

## CHANGE IN THE MINDSET? - EMPIRICAL EVIDENCE ON THE ROLE OF MULTINATIONAL COMPANIES IN THE EVOLUTION PROCESS OF SMES

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**Summary:** Hungary is one of the so-called ‘Detroit East’ countries where automotive industry has an outstanding and continuously increasing importance. This industry generates high value added investments and research and development and innovation (RDI) activities year by year and contributes significantly to the competitiveness of the local and national economy. The author’s basic hypothesis is that multinational companies, OEM (Original Equipment Manufacturers) and Tier 1 (first level, direct suppliers of OEMs) both, can become strategic allies of local actors in the development path designation process of a specific location, especially in case of mid-size, or second-tier cities. The local integration of these companies is an ongoing process, supporting the shift of these former ‘low cost locations’ to future RDI locations. The borderline between the traditional sector of the local economy and the exogenous actors (multinational companies) is becoming less definite and the subsequent development activities are strengthening the endogenous potential of the area. There are several milestones and facts underlining this tendency but in this article the author focuses on the role of multinational companies in the evolution process of SMEs and the future potential and trends in their relationship. The author examines three Hungarian case studies from Győr, Kecskemét and Miskolc and Audi, Daimler and Robert Bosch. The research has a strong empirical character and is process-oriented. The objective of the study is to prove the hypothesis by specific examples and better understand the success factors and obstacles in this process.

**Keywords:** automotive industry, multinational companies, SMEs, endogenous development, local integration

### 1. Introduction

According to Friedman, globalisation 3.0 has brought a shift in the drivers of globalisation and created major new challenges for local economic development (Friedman, 2005). The solutions called for an orientation toward ensuring that all participants in a local economy make maximum contributions. The recovery from the global recession means a clear shift from the “traditional” ideas and requires an economy focused on reinventing itself through new technologies, innovations, and renewed commitments to ethical leadership in both the public and private sectors. The competitive advantage of firms in the new economy has been greater specialisation that results in more interdependency with other firms and organisations. When leading-edge firms need specialised skills, they “hire” other companies and form ‘virtual corporations’ to produce one product or service and then recombine with entirely different sets of companies for another product or service. Firms with well-developed networks are flexible, able to identify and select strong suppliers as well as to penetrate new markets. In a networked economy, the skills of suppliers are as important as the skills within the firms (Blakely and Leigh, 2010). This process is very similar to what is called ‘matrix organisation’ in project management literature. Multinational companies and SMEs as

members of the supplier network can reduce income-, earnings- and spatial inequality that are resulted by globalisation.

## **2. Methodology**

The author's basic hypothesis is that multinational companies, OEMs (Original Equipment Manufacturers) and Tier 1 companies (first level, direct suppliers of OEMs) both, can become strategic allies of local actors in the development path designation process of a specific location, especially in case of mid-size, or second-tier cities. They can contribute significantly to the successful and sustainable development of an area. Through the Quadruple Helix (QH) model, their connections with the local economy and society elements can be captured. Following the presentation of the global, Central European and Hungarian environment, the author focuses on the role of multinational companies (MNCs) in the evolution process of SMEs and the future potential and trends in their relationship. The author presents three Hungarian case studies from Audi in Győr, Daimler in Kecskemét and Robert Bosch in Miskolc. The research has a strong empirical character and is process-oriented. The most recent industrial statistics and reports form the basis for references. The objective of the study is to prove the hypothesis by specific examples and better understand the success factors and obstacles in this process.

