

**LAPSE OF
TIME**

SM/22/274

Correction 1

January 10, 2023

To: Members of the Executive Board

From: The Secretary

Subject: **Czech Republic—Selected Issues**

Board Action: The attached corrections to SM/22/274 (12/15/22) have been provided by the staff:

**Factual Errors Not
Affecting the
Presentation of Staff's
Analysis or Views**

Page 4

Typographical Errors

Page 9

Questions:

Mr. Segoviano, EUR (ext. 38558)
Mr. Noumon, EUR (ext. 38555)
Mr. Ayerst, EUR (ext. 39509)

Czechia, it benefits from a larger share of high-skilled workers to pull from in the general population.

Figure 3. Intermediate Suppliers and Consumers from Czechia Auto Sector

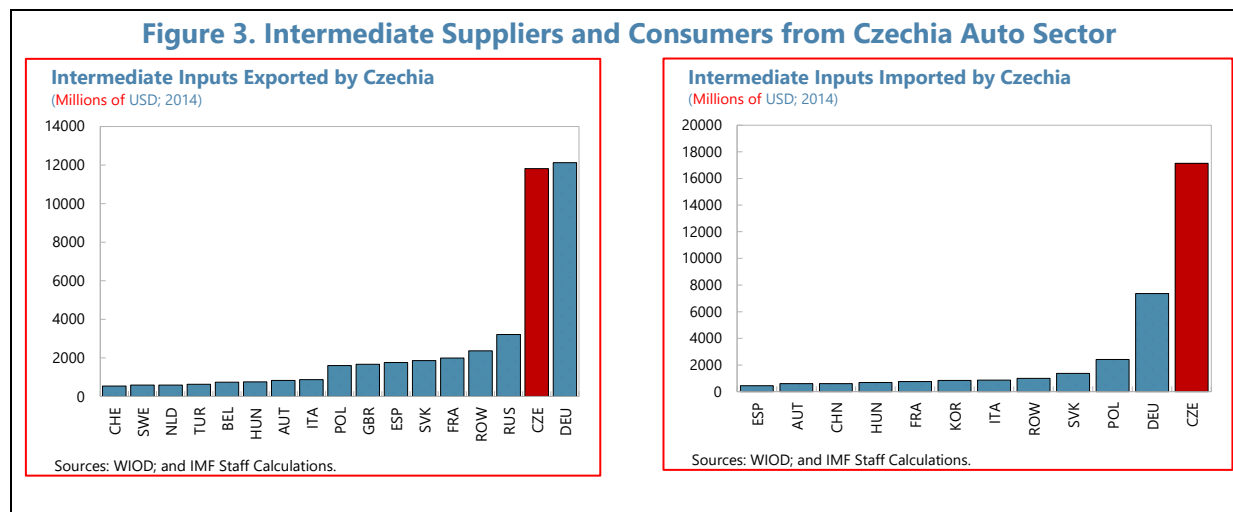
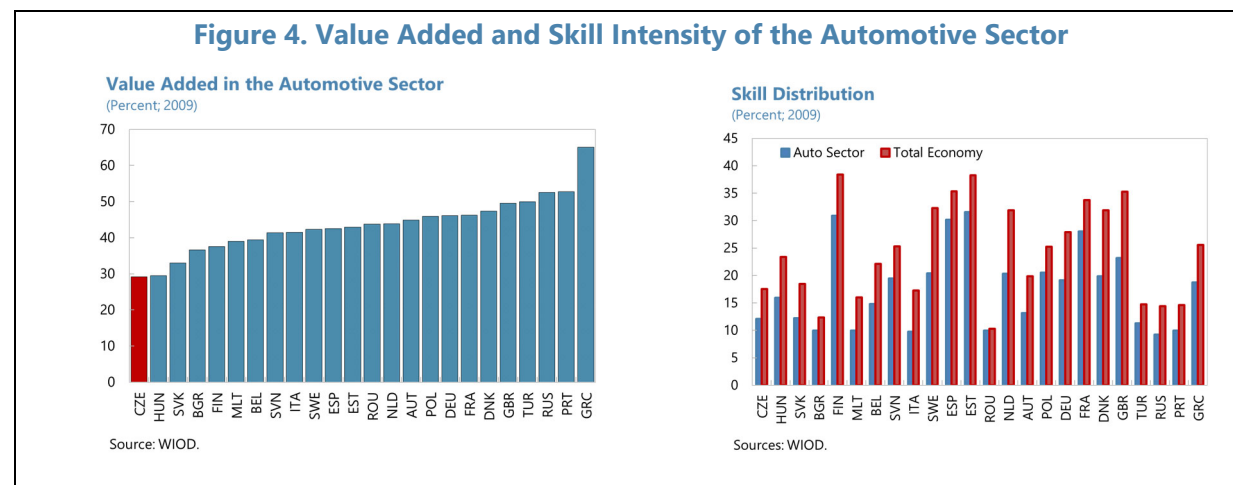
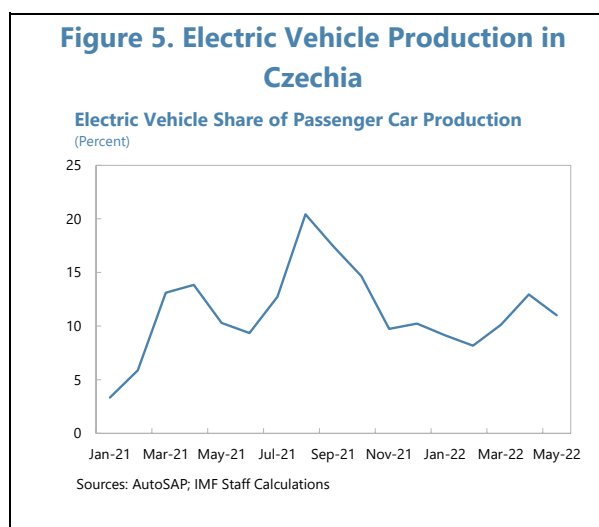


