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Research Report

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SWP Comment

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Geopolitics on Wheels: The Repositioning of the Turkish Automotive Industry

Yaşar Aydın

Turkey is not only an important market for German automobiles – it also exports a significant volume of automobiles and components to Germany. Through their integration into German supply chains, Turkish suppliers are making a significant contribution to the international competitiveness of the German automotive industry. However, the Turkish automotive industry is facing complex economic, technological, and geopolitical challenges, including trade barriers, intensification of international competition, and macroeconomic imbalances. These challenges are now becoming more relevant for the German automotive industry as well as the country's security policy, as they pose security and geopolitical risks and could weaken ties between the countries. Turkish car manufacturers and government representatives are responding to these challenges with a strategic repositioning towards digitalisation and electrification, which is creating new opportunities for cooperation with Germany.

In July 2024, the Turkish government reached an agreement with the Chinese electric vehicle manufacturer Build Your Dreams (BYD) to develop a production facility in Manisa, a provincial capital in western Turkey near the port city of İzmir. Even before that, the Chinese car manufacturer Speedy Working Motors (SWM Motors) had announced similar plans to expand into the Turkish market. Further Chinese direct investment is on the agenda: According to the Turkish Minister of Industry, Mehmet Fatih Kacır, the Chinese automobile manufacturer Chery is in negotiations

to establish a production facility in Samsun. The planned investment is expected to be similar in scale to that of BYD. Turkey's attractiveness as a production location is further demonstrated by the German-French group Forvia's planned investment. As the world's seventh-largest automotive supplier, it generates about one-quarter of its revenue in China and plans to establish a supply factory in Turkey. In doing so, it aims to compensate for the decline in orders from European vehicle manufacturers and to promote the integration of Chinese suppliers into alternative supply chains.



Such developments fuel optimism about the sector's prospects, yet conceal significant economic and security challenges.

Realignment between the mobility transition and geopolitics

The automotive industry, a central pillar of the Turkish economy, is facing increasing competitive pressure. Automakers and the government are responding to the mobility transition and geopolitical shifts by strategically repositioning themselves towards digitalisation and electrification. This requires investments in new technologies and propulsion systems, as well as stronger integration into evolving international supply chains. However, the adaptation efforts and long-term strategies of the Turkish automotive industry are being hampered by monetary and legal uncertainties, regulatory hurdles, and political volatility in the country.

Growth, innovation, and export power

Since the introduction of the Customs Union between Turkey and the European Union (EU) in 1996, the EU has become Turkey's most important trading partner. Among the EU countries, Germany is Turkey's key trading partner. Regarding the automotive industry, Turkey's tariff-free access to the EU single market has, on the one hand, contributed to an increase in vehicle production in Turkey: from 300,000 vehicles in 2002 to 1,332,755 in 2024, of which 980,341 were passenger cars. On the other hand, the country benefits from deeper integration into European value chains and has become an attractive production location for international automobile manufacturers and suppliers.

The largest players in the Turkish automotive industry include joint ventures with international car manufacturers: Anadolu Isuzu, TOFAŞ-Stellantis, Ford Otosan, BMC (British Motor Corporation, currently a Turkish-Qatari joint venture), Mercedes-

Benz Türk, Hyundai Assan, MAN Türkiye, Oyak Renault, and Türk Traktör. In 2024, Turkey ranked twelfth worldwide among passenger car producers, fourth in Europe, and second in Europe for commercial vehicle production.

The automotive sector makes an important contribution to Turkey's economic growth by stimulating demand in numerous upstream industries. Similar to Germany, it creates well-paid jobs, which has a positive impact on Turkey's overall purchasing power. More than 56,000 people are employed directly in the automotive industry, and over 550,000 work in upstream and downstream sectors. Industries such as metallurgy, plastics processing, electronics, and logistics are developing in parallel with the growth of the automotive sector. Companies in this sector are investing in technological innovation – there are 167 research and development centres nationwide – thereby strengthening the country's technological infrastructure and innovative capacity in a sustainable way.