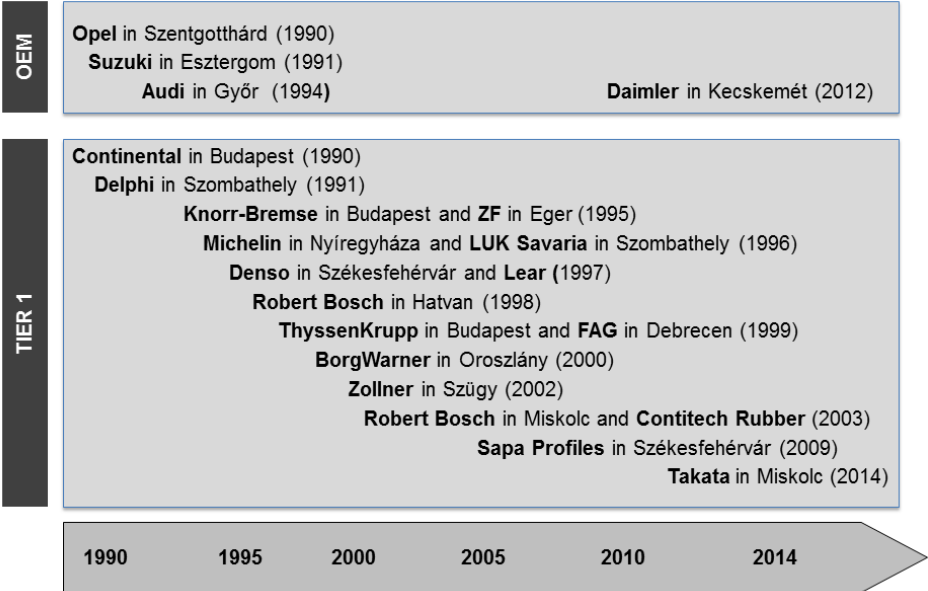
## **2. Global, EU and national environment**

According to the list of the 500 largest companies globally, two companies in the top 10 belong to automotive industry, Volkswagen (Germany) and Toyota (Japan), ranked 8<sup>th</sup> and 9<sup>th</sup>. There are 4 other sectors in the list, as retail (rank 1); petroleum (rank 2-6); power (rank 7); and commodities (rank 10). The revenue was 261.5 billion USD for Volkswagen and 256.5 billion USD for Toyota based on the fiscal year ended before March 31, 2014 (Fortune, 2014). The ASEAN Economic Community (AEC) is a goal of regional economic integration by 2015 of the Association of Southeast Asian Nations (ASEAN). The key characteristics envisaged in the framework of the cooperation are: (a) a single market and production base, (b) a highly competitive economic region, (c) a region of equitable economic development, and (d) a region fully integrated into the global economy. In short, the AEC will transform ASEAN into a region with free movement of goods, services, investment, skilled labour, and freer flow of capital (ASEAN, 2014). According to the World Investment Prospects Survey for 2013-2015, transnational cooperations (TNCs) in the manufacturing sector drove a change in preferences on the mode of entry, with almost half of them stating that brownfield investments and exports would be highly important in 2015. This change in the internationalization patterns underlying the importance of exports and of existing operations will likely result in rationalization of foreign operations and refocusing of businesses.

Regarding Central Europe, manufacturing sector has been radically transformed in the last 15 years following the transition. Internationally competitive, modern and efficient manufacturing facilities have started their operations and the automotive industry is one of the crucial manufacturing sectors in the Czech Republic, Hungary, Romania, Slovakia and Poland. According to a recent report in Central Europe, 114 companies (23%) in the TOP 500 belong to manufacturing sector and deliver an average growth of 2.9 %. Manufacturing holds the third place among all sectors and the main driver of its growth is the automotive sector. The average revenue growth for the sector was 5.8% in 2014, a significant increase from 1.7% in 2012. The biggest moves were the big jump of Mercedes-Benz Manufacturing in Hungary and Ford Romania. Global car manufacturers and their suppliers continue to invest

in the CE region as a lower-cost and high-quality base. “The message is clear: this is one of the most important and fast-growing industries in the region.” (Top 500 in CE, 2014). Hungary is one of the so-called ‘Detroit East’ countries where automotive industry has an outstanding and continuously increasing importance (Edmondson, 2005). From the early 1990s, several OEMs and connected Tier 1 companies have started their operations in Hungary. As a good example, Bosch Group has established an automotive electronics plant in Hatvan in 1998, a power tool plant in Miskolc in 2001 and a second plant in Miskolc in automotive industry in 1994. After 2010, several new investment projects were completed by both the OEMs and their Tier 1 and 2 level suppliers in the country (Fig. 1). The level of value-added is continuously increasing in the sector in Hungary, employing more than 120,000 people and producing 18 billion EUR revenue (2013). More than 92% of the production volume is exported and the industry reached 23% increase in the production value from 2013 to 2014. According to OECD, the Hungarian economy has finally entered into recovery in 2013 and the relative importance of automotive sector, which accounts for 18% of all exports, has increased because of new investments (OECD, 2013). Based on these facts and tendencies, Hungary and automotive industry as territorial and sectoral focus are good examples in the CEE region to examine the connections between large enterprises and SMEs.

