

## Preface

This book investigates the changing European automotive industry from the perspective of economic geography by employing the analytical lenses of the global production networks (GPNs) and global value chains (GVCs) perspectives. It focuses on the restructuring and geographic reorganization of the European automotive industry since the early 1990s by analyzing the driving forces behind this transformation and the regional development effects of these changes.

From the geographical perspective, the biggest change in the European automotive industry during this period has been the integration of Eastern Europe into the Western European production and distribution networks, and the development of European transnational automotive industry production networks. These processes have been driven by the investment strategies of automotive industry firms. Both assemblers and suppliers heavily invested in Eastern Europe to benefit from potentially higher rates of profit than in existing locations in the rest of Europe. Potentially higher rates of profit in Eastern Europe were made possible by its location-specific advantages in production factors, resulting in lower production costs than in other European regions. At the same time, the rapid growth of the automotive industry in Eastern Europe had important consequences for the rest of the European automotive industry, especially in Western Europe, leading to its restructuring, and resulting in the finer spatial division of labor in the European automotive industry.

Theoretically and conceptually, this book draws on the GVCs/GPNs perspective (e.g., Sturgeon et al., 2008; Coe and Yeung, 2015, 2019; Gereffi, 2018; Kano et al., 2020; Coe, 2021). Although the GVC and GPN perspectives are distinct, they share their focus on the transnational organization of industries in value chains/production networks, power distribution in these networks, the role of various institutions in affecting the configuration and operation of GVCs/GPNs, and the impact of GVCs/GPNs on economic development within the context of the international

division of labor (e.g., Pavlínek, 2018; 2022a). For the purposes of this book, I apply the GVC and GPN perspectives as one broad analytical approach to examine the changes in the European automotive industry, although in most cases I simply refer to this broad approach as the GPN perspective.

In this book, I am using the term Eastern Europe as an all-encompassing geographic term referring to the pre-1990 state-socialist countries in Central Europe (Czechia, Hungary, Poland, Slovakia and Slovenia), Southeastern Europe (Bulgaria, Croatia and Romania) and the Baltic states (Estonia, Latvia and Lithuania) that became European Union members. Eastern Europe also includes non-European Union member countries in Southeastern Europe (Serbia, Bosnia and Herzegovina, North Macedonia and Moldova) that have been integrated into the European automotive industry production system through investment and trade links. Russia, Ukraine and Belarus are excluded from the analysis and are beyond the scope of this book.

## OVERVIEW OF THE BOOK

The automotive industry is a typical example of producer-driven GVCs/GPNs in which lead firms usually directly own and operate production facilities, including those in foreign locations. More specifically, the automotive industry is a typical example of captive GVCs (Gereffi et al., 2005) or a so-called quasi hierarchy (Humphrey and Schmitz, 2004), in which lead firms organize and regulate GVCs/GPNs through their corporate and market power. Investment in production facilities that are built in new locations and disinvestment in existing locations play a crucial role in the restructuring of automotive industry GVCs/GPNs because they affect the extended networks of component suppliers. Cross-border investment in the form of foreign direct investment (FDI) and disinvestment, especially in large assembly factories and component suppliers in the form of follow sourcing, therefore potentially have very significant long-term economic development effects in host countries and regions. Since it is important to understand these potentially long-term economic development effects of automotive industry FDI, Chapter 1 reviews FDI in less developed countries and critically evaluates both the mainstream and heterodox approaches to FDI.

Chapter 2 broadens the scope of this discussion on FDI's long-term economic development effects to the less developed (peripheral) regions of more developed countries. Since the 1960s, a high proportion of automotive industry FDI in Europe has been invested to develop the production capacity in peripheral regions to benefit from their lower production costs compared to more developed (core) regions. Chapter 2 identifies the different types and mechanisms of FDI in core and peripheral regions. It highlights the importance of linkages between foreign-owned and domestic firms and spillovers from foreign-owned to domestic firms in host regions to argue that, in the long run, FDI tends to benefit core regions more than peripheral regions.

