Does competitive tendering improve efficiency in the transport sector? An Empirical assessment of the Norwegian Ferry sector

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1. Objective [this should be relevant to the conference]

In the literature of economics, competitive tendering is thought to enhance efficiency more as compared to e.g., to cost norm subsidization regime. The objective of this paper is to test whether this is true in the case of Norwegian ferry services. The background is that the Norwegian ferry services, which transport vehicles across fjords due to lack of fast links, have historically been subsidised using cost norms. As from 2009, the majority of links were subjected to competitive tendering. Thus, using operational data for ferry links before and after tendering was implemented, this paper explores whether competitive tendering can be said to be more efficient as compared to a cost norm subsidization regime.

2. Data/Methodology

We establish a best practice frontier from which the efficiency of individual ferry links are measured against both before and after competitive tendering was implemented. Thus, we compare and test the performances of ferry links in the period prior to tendering versus the period after tendering was implemented. The approach we use for establishing the frontier is the Data Envelopment Analysis (DEA) which is known to tackle problems of this type appropriately and which is now popular in assessing the efficiency of public transport services as is evident in the numerous transportation journals. We use a rich data set comprising about 80 ferry links spread throughout Norway. The data are from the accounting years 2004 – 2010 and include as inputs fuel, labour, capital and maintenance costs, and as output ferry kilometres per year. Further, we include a measure for quality of services provided such as frequency of departures in the analyses. This enables a study of changes in effectiveness.

3. Results/Findings [these should be relevant to the conference]

Our tentative results reveal that here is a large potential for efficiency improvements in the Norwegian ferry sector as whole and that a change of the subsidy regime from cost norms Competitive tendering has been a worthwhile endeavour: (i) the level of services has clearly improved and, (ii) technical efficiency has improved in the short-run whereas the long-run impacts are unknown. The latter result is due to the short time since the competitive tendering was implemented.

4. Implications for Research/Policy **[abstracts which do not show evidence of implications for either research or policy may be rejected]**

While competitive tendering has been advocated for as a means of enhancing efficiency, studies on how far this true is scarce in the transportation sector. This is the novels feature of this research. Our findings suggest the benefits of competitive tendering in transportation which can be exploited by agencies/governments to improve effectiveness and efficiency of transport services.

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Introduction

Ferry links in Norway are an integral part of the Norwegian road. This is not surprising since Norway is a long stretched country with many fjords and islands therefore straits are crossed by ferries. SEE ÆYVIND!!!

Ferry links are an integral part of the Norwegian road network. They provide scheduled transportation services quite similar to public transport. The services provided at ferry links include the transportation of passengers, passenger vehicles and heavy vehicles across fjords. There are costs associated with the provision of those services e.g. fuel and crew costs that service the links. STOPPED HERE !!!

operated by different companies most of which are subsidized either by the central government who are responsible for the links on the trunk road networks, or regional governments who are responsible for the provincial road networks.

Until 1990, subsidies were awarded ex post on a cost-plus basis. The incentive for cost efficiency was thus weak. In order to encourage cost efficiency, subsidies were awarded ex ante on and after 1990. In order to induce further cost efficiency and thus allow for further cuts in the subsidies, the transport act was amended in 1991 so as to allow for tendering to a limited extent from 1994 onwards. The National Public Roads Administration made us of this opportunity and during the years that have followed, six ferry links have been exposed to tender competition of which the operations of the first four started during 1997. This paper describes and evaluates these tender competitions. In addition to an in-depth studies of the ferry links having been exposed to tender competition, Data Envelopment Analysis (DEA) has been applied in order to measure the relative improvements in efficiency for tendered and non-tendered ferry links

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