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## The automotive sector in emerging economies: industrial policies, market dynamics and trade unions

Rudolf Traub-Merz (Ed.)

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From the decades that followed the II World War, the automotive sector has been rebuilt as one of the pillars of global capitalism. With an elevated level of concentration and working in global scale, the automotive sector has been a major vector of technological diffusion and it demonstrates a notable capacity to absorb technology from other industries. This paper discusses some conclusions of the book published by the Friedrich Ebert Foundation, named *The automotive sector in emerging economies: industrial policies, market dynamics and trade unions – trends & perspectives in Brazil, China, Mexico and Russia*<sup>1</sup>.

Motor vehicle assemblers have played an active role in the implementation of modular production, in the restructuring of working processes in post Fordism era, and in the dissemination of innovative technologies in production lines. After the 2008 crisis, the automotive sector has been passing through another series of adjustments as a result of the slowdown of international trade and the increased competition in international markets.

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1 TRAUB-MERZ, R. (Ed.). *The automotive sector in emerging markets: industrial policies, market dynamics and trade unions. Trends & perspectives in Brazil, China, India, Mexico and Russia*. Berlin: Friedrich Ebert Stiftung, 2017.

The book consists of a compilation of nationally based studies about recent changes in the geographic distribution of production and consumption of motor vehicles. The economic growth of some emerging markets and the increase in their participation as suppliers of global chains have created a new dynamics of automotive production. These changes have altered the directions of the trade and investment flows from the automotive sector, consolidating a new geography of the automotive production chain.

In this respect, the book is probably the first one in arguing that the emergence of two large consumer markets and – at the same time – economies with a relevant automotive industry has produced new trends in this sector. In the cases of India and, specially, China, the process of urbanization of both economies has brought a new dynamics to the automotive industry. The restructuring of the sector in terms of its regional basis along with the assimilation of new technologies (*e.g.* electrical and autonomous cars) will be the drivers of automotive industry in the next years.

During the last decade, the automotive market in the developed countries has remained stagnated. In contrast, some emerging markets more than doubled their market size between 2005 and 2014. Some countries with a large population in process of urbanization and significant degree of industrialization have sustained the growth of the automotive market; in particular, the BRIC group has concentrated the major part of market growth in the last decade.

The major contribution to this process came from China. From 2000, China has become the main market and the top manufacturer in the global automotive industry. The growth of the consumption of vehicles in peripheral economies have set the direction of investment flows; during this process, the automotive modular production has articulated regions with low costs of production, emerging economies with large population, automotive assembler companies and major OEMs (Original Equipment Manufacturer, auto parts system providers) from developed countries. Recent trends have shown that the automotive sector is part of the world economy transformation which has resulted in the increased importance of the BRIC group in investment and trade flows.

Along this process, some peripheral economies have amplified their participation in the worldwide distribution of automotive production through the attraction and subsequent transfer of some production lines of OEMs from developed countries. As a result of the structure of modular production, this process has led to the formation of supply chains in emerging economies, increasing the number of relevant clusters of production around the world and creating some regional division of labor, for example, in Latin America and Southern Asia.

These changes have facilitated the entrance of new companies, including new assemblers from India and China, by opening spaces for OEMs from both countries. As a general overview, it is possible to assert that after the 2008 crisis, due to the worsening of the global economic situation and due to the entrance of newcomers in the automotive industry, the sectorial competition increased and the companies started to accumulate idle capacity. This scenario has led to a series of national responses which have been generally materialized throughout a set of industrial policies focused on the automotive production chain.

Regardless of the entrance of newcomers from emerging economies and the stagnation of developed markets, countries like United States, Germany, France, Japan and South Korea remain the decision centers of the automotive sector. Major assemblers from developed economies continue to define the technological trajectories, the hierarchical structure of global value chains and the directions of investment flows. The geographical redistribution of consumption and production has not affected the importance of the traditional assemblers, in spite of new assemblers from China and India. The R&D expenditure of the automotive industry continues to be led by the traditional assemblers, and the technological efforts continue to be oriented towards high income markets.

