Significance of the car industry in EU countries

13 Apr 2016 – Analysis – International economy

In the EU countries, the car industry is of greatest significance to GDP and employment in Germany and some countries in East-Central Europe. In these countries a shock to the car industry could have a heavy impact on the national economy. The industry accounts for some 10% of the EU's goods exports.

In autumn 2015, the emission scandal surrounding the German car manufacturer Volkswagen immediately raised questions and concerns about the state of and outlook for car production in the EU. Possible macroeconomic effects can be assessed by studying the significance of the car industry[1] in the EU countries on the basis of national accounts and foreign trade statistics.

Car industry most important to Germany and economies of East-Central Europe

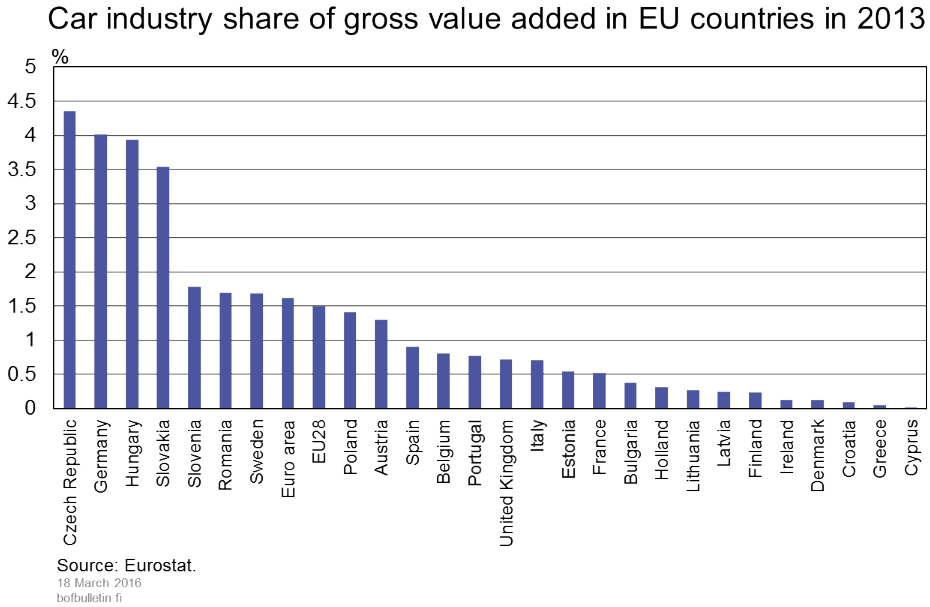
The car industry's share of gross value added in EU countries in 2013[2] was largest in the Czech Republic, Germany, Hungary and Slovakia, where it varies around 4% (Chart 1). This proportion is more than double the average (about 1.5%) in EU countries and the

1. Here, production of motor vehicles and trailers as well as related parts and accessories are included under the car industry.
2. Most recent comprehensive industry-level information.

euro area.

Although the car industry in, for example, the Czech Republic has long traditions, the car industry's present significance in the countries of East-Central Europe is due to investments by foreign – particularly German – car manufacturers. On the other hand, the car industry's share of gross value added in the traditional car manufacturing countries of France and Italy is relatively small: in France only about 0.5% and in Italy about 0.7%. In Spain, the share is nearly 1%, which as in the countries of East-Central Europe is substantially due to German investments.

Chart 1



The presented information (Chart 1) probably somewhat underestimates the car industry's share of gross value added, because it does not cover all inputs of the industry, for example tyres. In addition, the car industry's overall effect on GDP is larger than its share of gross value added, due to multiplier effects. The wage and capital income of car industry employees and owners create new demand for domestic goods and services, and the income from supplying them creates further new demand etc. These effects have not been assessed here.

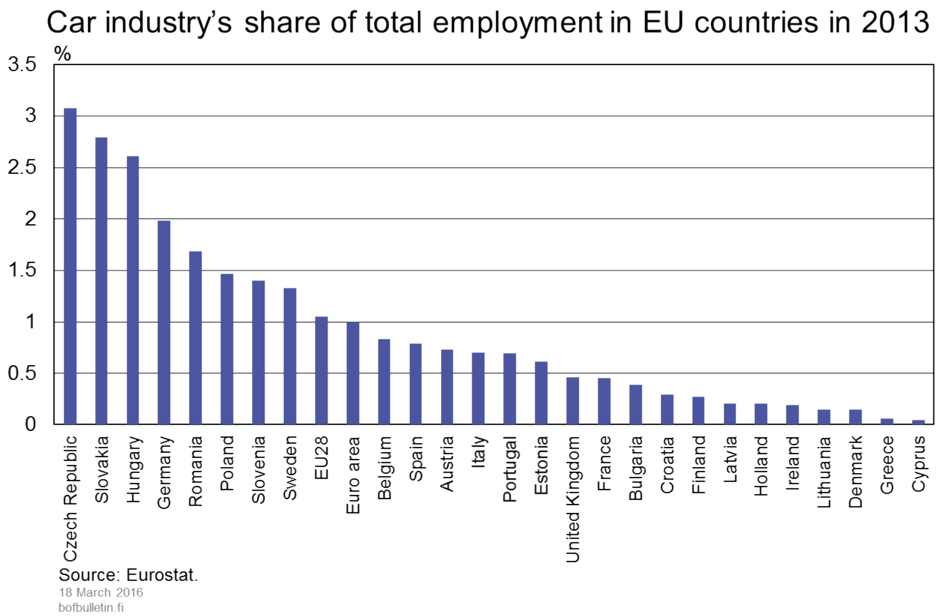
Car industry as employer in EU countries

