation of the deviation between the forecast and the actual (ex-post) traffic in your last traffic forecast? (where -10% means that traffic was 10% below the forecast)	<-50% -50% -40% -30% -25% -20% -15% -10% -5% 0% 5% 10% 15% 20% 25% 30% 40% 50% >50% No launched projects I don't Know
15	Comparing your forecasts with ex-post traffic you consider your results to be:	excellent Very Good Good Fair Poor Very poor extremely poor
16	In general, what was the tendency of deviations between your forecasts and actual traffic?	Forecast traffics where mostly below the real traffic Forecast traffics where mostly above the real traffic Forecast traffics were equally distributed below and above the real traffic
17	You apply mainly	"Tendencies" (time-series extrapolation, estimation of elasticities) "Sequential models"(four-stage model) Activity Based Approach Other, specify :
18	With modal choice models	Aggregated Disaggregated
19	And values of time	Constant Distributed
20	In your opinion, which is the more difficult to forecast with accuracy?	The initial traffic The traffic growth
21	Do you feel under pressure (explicit or implicit) to produce forecasts in accord with the expectations of the client?	Always Usually Occasionally Rarely Never
22	Do you believe you could make better forecasts in the absence constraints on the results?	Yes No I don't know
23	In your forecasts, did you know, with a good precision, the minimum traffic level necessary to attain the requested level of return:	Always Usually Occasionally Rarely Never
24	Between the technical study and the final forecast adopted for decision, the client can modify the results (directly or by influencing the forecaster) in order to suit its own interests. This is called strategic manipulation. Do you think it plays a role :	Insignificant Somewhat important Important Very important
25	It goes mainly in the sense of:	Underestimation (reduce forecast traffic) Overestimation (increase forecast traffic)
26	In your opinion, the influence of the technical study on the final decision is (a strong influence means that most of projects with high traffic levels are launched and most of projects with low traffic levels are not)	Absolute (decision takers always follow forecasts) Strong Moderate Weak (decision takers rarely follows forecasts)
27	What is, in your opinion, the main source(s) of errors in traffic forecasts?	
28	Comparing yourself with forecasters in transport known to you, class yourself according your level of competence (in a percentile scale, where higher percentiles represent better forecasters)	0 to 10 (best 10%) 11 to 20 21 to 30 31 to 40 41 to 50 51 to 60 61 to 70 71 to 80 81 to 90 91 to 100
29	Comments	

Figure A.1: Questions in the survey of forecaster's behaviour.