The economic significance of the motorcycle business in Germany

Executive Summary
Introduction

The motorcycle business in Germany does not only have a long tradition but in fact has its origins in Germany with the invention of Daimler’s Reitwagen (“riding wagon”) in the year 1885. And until today powered two-wheelers have continued to be very popular. Never before the registration numbers of motorcycles and scooters have been as high as at present: In total more than 5.9 million motorcycles and scooters were licensed in 2015, which means that about one in eleven Germans aged 18 and older is in possession of a motorcycle or moped. The total sum of annual mileages of powered two-wheelers amounts to 12.6 billion kilometers in Germany alone, covering the distance from Earth to the moon and back – 45 times a day!

Nevertheless, even today the macroeconomic significance of the motorcycle business is still being underestimated in many ways. This can be traced back to three main reasons: firstly, the motorcycle business is a so called cross-sectional matter or interdisciplinary matter, which is composed of more than one branch of industry. Closely connected to this is the lack of a standardized definition of what branches in fact belong to the motorcycle business and last but not least there is a lack of statistical data as regards the required disaggregation layer.

Problem and methodology

The study at hand for the first time calculated the macroeconomic contribution of the German motorcycle business with respect to the resulting gross value added and employment. The method used was the creation of a satellite account ‘motorcycle business’ in which – on the basis of a fixed definition - the economic contribution of the motorcycle business was quantified by means of an input-output-analysis. Apart from the direct effects by value creation and employment, both of which are generated directly from the respective enterprises in the business, the indirect effects, resulting and deriving from relations to the supplying industry just as induced effects resulting from the “spent” income, can be calculated.

Definition

In order to be able to capture the value added network of the German motorcycle business rather comprehensively, we worked on an exact definition in two stages (likewise for the study for Austria before). According to this, the motorcycle business in the narrow sense of the word comprises - apart from the manufacturing of powered single-track vehicles (motorcycles, powered two-wheelers etc) - also the complete trade with motorized single-track vehicles and parts of them (such as shock
absorbers and clutches), the manufacturing of tires for motorized single-track vehicles (provided that these have not been considered as preliminary supply in manufacturing the vehicle) as well as maintenance and repair work. If, in addition to that, one takes into account all these sectors whose value added activities would not take place without the motorcycle business or only to a smaller extent (downstream services such as insurances, motor sport clubs, magazine publishers, events such as motorcycle trade fairs, but also accommodation and the catering trade which benefit from motorcycle tourism) or being a necessary prerequisite for motorcycle riding (upstream sectors such as road / bridge / tunnel construction, service stations, driving schools and public administration), then this is the motorcycle business in a wider sense.

**Turnover**

In 2014 the enterprises of the motorcycle business in the narrow sense generated a turnover of 7.3 billion Euro. 45 per cent of this, thus being the biggest share, account for the trade and the repair work of powered two-wheelers. About 23 per cent account for the manufacturing of motorcycles, roughly 26 per cent on the accessory trade, the rest on tires and remolding. In the wider sense definition the turnover of businesses in Germany on a national and international basis amounts to 11.6 billion Euro.

**Value added contribution**

The motorcycle business in the narrow sense generated a direct gross value added total of 1.5 billion Euro on a national basis, being a share of 0.06 per cent of the German gross domestic product (GDP). For the motorcycle business in the wider sense this share more than doubles, resulting in a value added of 3.6 billion Euro or a GDP-share of 0.14 per cent.

The whole value added effect – being by definition the sum of direct, indirect and induced effect – amounts to 2.6 billion Euro in the narrow sense of the definition of motorcycle business, in the wider sense of the definition, this sum amounts to 6.6 billion Euro. Thus the motorcycle business in the narrow sense of the definition contributes almost 0.1 per cent of the German GDP. Its contribution to the gross value added thus is comparable to the complete performance of life insurances and more than doubles the gross value added by marketing research and opinion polls. In the wider sense of the definition the business’s share of the GDP is 0.25 per cent. Consequently, one Euro of every 400 Euro gained in Germany can be attributed either directly or indirectly to the motorcycle business; a
number that corresponds for example the economic output of pharmacies or the whole of the furniture production in Germany.

**Employment**

Nearly 28,600 persons work in the core area of the German motorcycle business (in the narrow sense). Nationwide, further 22,500 places of employment are created either by economic integration with the preliminary sector on a national basis (indirect effects) or by so-called income effects (induced effects). This is in the order of the employment effect of passenger transport in aviation or the number of inhabitants in the city of Bad Homburg v.d.Höhe in Hesse. As regards the further definition, nationwide almost 72,500 places of employment can be safeguarded directly by the motorcycle business, or rather 130,000 on the whole. This is corresponding to 0.3 per cent of all employed persons in Germany and thus is comparable to the number of inhabitants of Ingolstadt or Regensburg or can be compared to the number of employed persons in the car-accessory trade. One in 330 places of employment thus can be allocated to the motorcycle business.

**Exports**

The economic success of the German motorcycle business can be attributed considerably because of the export achievement as regards motorcycles and motorcycle accessories, which have developed with considerable dynamics in the past years. In 2014 the total value of exports accounted for 1.8 billion Euro and thus bookmarked a peak. Despite the difficult conditions due to the financial crisis, motorcycle-related export numbers in 2011 could already catch up with growth numbers from the time before the crisis. In the past 25 years the export numbers in the motorcycle business have increased on average by 12 per cent (inflation-adjusted), which means an above average increase compared to most of the other export businesses.

More than 0.15 per cent of all exports in Germany or one in 650 Euro gained in export can be attributed to the motorcycle business (in a narrow sense) – and the trend is rising. The most important target countries for exports in the motorcycle business are the USA, France and Italy. 57 per cent of all exports go to the member countries of the European Union.
Effects on time and the environment

In times of rising fuel costs, crammed roads as well as fewer and fewer places to park, which is in particular true for inner-city areas, a lot of people change to single-track alternatives without renouncing individual mobility. A powered two-wheeler saves money and time. Even today the costs for searching a parking lot can be reduced by 60.4 million Euro by using motorcycles. Moreover, 39,343 tons less CO2 are being released into the air.

Illustration No 1: Contributions of the motorcycle business in the wider sense to the German national economy (survey)
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