

The health crisis has hit a European automotive sector already facing major structural challenges

En 2020, l'industrie automobile est confrontée à une crise sans précédent qui vient s'ajouter aux In 2020, the automotive industry was faced with an unprecedented crisis in addition to the many factors of change already at work before the shock. On the one hand, sales volumes and production collapsed as a result of the lockdown measures. On the other hand, manufacturers were having to renew their vehicle ranges because environmental legislation and taxation were changing, with the introduction of ambitious targets regarding CO2 emissions. These changes were happening in a context where French multinational groups have located a large part of their production abroad over the last twenty years.

European automobile production is still weakened after the unprecedented shock in the spring

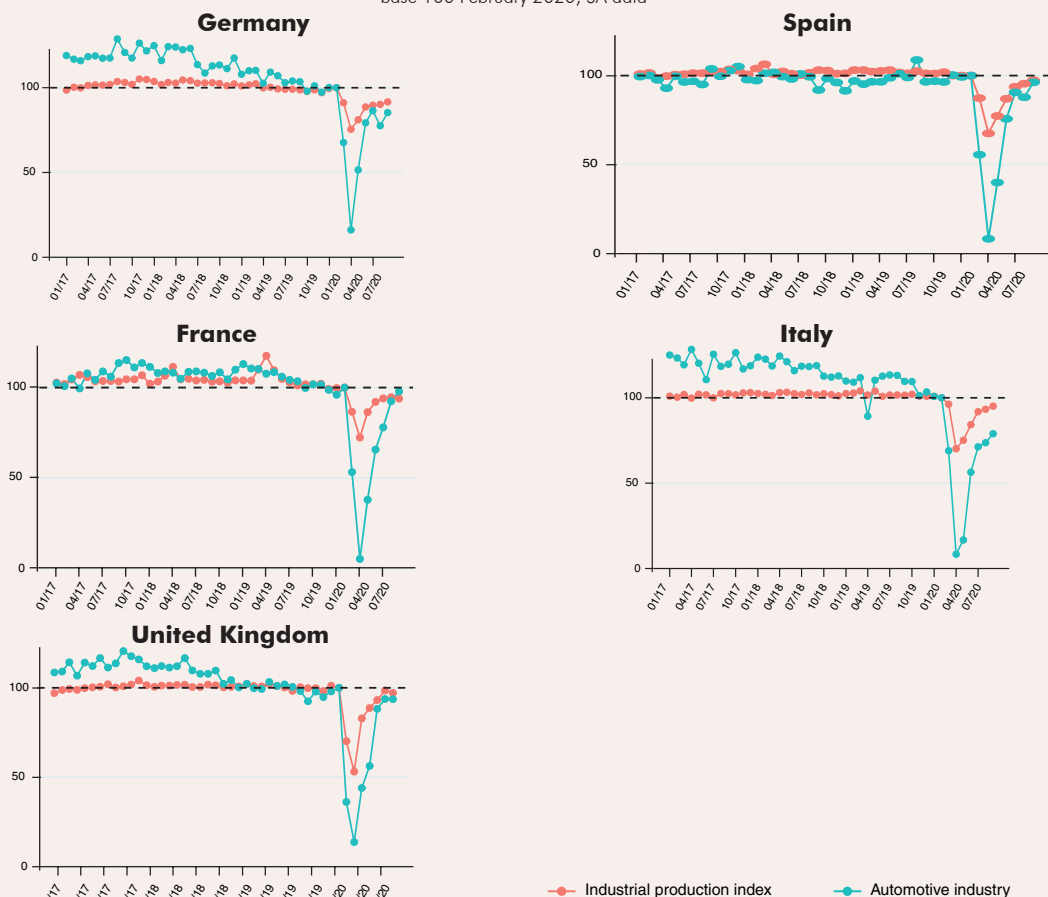
The restrictive measures put in place in the spring in the different European countries resulted in a sudden drop in automotive production across the continent. It has bounced back since then, but is still significantly below its pre-crisis level. In