**Figure 1: Location process of automotive OEM and Tier 1 companies in Hungary**



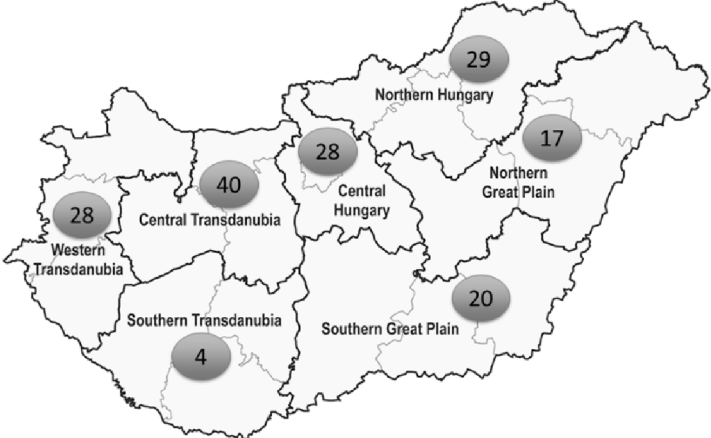
Source: own construction from public data, 2015

**3. The supplier base of automotive industry in Hungary**

Automotive sector not only brings direct employment and generates wealth but also creates extra wealth and employment in other sectors with a multiplier effect of almost four. Altogether more than 720 companies are working in the automotive sector in Hungary and the industry’s share in the GDP is 10%. Regarding the supplier network of the OEM and Tier 1 companies in Hungary there is a clear commitment from the side of large (multinational) companies to increase the proportion of local suppliers in their supplier network. The Hungarian Investment Promotion Agency (HIPA, formerly: HITA 2014) launched a qualified supplier database that has more than 210 registered member companies, mainly SMEs. Large companies as Audi/VW Group, Mercedes, Siemens, Denso, Knorr-Bremse and Continental are also exploiting the database. A representative of BMW called the Hungarian supplier basis an “invisible factory” as almost 10,000 people are working in Hungary for the German BMW

factory through 54 separate suppliers. The most important, Tier 1 suppliers are Robert Bosch Group, Denso, Knorr-Bremse and Continental. It can be stated that the spatial distribution of these OEM and supplier companies is not equal as it is illustrated on Figure 2.

