

DOCTORAL THESIS

Two essays on the economic impacts of high-speed railway in China

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ABSTRACT

The thesis contains two essays on the economic impacts of high-speed railway (HSR) in China. Utilizing a unique data set of towns in Dongguan, a city in South China, it provides empirical evidence on whether HSR affects economic growth and efficiency or not. The first essay uses the generalized method of moments (GMM) to estimate a dynamic panel data model of the town economies. The empirical results suggest that both HSR and expressway have a positive impact on the general economic development of the towns. However, HSR does not have a significant effect on the development of the manufacturing sector, while expressway does in this regard. These findings lend indirect support to the common argument that HSR can benefit the tertiary sector, but not necessarily other sectors. The second essay investigates the relationship between the advent of HSR and productive efficiency of the manufacturing sector. Using a stochastic frontier approach, it provides empirical evidence that proximity to expressway, rather than to HSR, enhances the efficiency of industrial enterprises.

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