

# The Automotive Industry and Business Opportunities in Central and E. Europe

## 中東歐汽車產業概況與商機

In recent years, with the opening and improvement of relations with advanced countries in the world, coupled with economic transformation, advantages in raw materials for automobiles, relatively low wages, and market growth potential, the automotive industry in major Central and E. European countries, such as the Czech Rep., Poland, Slovakia, Hungary, Romania, Serbia, Slovenia, etc., has improved in terms of quality of assembly and production technology, and has become a growing area for investment of the world's leading car manufacturers and parts suppliers. This article gives a brief overview of the development of the automotive industry in these countries, as well as the opportunities for investment.



## I. Overview of the Automotive Industry's Development in Major Central and E. European Countries

### Czech Rep.

The automotive industry is one of the pillars of the Czech economy. More than 40 of the 100 most important automotive companies in the world have invested in the Czech Rep. and set up branches in the Czech Republic. Their design, innovation and technology development centers located in the Czech Rep. form a dense and complete automotive industry chain, making the Czech Rep. one of the countries with the highest degree of concentration in automotive manufacturing, design and research and development in the world, and ranked the 5th largest automotive manufacturing country in the EU in 2022. The Czech automotive industry has a history of 100+ years, and **the Czech Rep. has embraced a dense and complete automotive industry chain with 3 passenger car manufacturers and nearly 400 automotive component manufacturers/suppliers, of which 55% are foreign-invested enterprises.**

The Czech Rep. has developed a number of advantages in the passenger car, commercial vehicle and component industries. In the automobile manufacturing and assembly sector, the Czech Rep. has three passenger car plants, including Skoda, Toyota-Citroën and Hyundai, of which Skoda is the top 100 Czech companies and the largest exporter in terms of trade turnover, and is also the 3rd largest R&D center of the VW Group worldwide; in the commercial vehicles sector, Karosa is the largest bus manufacturer in the Czech Rep. and the leading bus manufacturer in Europe, while Iveco Group is the second largest bus manufacturer in Europe and has the world's largest bus manufacturing center in the Czech Rep. - the Iveco Czech plant. In terms of components, the Czech Rep. has been ranked as the world's best place for investment in the automotive components industry by European investment monitor Ernst & Young for many consecutive years. Half of the world's top 50 automotive component manufacturers have invested in the Czech Rep., including John Controls, Simens, Faurecia, and Visteon, and in terms of component services, the Czech International Automotive Parts and Accessories Exhibition is the only exhibition for utility vehicles in Central Europe

and enjoys a high reputation in Central and E. Europe. The Czech Passenger Car Show is the largest and most influential specialized truck show in Central and E. Europe, attracting a large number of European and global passenger car buyers and suppliers every year.

In 2021, after a year of intermittent shutdowns due to the epidemic supply chain disruption, production in 2022 reached as high as 1.4 million vehicles, accounting for 85% of the total capacity. A large backlog of orders in 2021 drove the growth of production in 2022 and strongly suppressed demand also stimulated consumption. One of the three largest Czech automobile manufacturers, Toyota (TMM CZ established in 2002 hires 3,200 employees and produced 202,000 vehicles in 2022, accounting for about 17% of the total Czech production), ceased production in February 2023 due to the continued shortage of key components, leading to a waiting period of about 6-12 months for individual vehicle models. With the continuous shortage of supply in early 2023 and a large backlog of orders, the Czech automotive industry continues to recover, driving the economic rebound.

## Poland

Poland's automotive industry has developed rapidly through large-scale attraction of foreign investment, privatization and comprehensive restructuring, and has become one of the major producers of automotive components in Europe and a major automotive industry country in E. Europe in a short period of time. In 2022, there were more than 1,500 manufacturers engaged in the production of automobiles and components in Poland, and major car manufacturers such as Fiat, VW, Toyota, Isuzu, GM, and Volvo all have invested and built their factories in the country.

