

RESEARCH AND DEVELOPMENT ACTIVITY IN 2008

In 2008 the total amount of the expenditure on research and development activity (R&D) is 325.9 million BGN which increases by 19.3% in comparison with the previous year and the annual growth tendency retains for the period of 2001 - 2008.

Growth of the R&D expenditure compared to the previous years in absolute value has not impact on the R&D intensity (R&D expenditure as % of GDP). In 2008 the total expenditure amount to 0.49% of GDP, which is only 0.01 percentage points higher than the previous year. R&D intensity in Bulgaria vastly lags behind than the average value of the same indicator for the total EU-27 countries (1.90% in 2008).

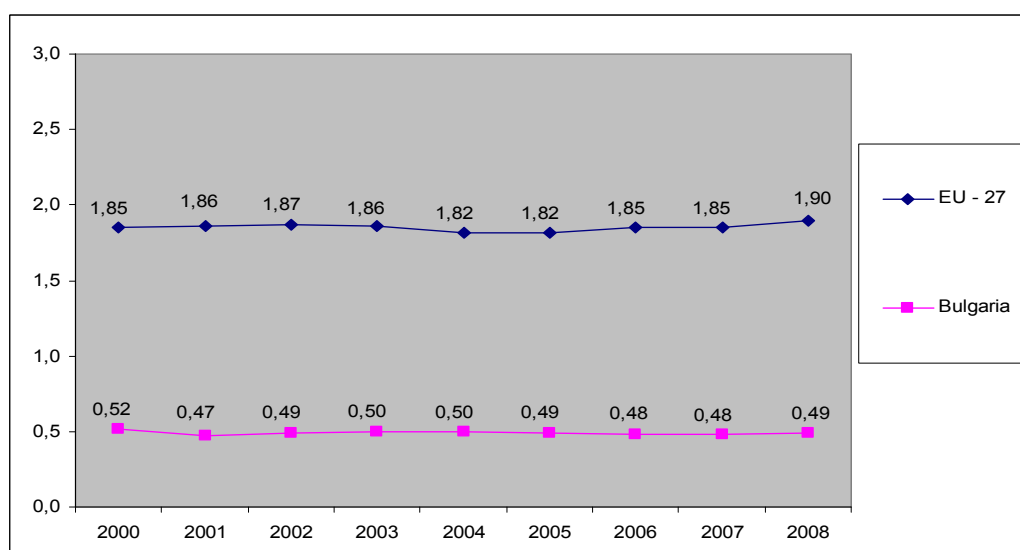


fig.1 R&D expenditure as share of GDP

Data source for EU27 is the Eurostat' database New Cronos

In 2008 the largest share of R&D expenditure are formed by the sector "Government" (58.3%). The government sector's research institutes and organizations have been set up the major part of the total R&D expenditure - 190.0 million BGN. The investments in scientific and technological development in business enterprise sector are 101.1 million BGN which comprises about one third (31.0%) of the total R&D expenditure in 2008. The disbursements on science in tertiary schools and university hospitals (31.3 million BGN) amount to 9.6% and respectively the non-profit organizations (3.4 million BGN) amount to 1.1% of total R&D expenditure.

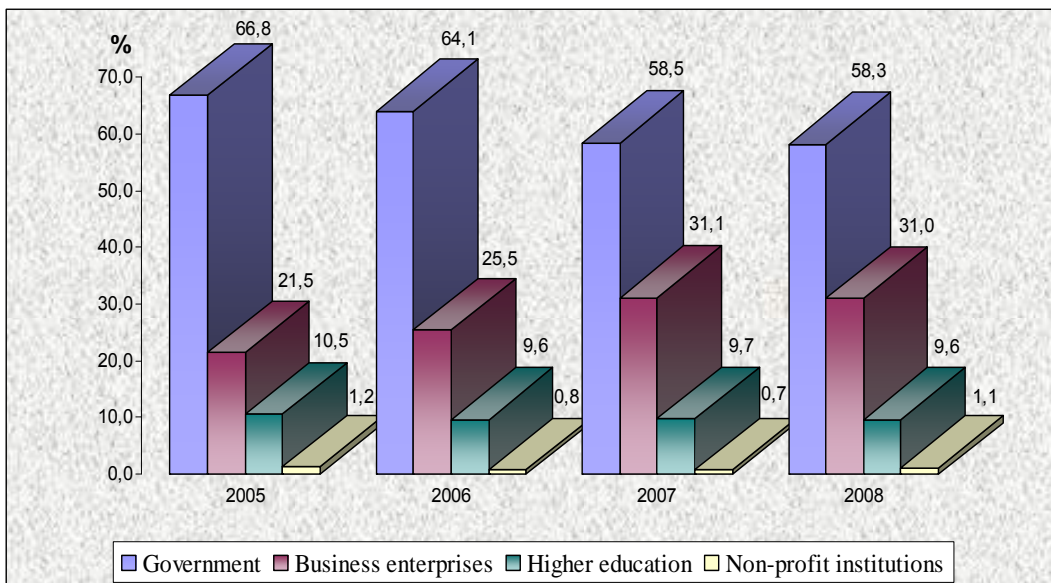


fig.2 Structure of R&D expenditure by institutional sectors

Financing of R&D activity is allocated by the government budget, business, and other national sources and from abroad. In the period 2005 – 2008 the leading role of the government in the R&D financing is being retained with slight downward tendency in favour of the ascending business support for fulfillment of R&D.

The foreign funds used for R&D activity covers governmental resources (another governments, European programs, international organizations etc.) and resources from foreign enterprises as well.

