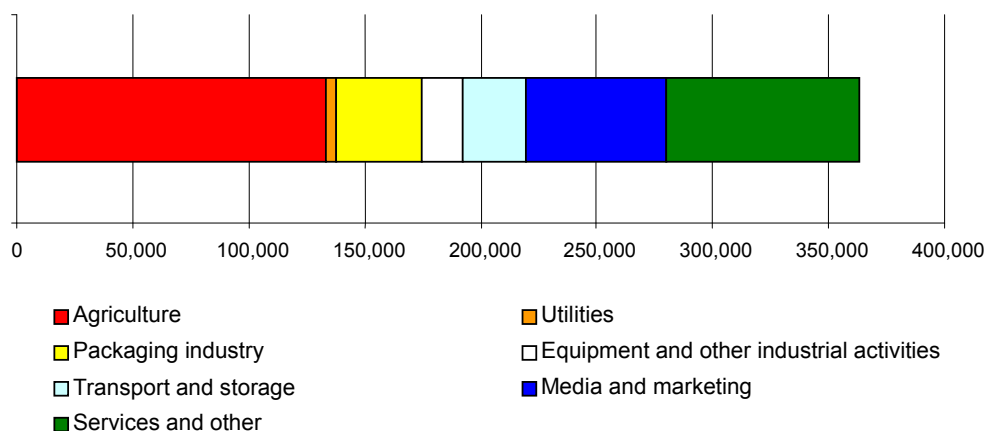


3.4 Indirect employment

The brewing sector also generates a considerable indirect employment effect. The production and sale of beer by breweries is only possible because various sectors provide the necessary goods and services, ranging from barley, hops and malt to energy and transportation capacity, and including a variety of industrial products and services. Some 363,100 jobs in these supplying sectors can be attributed to the production and sales of beer.

Indirect employment in EU 27 and Switzerland, Norway, Turkey and Croatia



Source: Ernst & Young calculation (2009) (see Annex III for an explanation on the methodology).

Chapter 2 stated that almost 40% of the total purchases made by European breweries involve the services sectors (including marketing and media), and 18% the agricultural sector. The figure above and table 1 below show that the service sector and media and marketing sector together generate 40% of the indirect employment, and agriculture 37%. The share of the agricultural sector in the employment effect is much higher than its share in the total purchases by the brewing sector. Although 37 percent of the total number of jobs generated by the brewing sector consists of jobs in agriculture, only 18 percent of the purchases by breweries occurs in this sector. This is explained by the relatively low turnover and labour costs per employee in the agricultural sector in comparison with other sectors. A one million euro impulse in the agricultural sector generates approximately 30 jobs, whereas the same impulse into for example marketing and media or other services generates only 15 jobs.

Table 1: Number of jobs generated per sector due to beer sales.

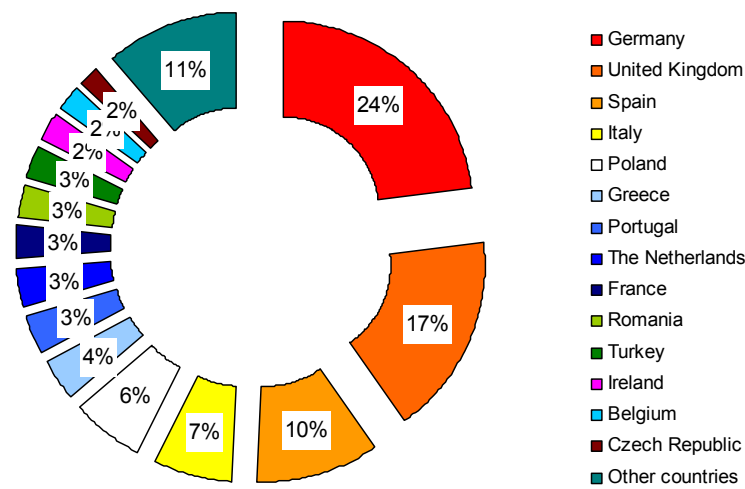
| Sectors | Number of jobs | Share in total indirect employment |
|---|----------------|------------------------------------|
| Agriculture | 133,100 | 37% |
| Utilities | 4,900 | 1% |
| Packaging industry | 36,500 | 10% |
| Equipment and other industrial activities | 17,400 | 5% |
| Transport and storage | 27,400 | 8% |
| Media and marketing | 60,800 | 17% |
| Services and other | 83,000 | 23% |
| Total | 363,100 | 100% |

Source: Ernst & Young calculation (2009) (see Annex III for an explanation on methodology).