At the same time, the automotive industry is one of Turkey's most important export sectors and is contributing towards reducing the country's high trade deficit. According to the Automotive Industry Exporters' Association (OİB), automobile exports reached a volume of US\$36.65 billion in 2024, an increase of 6 per cent compared with the previous year. The automotive sector thus accounted for 17.3 per cent of total Turkish exports; for almost two decades it has held the top position in Turkey's export statistics. Almost two-thirds of Turkey's automobile exports went to the EU in 2024, which is the largest market for Turkish vehicles and components. Thirteen per cent of Turkish automotive exports were destined for Germany, making it the single largest importing country (see Table, page 3).

The deeper integration of the Turkish automotive industry into the EU market – particularly the supply chains of the EU and Germany – stems from the Customs Union. Turkey strengthens the international competitiveness of the German automotive industry in several ways: Turkish suppliers

Table

Exports of the Turkish automotive industry, 2021–2024 (in billion US dollars)

	2021	2022	2023	2024	Change from 2023 to 2024 in %	Share in 2024 in %
Supplier industry	11.80	12.98	14.15	14.88	5	41
Automobiles	9.50	9.26	11.06	12.37	12	34
Vehicles for the transport of goods	5.33	5.05	4.90	5.58	14	15
Large and mini-buses	1.27	1.47	2.31	2.57	11	7
Semi-trailer tractors	1.03	1.76	2.15	1.25	-42	3
Total	28.93	30.52	34.57	36.65	6	100
Exports to the EU	16.20	17.35	20.93	21.77	4	59
Exports to Germany	3.22	4.38	4.85	4.86	0	13

Sources: Uludağ Automotive Industry Exporters’ Association (OİB), “Export Figures”, <https://oib.org.tr/en/export-figures.html> (accessed 24 October 2025); International Trade Centre, Trade Map, “List of Importing Markets from European Union (EU 27 for a Product Exported by Türkiye”, <http://bit.ly/47uAHxY> (accessed 29 October 2025).

deliver components reliably and cost-effectively, while the country offers competitive production conditions; and, as a logistics hub, it facilitates access to markets of interest to the German automotive industry, for example in Africa.

Challenges and stagnation

Nevertheless, the Turkish automotive industry faces three challenges.

Economic challenges: Inflation has, on the one hand, increased domestic demand for cars, partly because more consumers now view the purchase of a vehicle as an investment. At the same time, the volatility of the national currency, high consumer taxes, and the rise in the corporate tax rate from 25 to 30 per cent are dampening both investment appetite and consumer confidence in Turkey. A closer look reveals that industry profits are declining, while competitiveness and productivity are decreasing, partly due to rising production, transport, and distribution costs. The stagnation trend in the automotive sector is also reflected in the sharp drop in after-sales revenues.

Political, legal, and environmental challenges: The Turkish automotive industry is burdened by EU environmental regulations, particularly stricter CO₂ limits. These require manufacturers to adapt their production processes and range of available models, which necessitates substantial investment in low-emission technologies. The sector must therefore invest in more environmentally friendly production methods, alternative drive systems such as e-mobility, and circular economy concepts. The EU’s scheduled ban on the sale of new cars with internal combustion engines from 2035 is creating significant planning uncertainty. As a result, the demand for conventionally powered vehicles could decline considerably.

Additional uncertainties are emerging due to the political climate in Turkey. Repressive measures aimed at consolidating the regime – as in the case of the arrest of Istanbul’s mayor, Ekrem İmamoğlu – can undermine market confidence, trigger capital outflows, and weaken the lira.

Technological challenges: The shift towards electric powertrains is forcing the Turkish

automotive industry to invest more heavily in the research, development, and production of electric vehicles, as well as in autonomous mobility, digitalisation, and connected systems. Experts warn that, otherwise, Turkey could be reduced to the role of an assembly location. New regulatory requirements such as the EU Battery Passport could create additional obstacles. If, for example, battery cells, inverters, and software are only assembled in Turkey, there is the risk of a regression to low-value creation, limiting the Turkish automotive industry's role in global production chains to basic manufacturing.