September it was 2.1% below its February level in France, 14.7% in Germany, 21.1% in the United Kingdom and 6.4% in Italy. When we consider the major contribution of the automotive sector to industry, especially in Germany¹, clearly the dynamics of automotive production contribute significantly to industrial production as a whole: in fact, compared to February, the industrial production index for September was 6.1% down

1. The automotive industry represents a significant share of the value added of the manufacturing industry as a whole: 8.4% in France, 16.7% in Germany, 9.8% in the United Kingdom, 5.8% in Italy and 9.7% in Spain. These figures were obtained from company data and may be subject to some approximations regarding the areas studied.

1 - Industrial production and automotive production indices

base 100 February 2020, SA data



Source: Eurostat, INSEE calculations

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in France, 8.4% in Germany, 4.9% in the United Kingdom and 2.9% in Italy.²

Looking into the details of automotive production³, motor vehicle construction rebounded strongly in France and Italy, up by 3.2% and 9.1% respectively in September compared to February, although it was still well below pre-crisis level in Germany (-21.8%). Conversely, the manufacture of automotive equipment still shows a clear decline in France and Italy (-7.2% and -18.1% respectively in September, compared to February), while in Germany it exceeded its February level (+3.4%).

Registrations fell sharply with the closure of dealerships and the uncertainties hanging over households

On the demand side, the health crisis resulted in a drop in purchases of new vehicles. On average over the first three quarters of 2020, registrations of new

vehicles to private individuals were down sharply compared to 2019: -28.9% in France, -25.5% in Germany, -33.2% in the United Kingdom and -34.2% in Italy (Graph 2). These figures can be explained by the closure of dealerships in the spring, and also probably by a more wait-and-see attitude on the part of consumers in Q3. In France, for example, the composite indicator of household confidence dropped almost 8 points in April⁴. Household surveys across Europe all showed a withdrawal of household confidence. German and UK composite indicators lost 9 and 15 points respectively in April and the Italian indicator lost 7.5 points in March⁵.

European automotive exports fell sharply due to the crisis

Concerning foreign demand in the sector, automotive exports declined significantly over the first three quarters of 2020, in France, Germany, the United