Poland has formed a lot of advantages in automobile and parts manufacturing. Almost 98% of Polish automobiles are exported and **the largest market for Polish automobile export is Germany. Poland is also VW's strategic base in E. Europe with the two most important engine factories of VW within Europe.** Nearly 50% of VW's European production is completed in Poland. In terms of components, Poland produces automotive components with high technical standards and a wide range of products, and is a world leader in the manufacture of tires, seats, automotive electronics, cables & braking systems, etc., which are widely used in the assembly of automotive brands such as M. Benz, Nissan, Opel, Porsche, VW, Fiat, Honda, and Citroën. Important global automotive component manufacturers such as TRW, Valeo, Delphi, Faurecia, etc. have also established their R&D centers in Poland.

According to the report of The European Federation for Transport and Environment (T&E), which promotes the European clean transport movement, Poland has the best EV battery production capacity in Europe, with a capacity of 47GWh in 2022, significantly higher than that of Hungary (30GWh) and Germany (20GWh). Polish EV batteries have become an important export item for the country and Polish EV battery sales were the highest in Europe with a value of around €4 billion in 2022, twice as much as in 2019. Polish EV batteries have the highest value of production in the automotive industry.



According to the report by AutomotiveSuppliers.pl, the export value of Polish automotive industry fell by 5.6% (EUR 28.6 bn) in 2022, with automotive components still accounting for the largest share of exports (EUR 10.7 bn), exports of cars valued at EUR 4.9 bn, and exports of EV batteries climbing to the 3rd place (EUR 3.99 bn). As many automotive factories have announced to increase the production of EV, the production

value of the automotive industry in 2023 is expected to perform well. Poland will continue to attract foreign investors and consider their production plants the basis for further development of the Polish EV industry.

## Slovakia

The automotive industry is one of the pillars of Slovakian economy, accounting for 13% of its GDP, 35% of its exports, and 44% of its total industrial production value, which occupies a strategically important position in the economy. In 2022, Slovakia's annual automotive production reached 981,000 vehicles, with an average of 180+ vehicles per 1,000 people. Slovakia's automotive production is only second to those of the Czech Rep. and Poland among the new EU member states. In terms of vehicle manufacturing, Slovakia has the most advanced automobile assembly production lines in Europe, and major automobile manufacturers such as VW, Peugeot, Citroën and Kia have invested and built factories in Slovakia. With the investment in the production of automobiles by the UK's Jaguar and Land Rover in the Sznitra region, the production capacity of Slovakian automobile industry will be further increased.

The reason that Slovakia could occupy a solid presence in the European automotive industry is mainly due to its quality of passenger car assembly and the ability to produce high-quality parts. Slovakia has 350+ parts suppliers, of which more than 240 are located in the western region. Slovakia is located in the middle of Europe, creating relatively lower transaction costs, so major Western European car makers have relocated their factories to Slovakia, thus gradually moving the European automotive manufacturing heartland from W. Europe to the Central & E. European region.

In 2022, 100% of the vehicles assembled at VW's Bratislava and Martin plants in Slovakia were exported to 180 countries, with China, the U.S., and Germany being the top 3 export destinations, accounting for 2/3 of its total production. The VW Bratislava plant in Slovakia has recently begun production of its first electric SUV (Porsche Cayenne), but market demand has been lower than planned due to low consumer willingness to purchase EV, a phenomenon that has also occurred in Germany. Customer orders for the German VW ID series of SUV are much below annual targets and all carmakers (not just VW) are experiencing a drop in orders. Slovakia is still optimistic about the market for the electric Porsche Cayenne, believing that luxury cars are still the company's main source of profit, and echoing the company's plans to convert the Audi Q7, Q8, and VW Touareg models of the same group into electric vehicles.

### Hungary

The automobile industry is the main driving force of Hungary's economic growth and more than 1/4 of the country's total foreign investment in the manufacturing industry went to the automobile industry. Among Central and European countries, Hungary's automobile industry has a relatively mature market with a complete system supporting the automobile industry chain. In 2022 there were 700+ automobile vehicles, parts and components and ancillary service providers in Hungary, of which 500 are automobile parts producers.