**Figure 2: Location of the biggest automotive suppliers in Hungary**

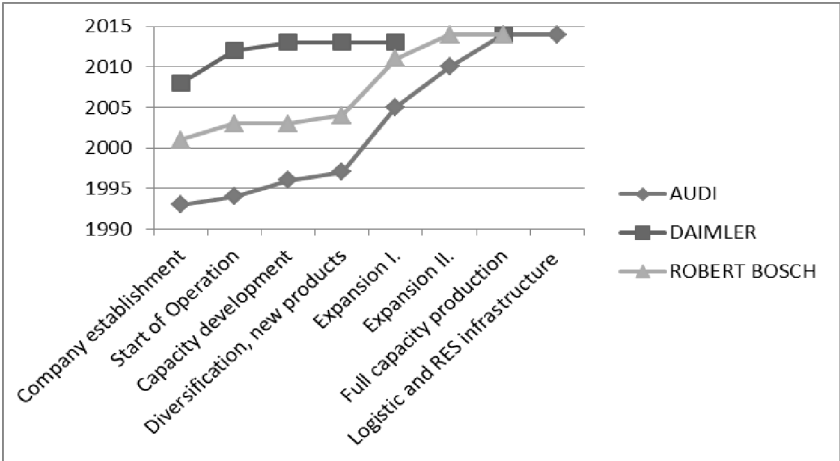


Source: own construction from public data, 2015

**4. Results of the empirical analysis**

The global economic situation and the dynamics of the market will lead to deep structural changes in the automotive industry, meaning high standards of ecology, safety and comfort. The key factor will be the engineering know-how and this will create the foundations for further development. Considering the role of SMEs and suppliers, the strategies and expectations of the OEMs and Tier 1 companies differ from company to company. In some cases OEMs conduct significant applied research activities and employ a stable and increasing R&D staff additionally to productive workers and administrators, or in their terminus technicus: direct and indirect personnel. OEMs and Tier 1 companies can contribute significantly to the sustainable development of an area, especially to the local economy through their core (compulsory) and non-core (freestyle) activities. Regarding the core activities the basic construction, the subsequent expansions, the production activities and the continuous technology and capacity development can form the basis of cooperation with supplier companies, mainly SMEs (Fig. 3).

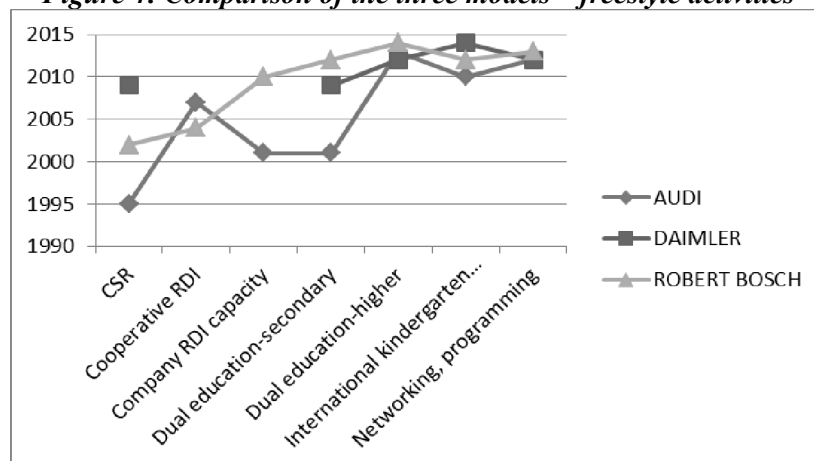
**Figure 3: Comparison of the three models – compulsory activities**



Source: own construction from public information and empirical analysis, 2015

As a specific example, in case of Daimler, there are about 25 suppliers already delivering to the company seated in Hungary. It is important to highlight that during the construction of the new production facility, the ratio of Hungarian companies was 80%. The investment volume was 800 million EUR and the total area exceeds 440 hectares. In the industrial area of Daimler, 10 suppliers can locate in the short term and an additional 35 in the mid-term. As the company forms a production network with the production plant in Rastatt, suppliers can deliver their products directly to Rastatt also. For Audi, the expansions and the new geothermal RES (renewable energy sources) project with an investment volume of almost 27 million EUR are also good examples. The project is executed in cooperation with PannErgy, with Hungarian majority ownership. Audi Hungaria Motor Kft. has almost 100 Hungarian suppliers recently. As regards the non-core activities, suppliers include service provider companies and other local actors also. The activities presented on Fig. 4 contribute to the endogenous development potential of the examined mid-sized cities as joint RDI centres, clustering, dual education and international kindergartens are comparative advantages of a specific area in the global competition. The importance of these “soft” activities has been significantly increased in the recent era following the global economic downturn.

**Figure 4: Comparison of the three models – freestyle activities**



Source: own construction from public information and empirical analysis, 2015

As concluding remark it can be stated that in the era of Globalisation 3.0, Industry 4.0 and Open Innovation 2.0, not only companies but also their supplier networks are competing on the global level. The opportunities for existing and potential supplier companies have widened and increased significantly though there are some obstacles as the critical mass of resources, long-term availability of skilled workforce in an area and low level innovation potential and openness of SMEs. The role of China and India will grow and in order to be able to successfully compete with Western European, Japanese, US and Korean competitors, CE companies should skilfully combine high quality, flexibility, profitability and innovation.

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