Adapting to a new technological and geopolitical reality

In cooperation with car manufacturers and suppliers, the Turkish government is pursuing the goal of strengthening the international competitiveness of its automotive industry. The main objective is to expand its market presence in Europe and to position Turkey strategically as a leading location for e-mobility – for instance, by specifically attracting foreign investors to the country. The strategic reorientation also includes building independent industrial capabilities and further developing the national electric vehicle brand, Togg, which made its international debut in September 2025 when it entered the German market. In doing so, Turkey is increasingly positioning the country as a self-confident industrial player that no longer wishes to see its role limited to that of a supplier or assembly location.

At the centre of this strategy is the deliberate recruitment of manufacturers from non-Western countries as well. In this regard, the agreement with the Chinese electric vehicle manufacturer BYD has drawn particular attention: The company is establishing a manufacturing plant in Turkey – a significant step towards strengthening the country's position as a production hub for e-mobility.

Working in favour of the Turkish automotive industry is the fact that the Turkish

brand Togg has managed to hold its ground, despite the market entry of BYD and Tesla: It maintained its high sales figures in 2024 and remains a key player in the electric vehicle market, where there has been a noticeable uptrend in general, further underscoring the structural transformation of the industry.

In 2024, total sales in Turkey were as follows: By far the largest market share was held by petrol-powered vehicles at 60.1 per cent. However, plug-in hybrids (with electrically assisted combustion engines) recorded the strongest growth, with their market share rising to 18.8 per cent, placing them for the first time in second place in the powertrain ranking. Diesel vehicles continued to lose importance, with their market share falling to 9.8 per cent. Sales of electric vehicles surged compared to 2023, from 72,179 to 105,315 units. As a result, electric vehicles surpassed the 10 per cent threshold for the first time, reaching a market share of 10.7 per cent. The most in-demand model was the Togg T10X, the first domestically produced electric vehicle, with 30,094 units sold. In second place was the Tesla Model Y with 11,534 units, while the BYD Atto 3 ranked eighth with 2,252 vehicles sold.

E-mobility in Turkey is strongly promoted through tax incentives. In particular, regulations under the Special Consumption Tax (ÖTV) have created incentives for the production and import of electric vehicles. As a result, numerous manufacturers began importing models that were subject to the reduced tax rate of 10 per cent – vehicles with a power output below 160 kW. This regulation has facilitated market access for affordable electric vehicles: 81 per cent of those sold in 2024 fell into this performance category.

Hybrid vehicles are also benefiting from tax incentives, which have noticeably increased their market share. In addition, trade policy measures have been implemented: On 31 December 2024, the Turkish government decided to raise the additional tariff on vehicles produced in China from 40 to 50 per cent. This measure, effective

from 2025, is aimed at both protecting industrial policy and controlling market players.

Interdependence with China – challenges and opportunities

In terms of economic and technology policy, Ankara is increasingly orienting itself towards China without turning away from the West. Turkey is exploring opportunities for a deeper partnership with China, particularly in 5G and battery technology. In line with this strategy, the Turkish government has opened its market to Chinese car manufacturers and suppliers. At the same time, it is promoting a flagship project with the national electric vehicle brand, Togg, supported by government subsidies and import restrictions on foreign competitors.

The central challenge for Turkey is to reduce its dependence on foreign original equipment manufacturers (OEMs), increase local value creation, and develop a competitive cost structure – ideally without relying on permanent state support or protectionist measures.

Chinese manufacturers are becoming increasingly important in Turkey, and their market share is expected to continue rising, supported by strategic investments in local production and distribution. Turkey remains an attractive sales market: In 2024, a total of 1,238,509 vehicles were sold, including 980,341 passenger cars and 258,168 light commercial vehicles. Of the passenger cars purchased in Turkey, 290,675 were domestically produced, while 689,666 were imported. This is a clear indication of the strong demand for foreign brands.

For Chinese car manufacturers, Turkey now also serves as a springboard into the European market. The establishment of local production capacities in Turkey is partly being driven by the aim of circumventing EU-imposed tariffs on Chinese electric vehicles. Thanks to the Customs Union with the EU, vehicles produced in Turkey have tariff-free access to the EU single mar-

ket – a clear competitive advantage that Chinese companies are leveraging for their expansion into Europe.