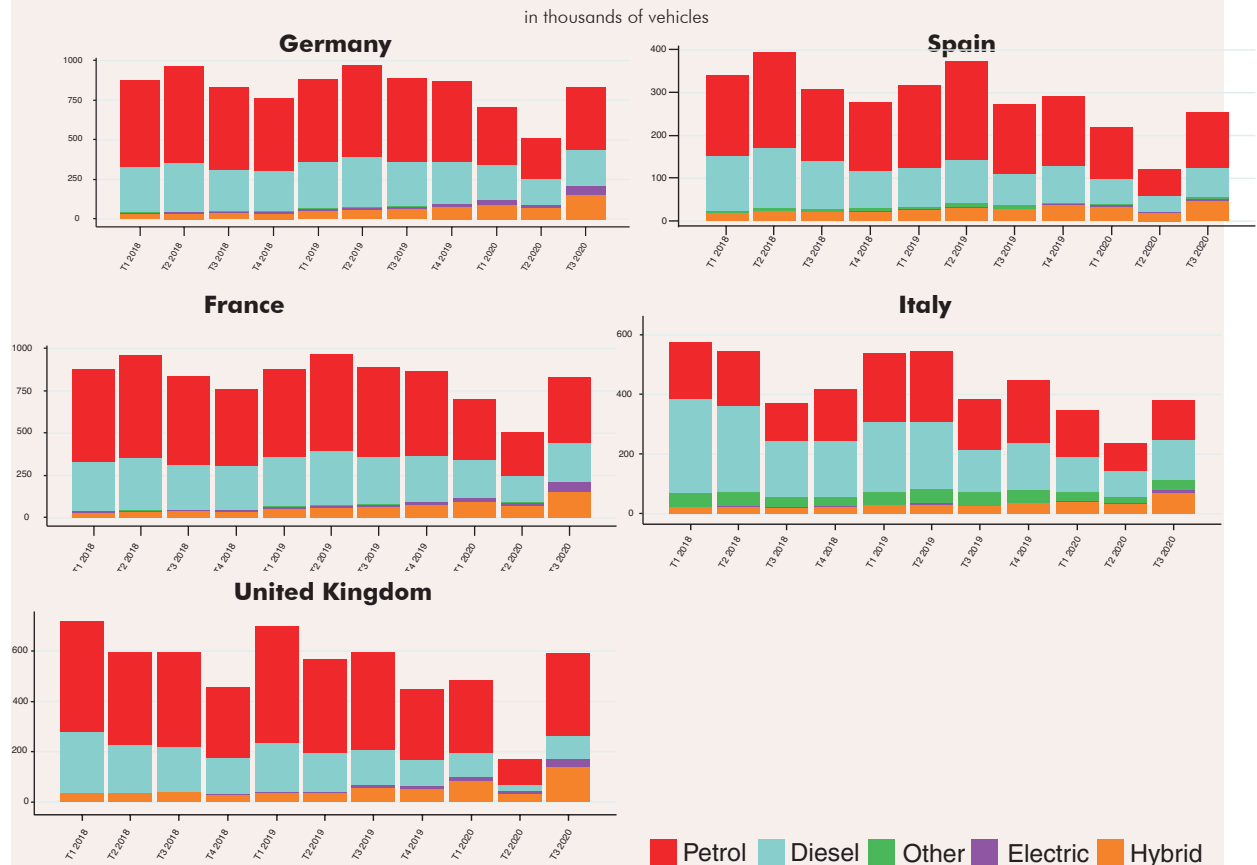
2. Source: Eurostat

3. Details of UK automotive production indices are not supplied by Eurostat.

4. Source: INSEE, Informations Rapides no.106: "Unprecedented drop in households' confidence in April 2020, compared to March".

5. Because of lockdown in April, the April 2020 survey did not take place in Italy.

2 - Private vehicle registrations in Europe by energy type



Source: European automobile manufacturers' association ACEA

Kingdom and Italy alike (down 36%, 28%, 57% and 24% respectively compared to the previous year). French exports in particular suffered mainly from the collapse in European sales (*Graph 3*), while German and Italian exports were affected by the decline in sales not only within Europe but also outside Europe. However, Italian exports were affected a little less, mainly because the contribution of intra-European sales declined less compared to its neighbours.

More specifically, in France, Germany and Italy exports of vehicles to European Union countries fell drastically, reflecting the weakness of European domestic demand. On average, over the months from January to August 2020, German and French exports of road vehicles to the European Union fell by 42% in value compared to the same period in 2019 and by 31% in Italy.

Concerning foreign demand for European vehicles, it too was generally in decline, but some European

