



DOCTORAL THESIS IN TRANSPORT SCIENCE  
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# Policy Analysis for Different Types of De- cision-Making Situa- tions

MATTS ANDERSSON

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## Abstract

This thesis seeks to contribute to decision support for policy makers in the transport sector. In order to frame the papers and to relate them to the broad field of “policy analysis”, I have structured the papers around a simple framework with three decision levels: responsibility, policy gap, and policy measure. The thesis contains five papers.

“Transaction and transition costs during the deregulation of the Swedish Railway market” is a paper in the transaction cost school. We studied the costs associated with the shift from monopoly to competition in the Swedish railway market, and we found that the change resulted in comparatively small transaction costs, but that transition and misalignment costs seem to be larger.

In “Parking policy under strategic interaction”, I examined the effect of strategic interaction between jurisdictions using an analytical model based on Hotelling’s linear city model. I conclude that the procedure for setting supply in most municipalities has a strong downward effect on municipal parking fees and that resource flow competition implies that the fees are higher than the efficient prices (but that the effect of the supply procedures makes this effect incongruous).

In “Validation of aggregate reference forecasts for passenger transport”, we followed up the Swedish national forecasts for passenger transport produced from 1975 to 2009 and tried to explain the deviations. We found that the forecasts during the last decades have overestimated car traffic, and that this is due to input errors. The potential problem of using cross-sectional models for forecasting intertemporal changes seems to have been limited.

In “The kilometer tax and Swedish industry - effects on sectors and regions”, we estimated factor demand elasticities in the Swedish manufacturing industry and used these to analyze the effects of a kilometer tax for heavy goods vehicles. We found that the kilometer tax leads to factor substitution in that it decreases transport demand and increases labor demand. The effects on output are less pronounced.

In “The effect of minimum parking requirements on the housing stock”, we used a model of the rental, asset, and construction markets. We quality-assured our assumptions and our results through interviews with market actors. In our example suburb, we found that parking norms reduced the housing stock by 1.2% and increased rents by 2.4%.

## Key Words

transaction cost, transition cost, misalignment, parking policy, strategic interaction, spillover, resource flow, reference forecast, kilometer tax, minimum parking requirements