Chapter 14
Can Long-Distance Rail Accessibility Affect the Real Estate Market?

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ABSTRACT

Most studies present in the literature have analyzed local transit networks and their impacts on land values. Empirical studies of the effects of long-distance rail accessibility on real estate prices are relatively rare. The Channel Tunnel Rail Link in England is presented as an example of such impacts. Hedonic price theory is used to estimate the implicit price of each dependent attribute. Ad hoc catchment and control areas have been defined around the St Pancras High Speed station. The main outcome of this analysis is that access to High Speed Rail has an impact on residential property prices, while, with increasing distance from the station, other attributes affect residential property prices.

INTRODUCTION

The introduction of a rail transit investment brings benefits to the transportation system and to the accessibility of the population to employment, retail, and recreation activities. Rail transit investments also introduce a variety of impacts to the area around the rail alignment. One of the most significant impacts of a rail transit project is the impact on property values. Numerous accounts of recent experiences with the impact of rail transit on property values have surfaced within the past two decades with varied results and general conclusions based on the local conditions of the rail transit systems studied (Armstrong and Rodriguez, 2006). One of the more prominent ways that people understand the value of property is through the price or value of a home that they own or in the

rent that they pay. Any factor that increases the length of travel time to other locations near the rail system will unnecessarily reduce the accessibility provided by the rail transit investment. This reduction in the value of rail transit will result in lower than potential property value increased (Greengauge 21 2006).

These concepts can be moved to a wider territorial scale, i.e. to investments in High Speed Rail (HSR). Promoters of HSR line development usually stress its benefits as meeting a growing demand for travel while reducing congestion and pollution and supporting spatial planning for improving regional economies (Bonnafous, 1987; Blum et al., 1997). Some examples of the impacts of HSR on property values are reported in Table 1.

This paper is organised as follows. The second section deals with the Channel Tunnel Rail Link (CTRL) in England considered as an example of the impacts of long-distance rail accessibility on property prices. The analysis is carried out both at macro and micro levels, i.e. the impact of the CTRL accessibility on property prices is first analysed along the corridor (third section) and then at micro-level (fourth section) quantifying the impacts of St Pancras High Speed International station in London on property prices. Ad hoc catchment and control areas have been defined around this station. The main out-come of this analysis is that access to HSR has an impact on residential property prices, while, with increasing distance from the station (i.e. within the control area), other attributes, such as access to CBD, affect residential property prices. Finally in the last section conclusions and further perspectives are reported.

THE CHANNEL TUNNEL RAIL LINK (CTRL)

The opening of the Channel Tunnel in 1994 led to the prospect of HSR services operating from London to Paris and Brussels. Although HST lines to access the Channel Tunnel were provided in France from the outset, it has taken time for similar infrastructure to be provided in England. High Speed 1 (HS1), officially known as the Channel Tunnel Rail Link (CTRL), is a 108 km (67 mile) HS railway line running from London through Kent to the British end of the Channel Tunnel. In 1998, London & Continental Railways

Table 1. Some case studies in the literature

Location (Author, year of publication)	High Speed Rail	Analyzed property price	Impacts on property prices
Japan (Nakamura and Ueda, 1989)	Shinkansen	Land for commercial use	The Growth rate of prices of land for commercial use amounted to +67%.
Spain (Farina, Lamiquiz and Pozueta, 2000)	AVE (Madrid - Sevilla)	All types of buildings	The studies showed that in Ciudad Real, coinciding the arrival of the AVE link, the highest increase real estate values has been recorded in the historical area and area close to the station. In the case of Puertollano the difference in price/sqm between the Central area and the area at the west of the railroad is 2.5 points, while in Ciudad Real, the difference between the most expensive and the cheapest is 1.3 points.
France (Bazin, Beckerich and Delaplace, 2007)	TGV	Houses	In the X arrondissement of Paris, where there is the HS station of the Est-europeenne line, between the 2006 and 2007 (when the station was opened) there was the smallest increase of property prices (+2.18%), while between 2003 and 2004 it was of +19.35%. The percentage change in this area is less than the average citizen.
Italy (Scenari Immobiliari, 2007)	TAV (Turin - Milan)	Houses	In the district of Cit Turin, was in 2006 a percentage increase of property price of 30,46%, a value higher than the average value of the whole city (9.52%).

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