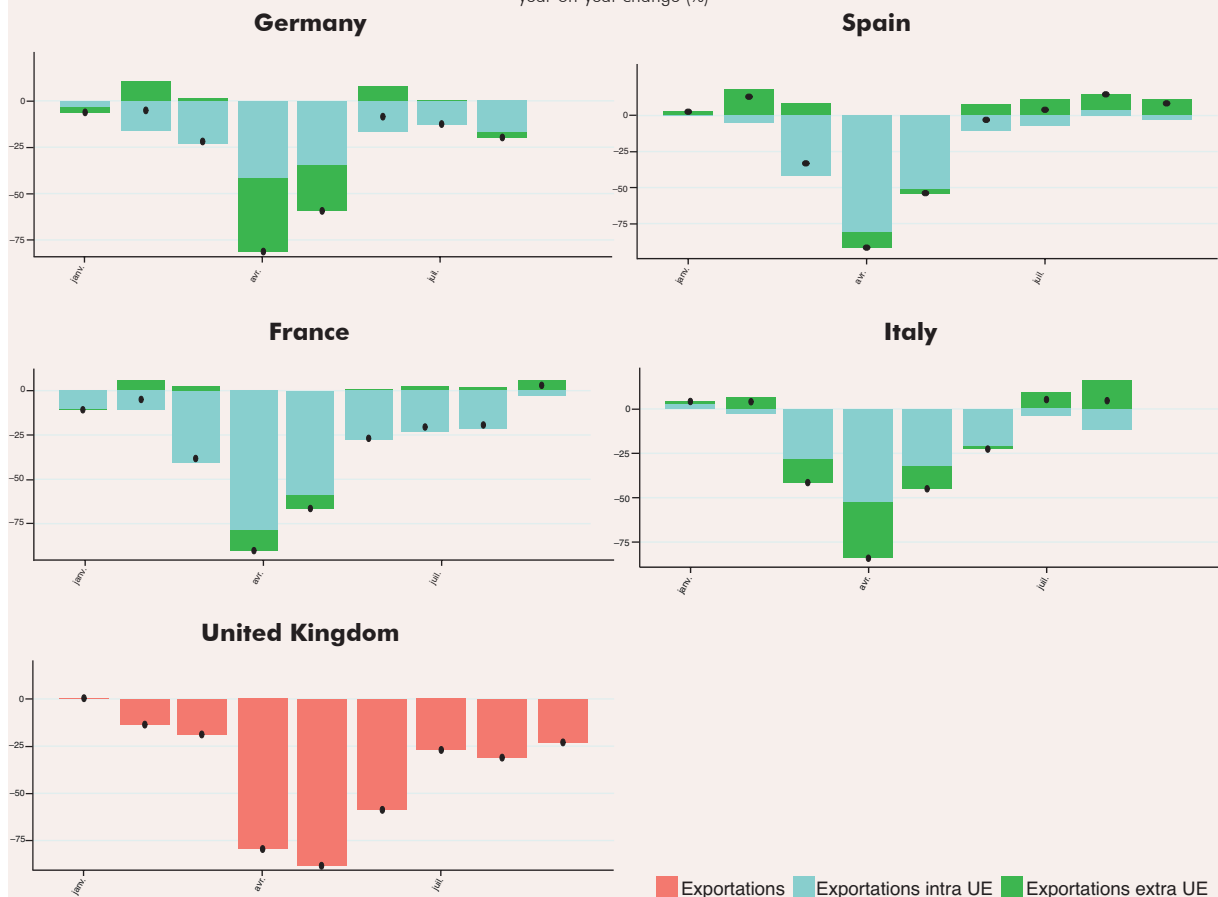
countries were affected more than others. On average, across the first eight months of 2020, German, Italian and French extra-EU exports fell by 14%, 13% and 7% respectively, compared to the same period in 2019. However, their contribution to the change in exports of road vehicles depends on the contribution of these extra-EU exports to total road vehicle exports: of the countries considered here, the United Kingdom and Germany are the ones whose share of extra-EU exports is stronger, with 59%⁶ and 51% of road vehicle exports respectively (in 2019), whereas in Italy, this share was more modest (37%) and even more so in France (15%).

Even before the health crisis, the automotive sector had experienced some major structural changes over several years which underpinned its momentum in the long term. In particular, the geographic location of production has evolved considerably. At

6. Details of UK automotive trade in 2020 are not supplied by Eurostat.

3 - European automotive exports in 2020

year-on-year change (%)



Source: Eurostat, British ONS, INSEE calculations

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the same time, changes in environmental standards have had an increasingly strong impact.