Regarding the strategic realignment of the Turkish automotive sector, two questions arise: Will Turkey succeed in shaping its growing interdependence with China in terms of industrial policy in such a way that it results in an independent technological upgrade? And how likely is it that this could give rise to a new form of external dependency?

Economic advantages and disadvantages

Economic experts see real opportunities with the market entry of Chinese car manufacturers in Turkey. For example, the expansion of charging and service networks could be accelerated, which would also benefit the national brand, Togg. Critics, however, warn that increasing economic integration with Chinese companies could intensify competition, displace domestic manufacturers, and foster strategic dependencies. Nevertheless, not all of these concerns can be substantiated by the current market structure.

Firstly, the Turkish automotive market is diversified, both in terms of supply and demand. Secondly, the market share of Chinese brands remains limited. Although BYD drew attention by selling 6,591 vehicles in the final 32 days of 2024, other manufacturers such as Neta were forced to withdraw from the Turkish market due to low sales and higher tariffs. Chery ranked fifth among the best-selling brands in 2024, yet its sales declined as a result of the new tariffs. At the end of 2024, as mentioned above, the Turkish government raised the additional tariff on Chinese vehicles from 40 to 50 per cent to protect domestic production.

The Turkish automotive industry would only face a substantial threat from Chinese manufacturers if tariff barriers were significantly reduced or removed. In such a scenario, Chinese producers could quickly expand their market shares at the expense of domestic manufacturers such as Togg. To

remain competitive under these conditions, Togg would continue to rely on state support and regulatory assistance.

Turkish car manufacturers and suppliers expect that the planned BYD production facility, once operational, will promote technology transfer, strengthen local value creation, and further diversify Turkey's integration into global supply chains, particularly in e-mobility. Collaboration in the form of joint ventures in battery production appears especially promising, as Chinese manufacturers hold a leading global position in key technologies such as battery cells, power electronics, and solar modules. This is likely to notably increase competitive pressure on the European automotive industry – not only globally, but also within the EU single market, to which Turkey has access through the Customs Union.

At the same time, cooperation with China holds fundamental risks, such as a deepening dependence on Chinese technology and an increase in the trade deficit, not to mention existing geopolitical tensions. Should the trade conflict between China, the EU, and the United States escalate, this could lead to restrictions that impact the Turkish automotive sector.

Security policy consequences

It cannot be ruled out that the conflict between Washington and Beijing in the field of digitally connected vehicles will intensify. In this case, close cooperation between the Turkish and Chinese automotive industries could lead to tensions in Turkey's relations with the EU and the United States. The US government is already considering a ban on importing vehicles from China and other countries deemed security risks. This is justified on the grounds of national security interests, which could be threatened by electric vehicles. Certain electric vehicles today are far more than just a means of transport: They are highly connected IT systems. They feature tracking and data collection capabilities, making them politically and strategically relevant – both as potential targets

for cyberattacks and espionage, and as a medium for surveillance.

Mass surveillance: Digitally connected vehicles can collect extensive personal data, including driving behaviour, movement patterns, residential and work locations, as well as business and private contacts. In authoritarian states such as China, the use of such data is not subject to independent oversight. Instead, it is evaluated by the state – for example to monitor individuals living abroad or to deliberately influence political, economic, or societal actors.

Such access to data entails significant risks, especially in countries with weak rule-of-law protections, like Turkey. The ability to create digital shadow profiles over a long period would threaten not only the privacy of individual users but also collective security. The possibility that Chinese authorities could gain access to sensitive security or military data through vehicle technologies deployed in Turkey cannot be ruled out.

Espionage: Digitally connected vehicles – equipped with microphones, cameras, and sensors – have the capability to collect information covertly. They can track locations, movement patterns, and even conversations – thus losing their function as protected spaces for sensitive communication, whether in business, political, or diplomatic contexts. In the case of close technological cooperation with China, there is a risk that this infrastructure could be used for state-directed espionage. The deployment of Chinese vehicle technologies in Turkey would not only endanger national security; if Chinese actors were to gain access to security-relevant information through such systems, the consequences could extend to the North Atlantic Treaty Organization (NATO), the EU, and the United States.

