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High Speed Rail and China's New economic Geography. Impact Assessment from the Regional Science Perspective

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The link between the lack of infrastructure and economic disparity between regions is an increasing relevant area of research in economics of geography. This book adopts a new economic of geography perspective to contribute to the lively debate on governments' investment in new infrastructure aiming at improving connections, transportation between regions and cities and regional economic growth. The book sheds new light on key issues that received increasing attention in the last years by scholars studying similar infrastructure developments in Europe and the United States. While it provides support for existing evidence on the effect of high speed rail (HSR) on domestic air transportations, it extends our knowledge about HSR and the new economic geography of countries. Existing studies analysed HSR in European countries such as Spain and Italy and the United States, this book presents an accurate analysis of the effect of HSR on China new economic geography and environment. The development of HSR in China was unique in terms of technological innovation and new technology development at a pace not seen before in other countries. In doing this, the authors use different sources of data to develop large and rich dataset. The availability of this rich data makes the analysis quite interesting and empirically accurate.

The book consists of three parts. The 4 chapters of part 1 present evidence about the impact of HSR on land value and real estate. The results of the spatial econometric regression analysis show that the development of HSR is associated with an increase in land values. The two chapters of part 2 investigate an important area of research that is the impact of HSR on tourism (Chapter 6) and the relation between two transportation systems, HSR and domestic air transportation (Chapter 7), which is a crucial area of

policy intervention as the two transportation systems can affect the geography of regions and improve connections among economic actors.

The third and last part of the book consists of three chapters dealing with a key area of recent research that is the economic and environmental impact of HSR. Chapter 8 investigates the effect of HSR on regional economic disparity by looking at the period 2000-2014 and provides evidence of the convergent trend, that is regional economic growth in China tend to follow a convergence with a positive effect of HSR on the reduction of economic disparity between regions. Chapter 9 presents an analysis at the national level, of the impact of Chinese railway investment from a simultaneous economic and environment point of view. In Chapter 10, the authors evaluate the regional economic impacts of rail infrastructure development. They show that the rail infrastructure in China is dominated by HSR with a positive impact on the national real Gross Domestic Product. It is worth noting that differences are found between the north and the southwest regions. The concluding chapter highlights the implications of this analysis for improving decision-makers dealing with similar mega projects.

The recent development of HSR in countries like the United States, Russia, Korea and China, urges an understanding of its impact on social changes and economic geography. One notable point of this book is that, while this is a topic widely studied in the operations management literature (c.f. Adler, Pels & Nash, 2010; Dobruszkes, Dehon, & Givoni, 2014) where the focus has mostly been on the efficiency issues related to HSR evaluation, this book has the merit to introduce a new economic of geography perspective. The authors investigate this key issue and provides a number of policy implications relevant to public investment decision makers. Overall, the book shed lights on the important implications for governments implementing HSR and for the future development and wellbeing of countries and regions. For instance, it is the case of the geographical reconfiguration of China's spatial economy. Similar issues are relevant for other countries, although the case of China has some unique characteristics and comparisons are difficult to make. Although robust evidence is provided by authors, the debate about the feasibility and economic benefits of this kind of investments remains open to criticisms.

The book is timely as there is an increasing attention to this topic from an economic perspective (c.f. Vickerman, 2018). A promising line of research to pursue further would be the effect of HSR investment on the macro economy as this could provide insight for policy makers.

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