French manufacturers largely internationalised their production in the 2000s

One of these changes relates to the geographic location of automotive production. Over the last 20 years, an analysis of the geographic origin of automotive production by French and German manufacturers reveals a growing internationalisation of production: the share of output produced in the national territory has continuously declined, from 60% and 50% in France and Germany respectively in 2000 to 24% and 31% respectively in 2017. In fact, the increase in total production during this period was achieved mainly by developing production sites in other countries: notably, production by German manufacturers is largely located in China, while French manufacturers are located more in Eastern European countries, Turkey and Morocco (Graph 4). These figures demonstrate a difference in strategy, with French manufacturers tending to relocate their vehicle assembly plants, whereas German manufacturers have preferred to keep their assembly lines while outsourcing production of spare parts.⁷

In addition, in the case of France, the level of national output decreased (2.3 million vehicles produced in 2018 against 3.3 million in 2000),

while Germany maintained a level of production that was both relatively stable and high (around 5.5 million vehicles produced).

The production choices of French and German manufacturers are reflected in the change in the balance of trade of road vehicles for both these countries. From 2000 to 2004, France had a trade surplus in road vehicles amounting to 6.2 billion euros (Graph 5). Its position then deteriorated rapidly and, from 2007, a trade deficit appeared for this item (3.5 billion euros). The deficit continued to widen, reaching 11.4 billion euros in 2018. This phenomenon is due specifically to the increase in imports of vehicles from countries where French manufacturers have set up automobile assembly lines.⁸ In particular, France was slightly in surplus with the Eastern European countries in 2005 but subsequently found itself with a growing deficit with these same countries. Similarly, the French deficit with Spain has intensified in recent years (3.4 billion euros in 2018 after 1.5 billion in 2005).

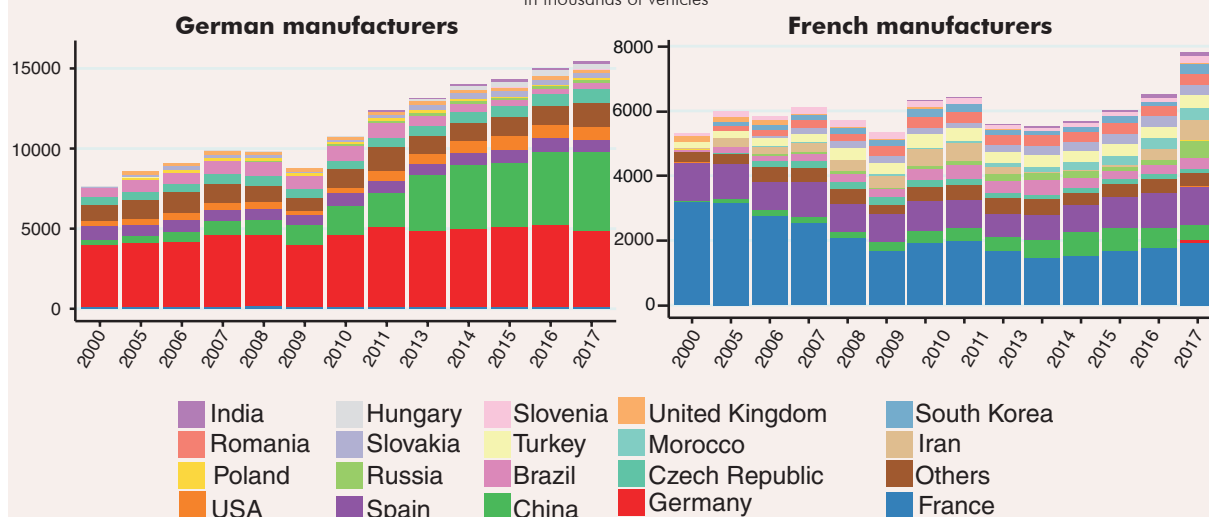
The contrast with the German trade balance is very striking. In 2000, Germany already generated a large surplus of 48.5 billion euros, and this surplus grew substantially, reaching 114 billion euros in 2015, though it has since dropped back to 93 billion euros in 2018. This strong growth can be explained by good export performances, but also by the fact that, more than their French counterparts, German

7. Based on the work of Head and Mayer (2019), Note no.58 of the Conseil d'Analyse Économique published in July 2020 (K. Head, P. Martin, T. Mayer) stresses that France has seen more relocations on the part of its national manufacturers, especially when compared with Germany.