**TABLE 1**  
Top R&D Expenditures – motor vehicle assemblers – 2006-2014

2006		2010		2014	
Assembler	R&D Expenditure (€ million)	Assembler	R&D Expenditure (€ million)	Assembler	R&D Expenditure (€ million)
Ford Motor	6,781.92	Toyota Motor	6,768.46	Volkswagen	11,743.00
General Motors	5,679.86	Volkswagen	5,790.00	Toyota Motor	6,269.95
Daimler Chrysler	5,649.00	General Motors	4,229.08	Daimler	5,379.00
Toyota Motor	5,423.93	Honda Motor	4,216.44	General Motors	5,220.80
Volkswagen	4,075.00	Daimler	4,164.00	BMW	4,792.00
Honda Motor	3,359.70	Ford Motor	3,415.04	Ford Motor	4,640.71
BMW	3,115.00	Nissan Motor	3,410.02	Honda Motor	4,366.71
Nissan Motor	2,859.75	BMW	2,448.00	Nissan Motor	3,447.17
Renault	2,264.00	Peugeot (PSA)	2,314.00	Fiat	3,362.00
Peugeot (PSA)	2,151.00	Fiat	1,692.00	Peugeot (PSA)	1,966.00

Source: European Commission.

The increasing importance of emerging markets in an industry where the value chain is still controlled by traditional assemblers has shaped a particular geography of production and consumption based in three groups of countries. The first one is formed by large population countries where the automotive production is directed to the local market. Despite the large consumers market, in this group of countries there is a considerable number of local suppliers but there is no important national assembler –Brazil probably being the best example, along with Turkey and Iran. The second group comprises countries with a large population where the automotive production is directed to the local market. In this case, there is a sizeable number of local suppliers and at least one important national assembler – such as China and India. The third group includes countries without a relevant local market but with a sizeable number of local suppliers, with the automotive production directed to other markets.

In this context, two cases deserve special attention: India and China. They have both taken advantages of foreign direct investments made in the 1980s and 1990s to induce technological transfers and to create national assembler companies. The size of the consumer market in both countries has represented an important asset to build capacities in the automotive industry and to consolidate an integrated production chain. The strategies of entrance of Indian and Chinese assemblers are also similar, based initially on low labor costs and focused in low cost cars.

During the 2000s, India reduced its import duties while starting to promote policies to attract foreign investments and to increase the share of local suppliers in the automotive production. In 2014, the Indian government launched the “Make in India” program, which set the automotive industry as one of its main targets. The program is a grand-scale effort to internalize stages of production and transform India in an assembly hub to attend the Asian automotive market.

In turn, China has been the main driver of the changes in automotive industry. The Chinese automotive market has maintained a steady rate of growth during the last decade, a period in which the sales of motor vehicles in the country has been multiplied by four and China has become the first world producer in the sector. In the 1980s, China started a successful strategy to induce joint ventures between foreign companies and local producers. The foreign direct investment policies promoted by China have produced the most relevant new entrant companies from emerging economies.

In 2004, the Chinese government adopted a new set of industrial policies to protect the Chinese automotive market and to consolidate its domestic automotive industry. During 2009 and 2010, China revised and expanded the scope of auto-

motive industrial policies, providing the guidelines to promote innovative efforts in Chinese auto companies. China revised the import regime in 2012 and introduced a group of measures to encourage import substitution and repeal incentives to foreign carmakers.

The set of measures adopted by China after the crisis seems to have been designed to consolidate the domestic motor vehicle assemblers. Indeed, the entrance of Chinese auto companies in the world market and the set of industrial policies that support this movement will probably be a key factor in defining the competitive standards in the automotive industry during the next years.

The 2008 crisis has also played its part in this process. Firstly, it produced a revision in the prospects of the rate of growth of demand, which served as a basis to investment plans and corporate strategies. This revision of prospects induced a set of adjustment processes in the automotive industry: some large-sized merger and acquisition operations, a new round of outsourcing and the worsening of international competition.

The increase in foreign direct investment flows is part of this process. It is a consequence of the corporate strategies to transfer activities to low cost economies and it is also a consequence of the increase in market concentration after the crisis. In particular, the traditional assemblers took the opportunity created by the crisis to acquire smaller companies and to increase the scale of business operations. In certain cases, some traditional auto companies were sorely affected by the financial crisis.

Over the last years, the developing market has reduced its pace of economic growth, which has worsened the situation of the automotive industry. Along with the restructuring of the global automotive value chain, the car production in developing countries has increased and new players have been created. The combination of newcomers and idle capacity after the crisis usually means that the companies are compelled to cut costs and to claim some protection in their domestic markets. This scenario indicates a strengthening competition in the international market, with more involvement of state policies to promote exports, efficiency gains and technological innovations.

The main contribution of the book is to capture this scenario and, starting from there, propose a guideline to the work of trade unions. In addition, the first chapters (“Part I: Automotive industry – prospects for emerging economies”) offer a great overview about the current trends in the automotive industry in emerging economies, based on local research experiences. The effort made by the *Friedrich Ebert Foundation* to assemble these studies has undoubtedly produced a good guidance to understanding the future of the automotive industry.

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