A study of the car industry's share of total employment in EU countries in 2013 also shows the significance of the industry as an employer (Chart 2). The industry's share of total EU employment is slightly more than 1%, which amounts to a little less than 2.4 million people. Their share of total employment in the euro area is more or less the same as in the EU as a whole.

The car industry's share of total employment is largest in the Czech Republic (more than 3%), followed by Slovakia, Hungary and Germany. The industry's share of total employment is smaller than its share of gross value added, because it is so highly automated that in relative terms the necessary workforce is smaller than in many other industries.

Increased productivity requires investment in research and development. In 2014, the car industry's R&D expenses were about EUR 40 billion, which matches about a quarter of all R&D expenses of industrial corporations in the EU.[3]

Chart 2



Car industry share about 10% of EU goods exports

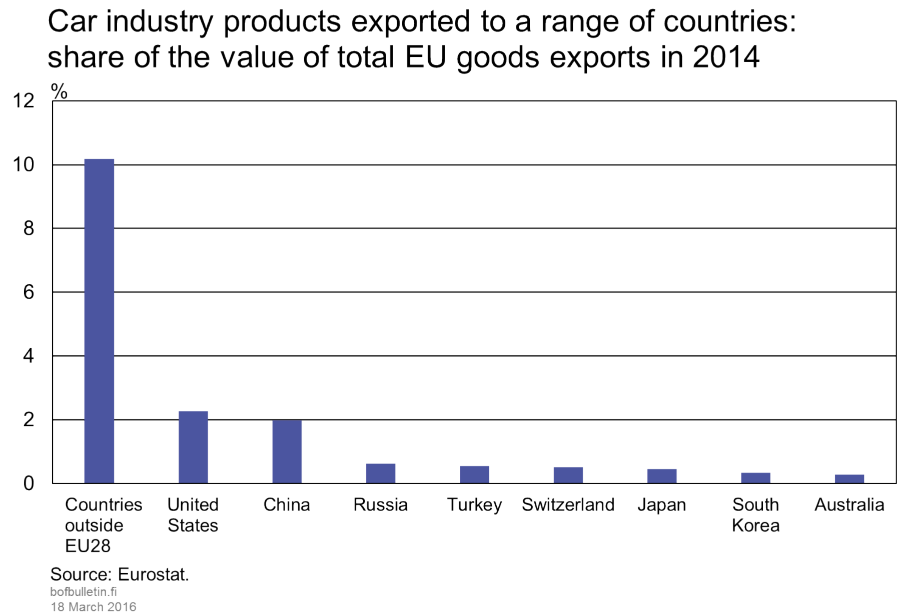
In 2014, about 30% of EU car industry production was exported.[4] A study of car industry products exported to different countries and their share of the value of total EU goods exports shows that the car industry's share of exports to regions outside the EU is slightly over 10% (Chart 3). The USA is the single most important export market for the EU car industry. About 22% of car industry exports to regions outside the EU go to the USA. The second most important market is China, whose share is a little less than one fifth. Since the US and Chinese shares are so considerable, the EU car industry represents one channel along which demand shocks originating in these countries are transmitted to the EU area. Other important export markets are Russia, Turkey, Switzerland and Japan.

In addition to their exports, European car manufacturers also have significant production outside the EU. Correspondingly, there are foreign – particularly Japanese – car manufacturers in Europe.

3. European Commission (2015): The 2015 EU Industrial R&D Investment Scoreboard. JRC/DG RTD.

4. Eurostat Europroms.

Chart 3



Overall, the car industry is significant in EU countries. Since this industry is most important to Germany and some countries of East-Central Europe, a shock to the car industry could have a heavy impact on their national economies. Of these countries, the effects on Germany would be most significant to the EU as a whole. Still, the car industry's share of gross value added in Germany is much smaller than, for example, the share of financial services in the United Kingdom (a little less than 7% in 2013).[5]

Tags

gross value added, exports, employment, car industry

5. ONS (2014) An International Perspective on the UK - Gross Domestic Product. The figure presented by the ONS is based on data from the OECD.