8. Thomas Vacher (2019) also showed, using annual business statistics, that the internationalisation of production by French manufacturers affected the trade balance in 2016, INSEE Première n°1783, November 2019.

4 - Geographic location of automotive production by main French and German manufacturers

in thousands of vehicles



Source: OICA

manufacturers prioritise vehicle assembly in their own country, with vehicles then being sold locally or exported. Thus the German surplus towards China increased sharply from 4.2 billion euros in 2009, to 15.4 billion in 2018, despite the strong presence of German manufacturers in China.

Changes in European environmental regulations have encouraged a boom in electric and hybrid cars

The other structural change that has affected the automotive sector for several years concerns the environmental requirements that have to be taken into account in the fight against climate change.

With significant fines being imposed if average emissions in vehicles sold are above a certain threshold, the new European legislation very strongly recommends that manufacturers sell vehicles with lower CO2 emissions. These incentives can also be strengthened at national level, for example through ecological bonus-malus tax schemes. Thus, in France, the ecological bonus-malus was tightened

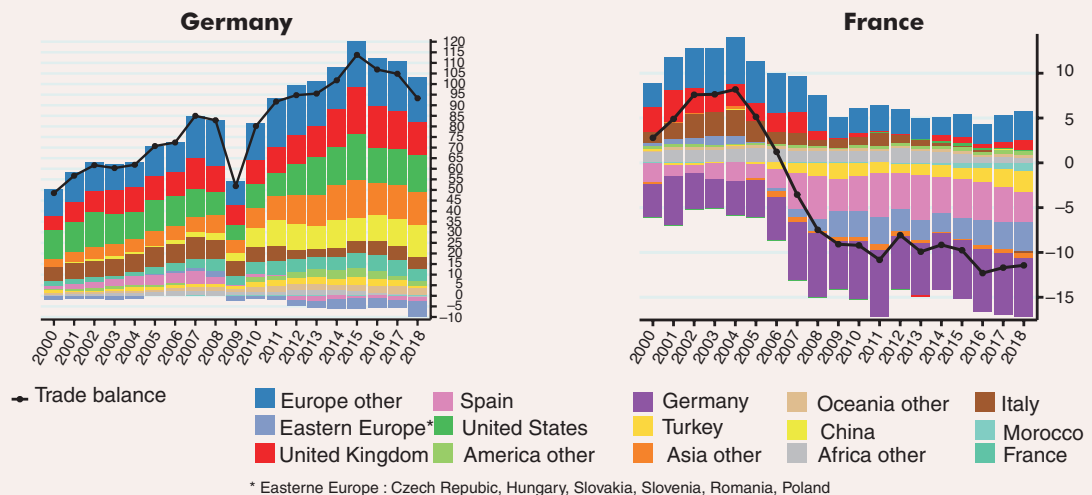
in January 2020 and June 2020, and Germany is preparing to increase the taxation of vehicles with high CO2 emissions even further in 2021.

These new rules pose a significant challenge for manufacturers because their average emissions in 2019 were still far from meeting the targets. To achieve them, they have overhauled the ranges of vehicles offered to consumers.

Registrations in the first three quarters of 2020 suggest that the new legislation is having a real effect. Market shares of electric and hybrid vehicles have surged all over Europe. This represents an important structural change for the European automotive market. In France, the share of electric vehicles in total registrations of new cars increased from 1.9% in 2019 to 6.0% for the first three quarters of 2020 and for hybrid cars, numbers doubled, reaching 12.9% in 2020. The same phenomenon can be seen in Germany, where the electric car has gained 3 points of market share at 4.8% in 2020 and the hybrid is at 15.3% against 6.6% last year. ■

Hadrien Leclerc ■

5 - Annual trade balances by road vehicle partner



Source: Eurostat