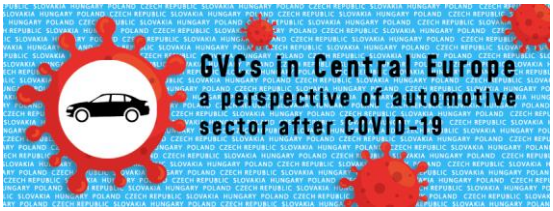


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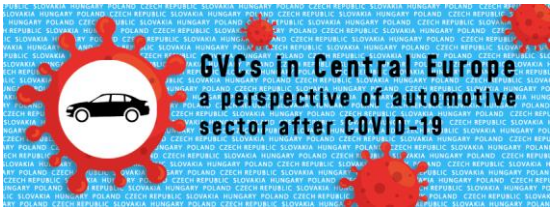
# How to promote the upgrading of local automotive actors and achieve a high-road integration of the Hungarian automotive industry in European and global automotive value chains

A case study by Andrea Szalavetz

The case was developed with support of the Centre of Economic and Regional studies (CERS), Budapest, Hungary and by the Visegrad Fund in 2021. It is intended to be used as a base for discussion in courses focusing on Global Value Chains, International Business and Management

*The project is co-financed by the Governments of Czechia, Hungary, Poland and Slovakia through Visegrad Grants from International Visegrad Fund. The mission of the fund is to advance ideas for sustainable regional cooperation in Central Europe.*

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In March and April 2021, a series of interviews were conducted with stakeholders in the Hungarian automotive industry. Automotive companies in domestic and foreign ownership have been interviewed, along with representatives of industry associations, the president of the Hungarian Metalworkers' Federation (a trade union representing the interests of workers in the automotive, electronics, metal and machinery industries), and a representative of the Government Office of a NUTS3 region that is strongly specialised in automotive manufacturing.

This short paper summarises the comments of four key informants who have shared their ideas and suggestions regarding the necessary policy instruments that would promote local automotive actors' upgrading and the high-road integration of the Hungarian automotive industry in the European and global automotive value chains. Since most of our interviewees opted for anonymity, the names of their organisations will not be disclosed.

Our first questions intended to capture informants' views about two aspects of the radical transformation of the automotive industry, more specifically, whether they consider the impact of digitalisation and electrification a threat or an opportunity for upgrading. Next, we inquired about companies' upgrading trajectories, and the enablers of and barriers to their upgrading. We tried to gain insights into the specifics of interviewees' upgrading, with respect to all upgrading dimensions set out in the theory of global value chains (Fernandez-Stark and Gereffi, 2019; Humphrey and Schmitz, 2002). These questions set the context for asking our informants to evaluate the Hungarian industrial policy, specifically the automotive industry-related policy instruments and initiatives, and make recommendations regarding the best ways of fostering the upgrading of local automotive actors. These latter questions have been elaborated upon only by four informants, as detailed below.

Our results indicate that there is a consensus view across respondents that the government considers the automotive industry of special importance for the Hungarian economic performance. Automotive companies are the recipients of the lion's share of public subsidies.[1] Interviewees have all made reference to Hungary's excessive exposure to the automotive industry, and to its dependence on the strategic decisions of German automotive companies (cf. Braun et al., 2020).

[1] This view is substantiated by data. According to Vasvári et al. (2019), over the period between 2004 and 2018, automotive companies have received more than 60% of the so-called 'VIP cash subsidies' based on individual government decisions.

Interestingly, while interviewees considered Hungary's specialisation in automotive manufacturing excessively high, when asked about the near-term impact of the radical turn of the automotive industry towards electric vehicles, our informants considered this shift a distant threat. All interviewees pointed out, that the automotive industry is undergoing expansion, in terms of both production capacities and employment. Neither digital and robotic technologies, nor the shift of consumers' demand towards electric vehicles has entailed massive downsizing so far.[2] According to the interviewees, the current expansion of automotive production is fuelled by the upswing of demand for some conventional and mainly, for electric vehicles, and by massive investment inflows in the battery industry. One interviewee underscored the importance of organic development at Hungarian manufacturing subsidiaries. He claimed that a decade-long continuous process upgrading, openness to learning and absorbing new technologies, and a proactive participation in the ongoing competition across subsidiaries for higher-value assignments (functional upgrading) have shaped parent companies' commitment to consolidate production activities at their Hungarian subsidiaries. The flipside of the coin is organic development at domestic-owned automotive suppliers, doing their best to meet automotive consumers' ever-rising requirements in terms of cost-efficiency and production quality, and investing in advanced manufacturing technology. These non-abating efforts enabled the highest-flying domestic suppliers to co-evolve with their automotive customers.

Our informants asserted that large-scale investments by foreign, mainly Korean investors in the establishment of battery manufacturing facilities will indeed contribute to the creation of new jobs, which is indispensable for mitigating the adverse impacts of job losses – expected in the medium term. These job losses will not necessarily be induced by the automotive industry's shifting to electric vehicles, but rather by the robotic automation of certain manufacturing and, more importantly, logistics activities.