3.5 Induced employment

In addition to the direct and indirect impact of the brewing sector, the number of jobs created by beer sales in the hospitality and retail sectors exhibits a far greater effect. Almost 1.8 million jobs of the total of 11.7 million jobs in the hospitality sector can be attributed to the sales of beer. This means that approximately 15 percent of the jobs in the hospitality sector can be attributed to the sale of beer. The other jobs in the hospitality sector can be attributed to the sale of other products. In countries where the majority of beer is sold in the hospitality sector, the induced employment effect turns out to be very high. Examples are Ireland, Spain, Greece and Portugal with over 60% of beer being sold in pubs and restaurants. The largest number of jobs in the hospitality sector related to beer sales is however found in Germany. In the retail sector another 150,100 jobs can be attributed entirely to the sales of beer.

Employment in the hospitality sector: 1.8 million jobs



Source: Ernst & Young calculation (2009) (see Annex III for an explanation on methodology).

4 High value-added

4.1 Highlights

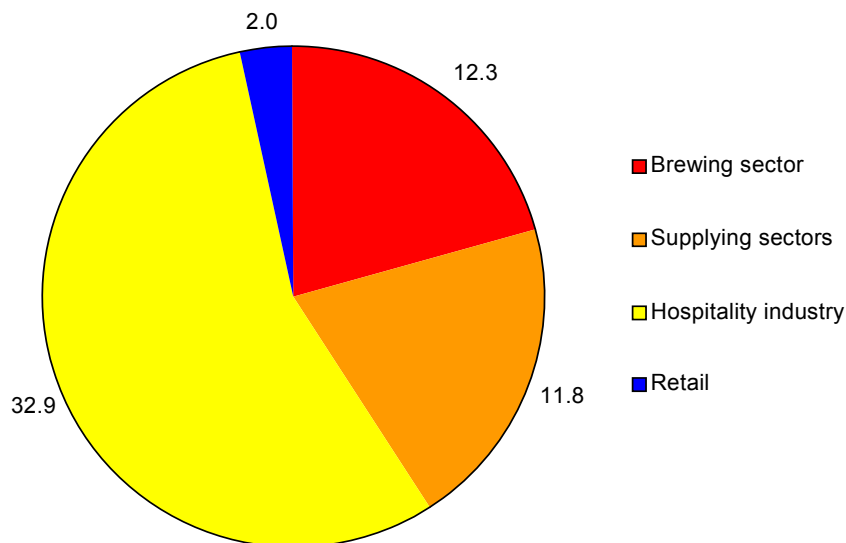
Highlights of value-added

- ▶ The total value-added created directly and indirectly by beer in Europe is estimated at approximately 59 billion euros.
- ▶ Compared to other sectors, employees of European breweries have relatively high productivity.

4.2 Value-added by sector

Another contribution of the beer industry is the value-added it creates, and the value-added created by the supplying, the retail and the hospitality sectors. Value-added can be defined as the difference between the production value and the value of purchased inputs (goods and services). In economic terminology value-added is also defined as the reward for all production factors (mainly labour, capital, entrepreneurship). For the governments in Europe the value-added is important because they levy a tax on it (VAT, see next chapter). We estimate the total value-added related to the production and sale of beer in the European economy at approximately 59 billion euros.

**Value added due to the production and sale of beer EU-27
Turkey, Croatia, Norway and Switzerland: 59.0 billion euros**



Source: Ernst & Young calculation (2009) (see Annex III for an explanation on methodology).

This total of 59 billion euros of value-added is generated by 2.5 million employees working in the brewing sector, in supplying sectors and in the hospitality and retail sectors. This only includes jobs due to beer; jobs due to other sectors are not included. The average value-added per employee is therefore some 23,700⁸ euros a year.

The average value-added per European brewery employee is far higher, namely approximately 81,300 euros a year. This illustrates the relatively high productivity of employees in the brewing sector in comparison with other sectors. The average brewery productivity in terms of value-added per employee is also much higher than the average productivity in other industrial sectors such as packaging and equipment.

The total value-added related to the production and sale of beer (59 billion euros) can be compared to the gross domestic product of countries like Slovakia (65 billion euros in 2008) or Croatia (47 billion euros).⁹ The total gross domestic product (GDP) of the European Union (EU-27), Turkey, Switzerland, Norway and Croatia together was some 13,693¹⁰ billion euros in 2008. This means that the brewing sector's contribution to the European economy is approximately 0.43% of total GDP.

⁸ This is calculated as follows: 58.8 billion euros divided by 2.5 million employees.

⁹ Source: Eurostat, Annual national accounts, 2008.

¹⁰ EY data calculation based on: Eurostat, Annual national accounts, 2008.