Sabotage: The ability to remotely control modern electric vehicles enables the possibility of digital sabotage. Cyberattacks could deliberately disable numerous vehicles in urban areas simultaneously – with severe consequences for traffic flow, emergency services, and security authorities. Attacks on the energy infrastructure would be par-

ticularly harmful: If charging operations for thousands of vehicles are coordinated to start or stop simultaneously, it could destabilise the power grid. Additional risks arise from bidirectional charging, whereby vehicles feed electricity back into the grid; this could serve as a potential entry point to disrupt the power supply and other critical infrastructure.

It is conceivable that this potential for sabotage could be used as a strategic means of exerting pressure. Beijing could be empowered to exert political or economic influence over Ankara through technical access points, for example in multilateral bodies or security policy decision-making processes. These risks affect not only Turkey's national security but also carry strategic implications for NATO as an organisation as well as Turkey's partners in NATO.

Outlook and potential courses of action for Germany

The realignment of the Turkish automotive industry is not an isolated, purely economic strategy. It is embedded in a process of energy policy and technological transformation, as well as in a complex global-political constellation in which geopolitical and geo-economic logic increasingly prevails.

The digitalisation, decarbonisation, and automation of mobility are closely linked to security-relevant technologies and require legal regulation. In this context, the automotive industry is increasingly becoming the focus of security policy considerations, as the implications of deeper cooperation between Turkey and China must be given greater weight within the framework of EU investment assessments. This, in turn, requires the intelligent integration of industrial and security policy.

Turkish industrial policy in general, and the realignment of the automotive industry in particular, follow both geopolitical and geoeconomic logic. The agreement with BYD to establish a production facility in Turkey stems from the same strategic calculus as the acquisition of the Russian

S-400 missile defence system and the cooperation with Rosatom in the construction of Turkey's first nuclear power plant. In all of these cases, the aim is to diversify options for cooperation in technology, the economy, and geopolitical matters.

At the same time, Ankara is pursuing an industrial policy strategy through which Turkey aims to play a key role in the European e-mobility architecture. The country seeks to establish itself as a regional production hub and transport corridor between Europe, Asia, and Africa, actively courting Chinese capital and technological know-how.

For German car manufacturers, Turkey serves both as a production location and a sales market. Turkish suppliers form an essential part of German supply chains. German decision-makers and automakers should therefore closely monitor developments in the Turkish automotive sector, especially since the German automotive industry faces similar challenges to those in Turkey and is pursuing comparable strategies to strengthen its international competitiveness.

First, the German automotive sector is undergoing a profound transformation. Technological upheavals are weighing on the industry, particularly because progress in e-mobility is slow, supply chains face disruptions, and technological gaps must be closed. Second, the German car industry faces intense competitive pressure. Chinese manufacturers such as BYD offer technologically advanced, yet cost-effective electric vehicles and are aggressively expanding into Europe. German automotive brands are losing market share and must struggle to maintain their positions in Europe, North America, and China. Although the United States has temporarily lowered import tariffs on cars from the EU, there is still a risk of trade policy escalation. Third, EU tariffs are forcing Chinese manufacturers to relocate production closer to the EU single market, including Turkey, in order to export from there to the EU.

Given these challenges, it seems prudent for the German automotive industry to

expand cooperation with the Turkish car industry. This would also be attractive for Turkey, which must invest more heavily in research and development, e-mobility production, autonomous mobility, digitalisation, and connected systems. Turkish companies, however, do not possess sufficient financial resources to undertake these investments on their own.

The German government could pave the way for deeper German-Turkish cooperation. For instance, it could remove institutional barriers, facilitate visas for Turkish nationals and entrepreneurs, and advocate – at the EU level – for a modernisation of the Customs Union agreement. This reform would also create the opportunity to close regulatory gaps to prevent Turkey from being misused as a transit point for Chinese electric vehicles into the EU.

Even more than the federal government, however, the private sector is being called upon to contribute towards stabilising bilateral economic relations in the automotive industry through constructive and long-term cooperation.



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