Chapter 2 also critically evaluates the most important approaches to FDI in peripheral regions developed in economic geography since the 1970s, namely the branch plant economy and truncation, new regionalism, new international division of labor and spatial divisions of labor, and the GPN perspective.

Chapter 3 examines the regional development effects of FDI in what I call the integrated peripheries of the automotive industry by analyzing supplier linkages between foreign subsidiaries and domestic firms. It introduces the spatial concept of integrated peripheries in core-based macro-regional production networks to explain the rapid growth of the automotive industry in Europe's peripheral regions. Conceptually, it draws on Harvey's spatiotemporal fix and on the GPN concept of strategic coupling to investigate the mode of articulation of integrated peripheries into macro-regional production networks. Empirically, it examines the rapid growth of the automotive industry in Slovakia and its consequences for the domestic automotive industry by analyzing the quantity and quality of supplier linkages. The chapter demonstrates how the weak integration of domestic firms into foreign-controlled supplier networks limits the potential for technology transfer from foreign firms to the Slovak economy and for the development of a stronger domestic supplier industry.

Chapter 4 builds on the concept of integrated peripheries introduced in Chapter 3 to conceptualize the changing geography of the European automotive industry based on the spatial profit-seeking strategies of automotive firms. It explains the growth of the automotive industry in peripheral regions and its contemporaneous restructuring in existing locations. The empirical analysis is based on 2,124 restructuring events of large automotive industry firms in the European Union countries and Norway between 2005 and 2016, and on 91 interviews with foreign automotive industry subsidiaries conducted in Czechia and Slovakia between 2009 and 2015. Large differences in labor costs, corporate taxes and other production costs across the European Union explain the growth in the Eastern European integrated periphery and simultaneous restructuring in both traditional core regions and old integrated peripheries in Western Europe. The chapter demonstrates the increasing internationalization of the European automotive industry, which is driven by the investment strategies of global automotive lead firms and the decreasing role played by large domestic firms in the European automotive industry.

Chapter 5 investigates the core-semiperiphery-periphery structure of the European automotive industry between 2003 and 2017 by drawing on the GVCs/GPNs perspective and on the conceptual explanation of the spatial division of labor in transnational production networks in the automotive industry. It develops a methodology to empirically determine the relative position of countries in the core, semiperiphery or periphery and changes in their position over time. The methodology is calculated as "automotive industry power" of individual countries, which is a combination of trade-based

positional power, ownership and control power, and innovation power in the automotive industry. The empirical analysis reveals a dominant position of Germany as a higher-order core. France and Italy are the only two additional countries positioned in the stable core of the European automotive industry. The periphery is mostly located in Eastern Europe, despite the rapid growth of the automotive industry there since the 1990s. Chapter 5 reveals that most countries kept a stable relative position in the core–semiperiphery–periphery structure of the European automotive industry transnational production system during the 2003–2017 period.

Chapter 6 develops an approach to measure value creation and value capture in regional production networks based on firm-level indicators to investigate how distinct tiers of firms contribute to value creation and value capture in the automotive industry. It investigates the relationships between the firm's position in GVCs/GPNs and its prospects for value creation and capture in the context of the Czech automotive industry. The empirical analysis suggests that the economic effects of the automotive industry largely depend on its capital intensity and that mostly foreign-owned higher-tier firms generate and capture greater value than lower-tier firms, which include the vast majority of domestic suppliers.

Chapter 7 analyzes the progress of the transition from the production of vehicles with internal combustion engines to the production of electric vehicles in Eastern Europe. It draws on the evolutionary economic geography perspective to contend that this transition is strongly embedded in and constrained by the previous FDI-dependent development of the automotive industry in Eastern Europe and its current integrated periphery position in the European automotive industry value chains and production networks. The chapter considers the consequences of the transition for the future position of Eastern European countries in automotive GVCs, GPNs and for the division of labor in the European automotive industry.

Chapter 8 summarizes basic points and arguments presented in the preceding chapters and discusses the important conceptual and methodological implications of the book.