Hungary has an advantage in the field of passenger cars, assembly and manufacturing of components and exports a large number of them. In terms of vehicle manufacturing, 80% of its passenger cars assembled by Suzuki Hungary are exported to Italy, Germany, the UK, etc., and the medium/low-priced cars produced are mainly for the demand of the Central and E. European market, such as Slovenia; in terms of components, **15 out of the world's top 20 parts manufacturers invested and set up factories for production and sales in Hungary, including Bosch, Takata, etc., and Hungary is a leader in the production of gasoline engines** and is the 4th largest exporter of engines in Europe. Bosch has built the world's largest production center for automotive electronic components in Hungary, and Audi Hungary is the largest exporter (about 90% for export) and the world's 3rd largest supplier of 12-cylinder diesel engines (for Audi Q7).

Automobile manufacturing is one of the representative industries of Hungary. As the pillar industry of Hungary, the annual growth rate of the automobile manufacturing industry in 2022 was 9.8%, contributing 29.3% of the output value of the Hungarian manufacturing industry, 91.1% of the output value of the automobile industry was from export, accounting for 1/5 of Hungary's total export value. The biggest market for the export of Hungarian automobiles and spare parts is the EU, half of which is sold to Germany, mainly supplying Audi, M. Benz assembly support. Foreign investment also plays a pivotal role in Hungary's automotive industry, with most passenger car and engine manufacturers being foreign-invested, while local manufacturers are mainly engaged in the production of commercial vehicles and automotive components. In 2022, Hungary had more than 740 automobile and component manufacturers and thousands of indirect service providers, forming an automobile industry chain.

### Romania

Romanian automobiles occupy a higher position in the European market. In terms of vehicle manufacturing, foreign companies have a higher market share, mainly **Renault and Daewoo, of which Renault is the largest automobile OEM in Romania, with a market share of 41.3% in 2022, and Daewoo is the second largest OEM in Romania, with a market share of 19.2%. The automotive industry has become the driving force of Romania's economic development,** which, together with the IT industry and the retail industry, are called the three major engines of the Romanian economy.

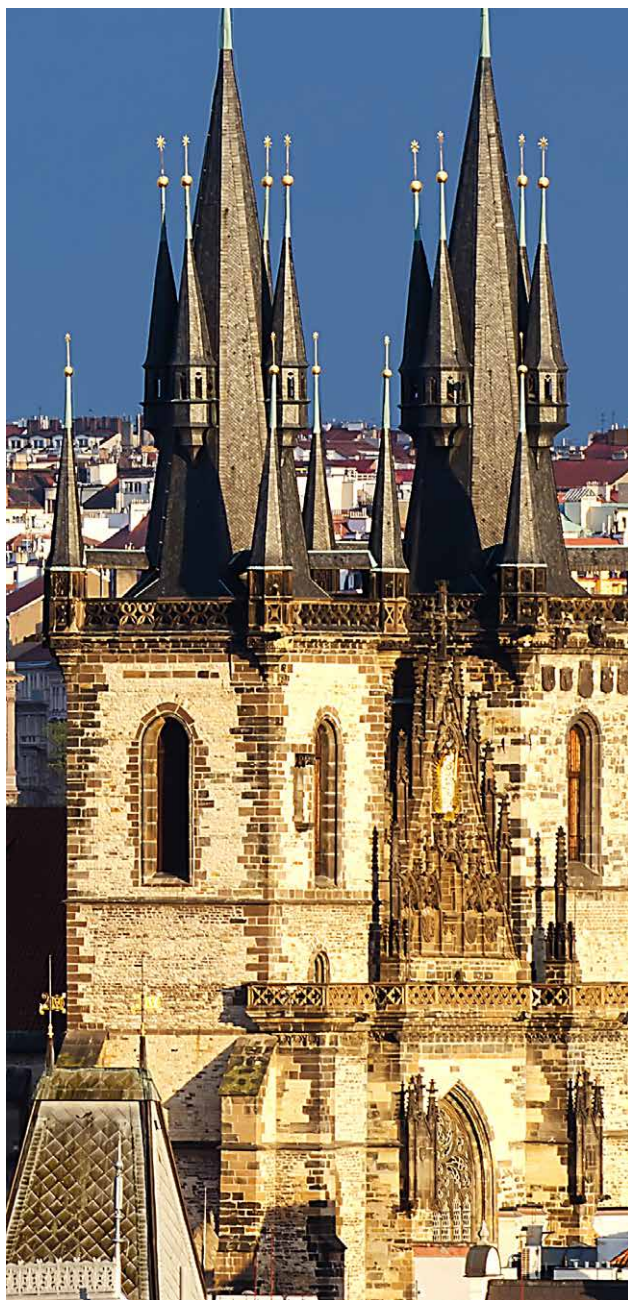
There were more than 470 automotive OEMs and components manufacturers in Romania in 2022, employing more than 206,000 people; the automotive industry in Romania has been on an uptrend in recent years, and the automotive industry was worth about US\$26 billion in 2022, accounting for about 12.7% of its GDP, of which export of OEMs and components amounting to 41.3%, and Daewoo, the second largest OEM in Romania, with a market share of 19.2%. In 2022, the automotive industry was



