



Rail investment and port competition: a case study for the Betuweroute

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Abstract

This paper presents a study on the impact of investment in the Betuweroute and alternative transport pricing schemes on port competition between Rotterdam, Hamburg and Antwerp. The Betuweroute is a 160 kilometre dedicated freight railway line connecting the port of Rotterdam with the German Ruhr area. If the line could, in the near or more remote future, attract a large share of transit freight, it will be of considerable importance for the competitive position of the port of Rotterdam relative to Hamburg and Antwerp. We use a transport network model that includes the three ports and allows for transport by road, rail and inland waterways to and from the Ruhr area. We run model simulations for scenario's with and without the Betuweroute and with and without marginal social cost pricing. The results show that, although the Betuweroute is a welfare reducing investment, it may indeed be of crucial importance to the port of Rotterdam.

Keywords: Transport pricing; Rail investment; Betuweroute; Port competition.

1. Introduction

In the past, ports were fairly insulated from competitive forces, each port serving its own, more or less captive hinterland (Haralambides, 2002). Trade barriers, national borders and inadequate hinterland infrastructure were mainly responsible for this situation. Nowadays, European ports are facing major external challenges, including the grouping of container shipping lines into powerful consortia, resulting in downward pressure on prices, increased efficiency levels in maritime transport and the importance of logistical chains (Farrell, 1999). These developments, in combination with trade liberalisation associated with the emergence of a single internal EU market and technological changes, have had a considerable impact on trade flows and hence on the port industry. The result is a competitive market situation in which hinterlands are no longer captives of the port with which they have the best connection. The mobility of

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