Jobs comprising low-skill, highly repetitive activities are expected to be eliminated by advanced manufacturing technologies. Although the first phase of this process is already over, there is still no meaningful growth in technological unemployment, since automation has been decided and implemented in response to increasingly pressing labour shortages that have already jeopardised production. In this vein, the operators whose work has become redundant

[2] The case of Wescast manufacturing automotive exhaust systems and turbocharger housings was mentioned among the exceptions (exhaust systems epitomise the losers of the transition to electric vehicles). Another exception was the recently (April, 2021) announced closure of one of Johnson Control's manufacturing plants in Hungary, where the reported reason was restructuring involving the relocation of automotive component production from the Hungarian plant to other facilities of the company that feature a much higher automation rate.

by the installed robotic solutions have started to perform other activities within the given firms, and were not laid off. Notwithstanding, future investments in further automation may already cause technological unemployment. According to our interviewees, these developments are, however painful, necessary for the upgrading of the quality of work at the existing automotive manufacturing plants. Automation and digitalisation are indispensable also for improving the competitiveness of the local subsidiaries.[3]

Relatedly, our informants have pointed to one of the most serious mistakes of the Hungarian industrial policy: *the misalignment among the individual policy components*. Some components of the Hungarian industrial policy try to foster the upgrading of incumbent automotive actors and enable a high-road integration of the industry into global value chains. Policy instruments supporting firms' digitalisation and the implementation of advanced manufacturing solutions can indeed contribute to upgrading. The direct impact of these investments is process upgrading: the upgrading of resource efficiency and operational excellence. Indirect impacts may also be meaningful: increased digital maturity usually entails functional upgrading.

In a similar vein, science, technology, and innovation policy programmes promoting the location of R&D-intensive activities to the premises of manufacturing companies, or subsidising the hiring of researchers and the procurement of high-value testing equipment, and/or fostering industry–university collaborations can also increase parent companies' commitment to delegate high-value assignments to local subsidiaries (functional upgrading).

By contrast, the policy instruments stimulating FDI attraction and retention are characterised by a race-to-the-bottom behaviour. These instruments still exemplify dependent market economy-type policy that tries to accommodate the needs of global investors by keeping labour costs low and labour market flexible,[4] and by abstaining from imposing and enforcing strict environmental regulations.[5]

The main problem with this race-to-the-bottom behaviour is that it effectively hinders the achievement of the other efforts: those of upgrading. If automotive investors are encouraged to capitalize on the low-cost features of the Hungarian location, they are not

[3] The case of Johnson Electric, described in footnote 2, was mentioned again as an example of the risks of local subsidiaries not following the overall trends of increasing automation.
[4] The Hungarian so-called 'Slave Law' deregulating overtime work was mentioned in this respect and the lenience of the government towards specific companies, owned by Asian investors who recurrently repress labour unions and ignore employees' rights to decent working conditions (cf. Artner, 2020).
[5] The cases of battery manufacturing facilities have been mentioned in this respect.

motivated to upgrade their local activities and invest in collocating research, design, and other quality activities to local production sites.

Another policy component that is not aligned with the ones envisaging and promoting a high-road development is education policy. If the upgrading of vocational and higher education is neglected, this can effectively nullify the efforts to channel the evolution of the industry towards a high-road trajectory. The reason is simple: automotive companies trying to upgrade and increase the skill-intensity and value added of local activities have to face a lack of qualified workforce at all levels. Automotive companies find it increasingly hard to hire skilled employees: not only IT-specialists and engineers but also technicians with domain-specific and programming skills, and operators with at least medium technical competencies. Interviewees underscored that the performance of the Hungarian education system keeps deteriorating.

Over and above repeating the usual messages in terms of investing in and improving vocational and higher education, our interviewees have called for *policy consistency*, that is, for a more coherent policy design across policy instruments envisaging FDI attraction, retention, and stimulation of incumbent actors' upgrading.

While developing the vocational and general education system was considered the primary and key condition of both upgrading and keeping up with the requirements posed by technological progress in the automotive industry, interviewees have also emphasised that the government's race-to-the-bottom behaviour exacerbates the problem of the shortage of qualified labour.

On interviewee mentioned that massive funds allocated by the European Union Structural Funds for the greening of the transport sector and for supporting R&D and technological development has increased the capacity of the state to steer the development of the industry. With non-negligible funding available to support functional upgrading the bargaining power of the government is non-negligible either. Consequently, the race-to-the-bottom behaviour of public policy with respect to Asian battery industry investors is by no means justified. The state should leverage its bargaining power and encourage investors to establish research centres specialised in electric vehicle battery research and engage in innovation collaboration with local universities. Obviously, this kind of proactive stimulation of a high-road development should be prevalent not only in battery manufacturing industry but also in the government–industry relations across the automotive industry.

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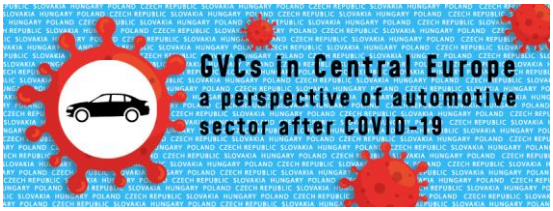


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