Figure 4. Value Added and Skill Intensity of the Automotive Sector



5. Czechia face key challenges and risks in the transition to electric vehicle production. The previous facts have established that Czechia auto sector is an important supplier to the German auto sector, is concentrated in a relatively low value-added section of the value chain and is relative less skill-intensive than other countries in the region. While future developments in the production of electric vehicles remain uncertain, three trends have been observed so far. First, electric vehicle production involves shorter value chains than combustion vehicle production. While Czechia automotive sector currently plays a well-defined

Figure 5. Electric Vehicle Production in Czechia



reduce the value-added share and overall employment relative to the baseline. The decrease in the value-added share and the increase in the skill intensity follow directly from the assumptions on the relative parameterizations of electric vehicle production (Figure 7 or Table 1) while the decline in employment is closely linked to the decline in value added and the change in the labor intensity of production. Overall, the model accommodates several channels through which policy can operate to support the automotive sector over the transition, which are explored next.

Policies to Maximize the Benefits of the Transition to EV Production

11. The model is used to simulate three broad policy schemes that could potentially aid the structural transition to electric vehicle production. As discussed below, these broad policy schemes are taken as stand-ins for groups of more specialized policies that could be implemented by the government.

- a. ***Boosting labor productivity.*** The first group of policies is related to investments to increase or enhance the share of skilled labor, which is comparatively low in Czechia automotive sector, and more broadly at the aggregate level (Figure 4). This policy is implemented in the model by increasing Czechia labor productivity to match that of Germany, making skilled labor more abundant and cheaper. In practice, this group of policies captures any labor productivity enhancing policies, including investing in education, upskilling, re-skilling, and lifelong learning programs, as well as digitalization policies that could boost existing skills.
- b. ***Support for horizontal production capabilities.*** The second set of policies considered relates to investments in the capabilities of the automotive sector where Czechia economy already performs well. This policy is implemented in the model by reducing the entry cost of Czechia for intermediate sectors in both the electric and combustion vehicle (CV stage 3 and EV stage 2) production by 20 percent. This policy scheme could alternatively be thought of as a reinforcement of the country's current production capabilities and specializations. In practice, this policy includes improving the (global) competitiveness of the automotive sector as it is currently structured, including investing in infrastructure, subsidies to operations of current firms, or lowering trade costs.
- c. ***Support for vertical production capabilities.*** While the second policy reinforces existing capabilities, the third policy scheme promotes moving up the global value chain through investments in capabilities that are not yet the comparative advantage of Czechia economy. This policy is implemented in the model by reducing the entry cost of the most downstream sectors for both electric and combustion vehicle production by around 20 percent, which facilitate the shift to higher value added and more skill-intensive sectors. In practice, this policy should be thought of as capturing any policy enhancing downstream activities, including research and development subsidies, lowering cost of new firm or product entry, or labor market policies that allow access to foreign experts.