worth 26 billion USD, accounting for 12.7% of the country's GDP, of which exports of automobile manufacturing and components reached US\$18.4 billion, around 20.2% of the country's total export.

Romania's main industry is the automotive industry. Due to the presence of automotive companies such as Dacia (a Romanian brand, part of the Renault-Nissan Group), Ford, and Continental,

Romania ranks 10th in the EU in terms of automotive and automotive parts manufacturing, with an annual production of about 500,000 passenger cars in 2022 and an export value of about US\$13.2 billion. The country has more than 600 upstream and downstream manufacturers in the supply chain, producing related components such as tires, wires, conductors, transmissions, electronic components, lights and batteries, etc. The EU countries are its main export destinations.



According to Focus2move, the sales volume of vehicles in Romania in Q1 2023 increased by 27.6% to 41,000 vehicles compared to the same period of the previous year, and the top 5 brands were Dacia, Renault, Hyundai, Skoda and Toyota, showing that the automotive market has been gradually recovering in the post-pandemic era.

The Romanian automotive parts industry is divided into 3 segments: mechanical and electronic parts, after-sales parts, and consumables & accessories. In the electric and hybrid market, the Ministry of the Environment doubled the budget of its Rabla Plus program for 2021, with a total value of 82 million euros to subsidize Romanian nationals' purchase of electric and hybrid vehicles. According to the program, 10,000 euros subsidy will be provided for each purchase of a purely electric vehicle, making Romania the country offering the highest subsidy among EU member states. According to EURACTIV media report in March 2023, thanks to Romania's EV incentive policy, 8.6% of new vehicles purchased by the Romanian public in January-February 2023 were electric vehicles. The Romanian Ministry of the Environment has announced a subsidy program with a total budget of 1.5 billion euros since March 2023 to encourage more people to purchase EV.

The Romanian automotive components industry is mainly driven by the investment of Western European car manufacturers, with manufacturing plants all over Romania, including Continental AG (tire manufacturing, located in the west of Romania), Michelin (tire factory in Zalau and Floresti), Pirelli (tire factory in Slatina), Star Transmission (transmission factory in Cugir), etc.

### Slovenia

The automotive industry is one of Slovenia's manufacturing strengths, with 180 manufacturers engaged in the industry in 2022. The main automotive parts and components include seats, interior trim, chassis, brakes, engines, electronic/electrical components, steering systems, power train components, spot welding equipment, transmission components, etc. **Slovenian automotive products are mainly exported (about 90%) and the main export destinations for vehicle assembly include Germany, Italy, France, Austria, Hungary and Southeast Europe**, while the main export destinations for automotive parts and components include Germany, France, Italy, Austria, the UK, the U.S. and Spain. In terms of components, Hella Saturnus, Revoz, Adria Mobil, and Cimos have become component suppliers to leading automakers such as BMW, Audi, Ford, and Toyota. In terms of vehicle manufacturing, Revoz is the only vehicle manufacturer in Slovenia, mainly producing Twingo2 and Clio2 small passenger cars.

