



EUROPEAN
COMMISSION

Monitoring industrial
research:

**the 2007 EU industrial
R&D investment
SCOREBOARD**

Joint Research Centre
Directorate General Research

Summary

The 2007 EU Industrial R&D Investment Scoreboard¹ (*Scoreboard*) provides information on the 1000 EU companies² and 1000 non-EU companies investing the largest sums in R&D. The *Scoreboard* includes R&D figures along with other economic and financial data from the last four financial years.

The data for the *Scoreboard* are taken from companies' publicly available audited accounts. In most cases, these accounts do not include information on the place where R&D is actually performed, therefore the approach taken in the *Scoreboard* is to attribute each company's total R&D investment to the country in which the company has its registered office³.

This report discusses the key figures of the world's top R&D investors listed here. The overall levels of R&D, the performance of the EU companies, and the main changes that took place last year are examined in chapter 2. The performance of individual companies among the top R&D investors, in particular those undergoing significant R&D growth, is outlined in chapter 3. Chapters 4 and 5 give an overview of the company data aggregated by industrial sectors and world regions, with comparisons between the EU companies and their main competitors.

In order to ensure a uniform basis for comparisons, chapters 4 and 5 consider companies with similar levels of R&D investment. This year's *Scoreboard* includes about 1400 companies with R&D investments of over €23 million. Taking this threshold yields a comparable group of the world's top R&D investors comprising the top 400 from the EU together with the top 1000 non-EU companies (see Box 1).

The methodological approach of the *Scoreboard*, its scope and limitations are described in Annex 1.

Annex 2 lists the EU1000 and non-EU1000 companies ranked by their level of R&D investment. The complete data set is freely accessible online at: <http://iri.jrc.es/>.

¹ The EU Industrial R&D Investment Scoreboard is published annually by the European Commission (JRC-IPTS/DG RTD) as part of its Industrial Research Investment Monitoring (IRIM) activity. Company data were collected by Company Reporting Ltd.

² The term EU company concerns companies whose ultimate parent has its registered office in a Member State of the EU. Likewise, non-EU company apply when the ultimate parent company is located outside the EU (see also the glossary and definitions in Annex 1 as well as the handling of parent companies and subsidiaries).

³ The registered office is the company address notified to the official company registry. It is normally the place where a company's books are kept.

Worldwide corporate R&D investment accelerated, growing by 10% over the past year (7.4% in the EU) ...

The 2007 EU Industrial R&D Investment *Scoreboard* shows that the top 1000 R&D investors in the EU increased their R&D investments by 7.4% in 2006 (5.3% in 2005) while the top 1000 investors based outside the EU stepped up their R&D by 11.1% (7.7% in 2005).

... while sales tended to grow at faster pace.

High R&D growth was, however, outpaced by soaring sales in most of the regions studied, except in the USA, where R&D grew sharply in certain high R&D-intensive sectors. Therefore, continuing the trend seen in previous years, companies' average R&D intensity has continued to decrease slowly as sales have grown faster than R&D investments. The performance of *Scoreboard* companies worldwide in terms of profits also improved last year.

Lower R&D growth rate in the EU is explained by a different sector composition and by the continued lower growth in its high R&D-intensive sectors.

An important factor in the slower R&D growth of EU companies is the much higher growth rate of R&D-intensive sectors in the non-EU group than their counterparts in the EU group. These sectors also account for a much larger proportion of R&D in the non-EU group. Nevertheless, the EU shows the biggest growth in fixed capital investment, which is an important part of total corporate investment and underpins investment in innovation.

Four US companies top this year's *Scoreboard*.

The EU accounts for the same number of companies among the top 50 R&D investors as last year (18), the US for two more companies (20) and Japan for one company less (9). The world's top four R&D investors are all from the United States: Pfizer (€5.8 bn), Ford Motor (€5.5 bn), Johnson & Johnson and Microsoft (€5.4 bn each).

DaimlerChrysler the top EU company lies fifth.

There are three EU companies among the top 10 R&D investors: DaimlerChrysler, the top EU company, invested €5.2 bn, GlaxoSmithKline, €5.1 bn and Siemens, €5 bn.

The pharmaceuticals sector has become the top R&D investor worldwide ...

The pharmaceuticals & biotechnology sector now holds the top position in R&D investments, overtaking technology hardware & equipment. Many pharmaceutical companies have reported a strong increase in R&D investment, these companies include Merck (+24.3%), AstraZeneca (+15.5%), Roche (+15.5%), Johnson & Johnson (+12.9%), GlaxoSmithKline (+10%).

... while the chemicals sector is recovering ...

The chemicals sector underwent a strong recovery in R&D investment (+9.8%), compared to the negative growth of the previous year. This is especially pronounced in the EU group of companies (+17%) where the large chemical companies showed impressive R&D growth rates, e.g. Bayer (+30.3%), Solvay (+20.3%) and BASF (+19.8%). However, the financial results of several large companies in the chemicals business were distorted by merger and acquisition activity.

... the aerospace & defence sector continues its growth ...

The aerospace & defence sector raised its R&D investment by 12.5% continuing the trend of strong growth seen in the preceding years. The sector's most representative companies, EADS and Boeing increased their R&D investment by 21.2% and 47.7% respectively.

... while car manufacturers have slowed down

The pace of R&D investments in the automobile & parts sector slackened significantly, with the two biggest companies, Ford and DaimlerChrysler, having decreased their R&D investment. However, some companies such as Toyota Motor and Volkswagen continued to raise their R&D (by 7.6% and 4% growth, respectively). Among the top companies in this sector, Robert Bosch had the biggest increase in R&D (+15.9 %).