### Serbia

The automobile industry is an important part of the Serbian economy, and the main vehicle manufacturers include Fiat (Serbia), Red Flag Special Purpose Vehicle Company, Red Flag Truck Company, FAP, Neobus, Ikarbus, etc. Among them, **the Fiat Group of Italy, through its investment and holding in the Red Flag Automobile Plant of Gulagoevac, has built a center of the automobile industry mainly focusing on the manufacturing of complete vehicles and spare parts processing in the Southeast Europe region.**

## II. Business Opportunities and Issues

### Business Opportunities

#### 1. Government Support for the Automobile Industry

“Automotive” is a dominant industry in Central and E. European countries, some of which have announced a series of policies to encourage foreign investment in the automotive industry, such as the subsidy of at least 10 million euros for new plants meeting certain conditions and one-stop services of Hungarian Investment and Trade Promotion Agency (HITPA). The Slovenian government, in cooperation with the Export Development Bank (SID) and the European Investment Bank (EIB), provides loans for long-term development projects in the automotive industry, with special subsidies for CO<sup>2</sup> emission reduction and energy-saving technologies.

#### 2. Strong Automobile Demand in Central and E. European Countries

Government and market orientation offer opportunities and development for the components industry in Central and E. European countries. For example, the governments of Czech Rep., Poland, Serbia and other countries support the development of cross-border cooperation in automobile manufacturing and joint development of new energy vehicles and components to promote the development of new energy vehicles in the local market. In terms of market, the Central and E. European countries, such as Hungary, the Czech Rep., Poland, Romania and other countries, show very low car ownership, showing a great market potential. In addition, the domestic supply of spare parts in some countries (such as Hungary) still cannot meet the needs of day-to-day automobile assembly, so they still need to rely on a large number of imports.

#### 3. Great Investment Opportunities in the Automotive Markets of Central and E. European Countries

Compared with the advanced EU countries, Central and E. European countries (such as Poland) are not very strict on the management of the automotive components market and the technical certification and regulatory review is more relaxed, so the cost of entering the market is generally lower. In addition, as consumers in the Central and E. European countries care mostly about: (1) stable quality and good maintenance services (2) prices cheaper than other local brands, Taiwan’s export-oriented automotive components manufacturers with advantages may benefit from potential business opportunities.

#### 4. Opportunities for the EV Components Industry

Compared with the high EV ownership in advanced countries in Europe, the U.S. and Japan, the EV market and charging infrastructure in Central and E. Europe are still in the nascent stage. Taiwanese EV component manufacturers have already entered the supply chain of the world’s major EV industry and have practical experience and competitive advantages, which will make Central and E. Europe a potential market for them to lay out their business in the future.

### Issues

#### 1. Inconsistent Market Standards

The inconsistency of standards in the automotive markets of Central and E. European countries has resulted in entry barriers for manufacturers. For example, for commercial vehicles and separately sold automotive parts, Central and E. European countries implement different national standards, and the corresponding inspection certificates are only valid in their own countries, which have not realized mutual recognized certification internationally or among the EU member states.

#### 2. Asymmetric Information on Cooperation

Due to the lack of authoritative and reliable channels to obtain information, manufacturers do not have an in-depth understanding of the automotive industry in Central and E. European countries in terms of market conditions, investment environment, technical standards, industrial advantages and relevant laws and regulations, etc., and market development is mostly confined to irregular exhibitions, making it difficult to form a long-term and stable market.

#### 3. Inadequate Market Mechanism

The overall trade criteria of Central and E. European countries is not as mature as those of other advanced European countries, the U.S. and Japan, resulting in relatively complicated administrative approval procedures, lower government efficiency, and frequently changing tariff rates, etc. In addition, there are also problems such as unsound credit system, imperfect inspection mechanism, incomplete Customs declaration procedures, and non-transparent Customs rules, adding the uncertainty to Taiwanese manufacturers’ deployment.

#### 4. Fierce Market Competition

To observe the current automobile and components industry market of the Central and E. European countries, the market share is basically taken by W. European developed countries, Japan and S. Korea, forming a perfect automobile and components industry chain. Taiwanese manufacturers facing such a closed industrial feature must compete with the quality of Europe, the U.S., Japan on the one hand, and create their own market differentiation on the other hand, in order to gain more market share. □