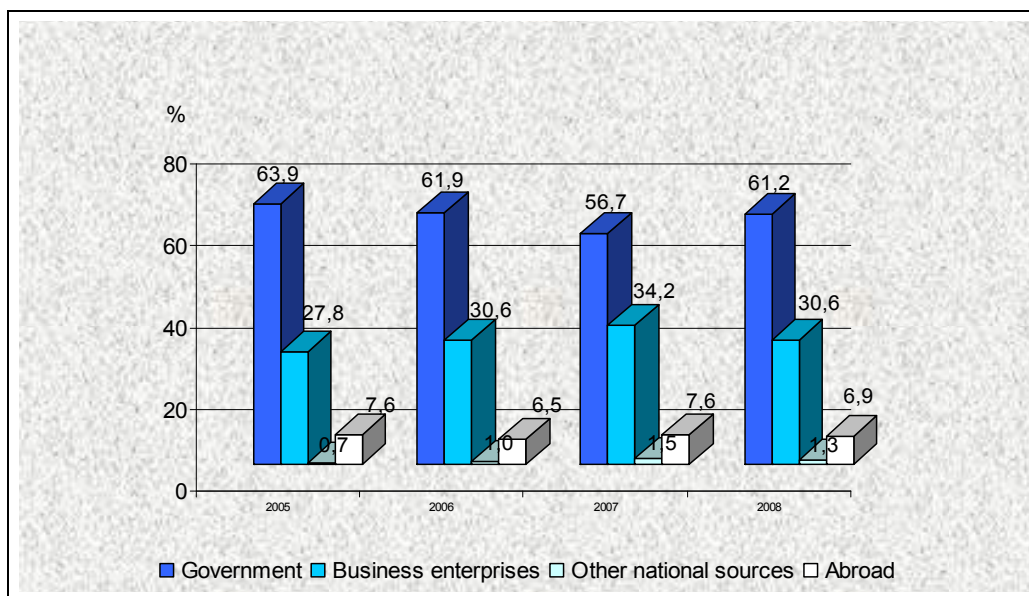


fig. 3 Structure of R&D expenditure by sources of funding - %

In 2008 the personnel employed with research and development activity are 17 219 persons (in full-time equivalent) which is 1.6% higher than the previous year.

In 2008 the researchers which are the most numerous and highly qualified category of scientific staff, count 11 384 persons in full-time equivalent or 66.1% of total R&D personnel.

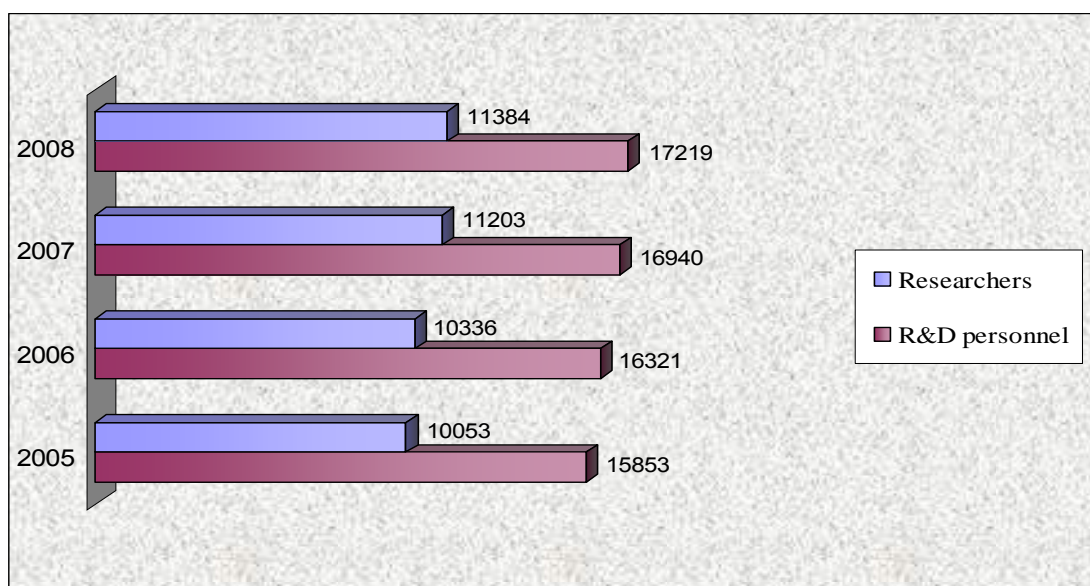


fig.4 R&D personnel and researchers (in full time equivalent)

The division of the R&D personnel by institutional sectors follows the model of the distribution of R&D expenditure. The main part of the scientific staff is concentrated in the enterprise and organization in sector “Government” where have been spent most resources for R&D. In 2008 in the same sector there have been 9 770 employees (in full time equivalent), which forms 56.7% of the total staff. The personnel engaged with scientific research and development in sector “Higher education” is vastly less number – 4 511 persons, as their share is 26.2%. In 2008 there have been 2 851 employees dealing with scientific activity in the “Business enterprises” sector which comprise 16.6% of the total personnel, engaged with R&D.

* Data on R&D statistics for 2009 are under processing and will be published in the end of October 2010.

1

¹ Research and development activity (R&D) comprises any creative work undertaken on a systematic basis in order to increase the volume of knowledge, including knowledge of man, culture and society, and the use of this knowledge to devise new applications. R&D activity covers basic research, applied research and experimental development.

The indicator “R&D expenditure” is defined as all expenditure for R&D performed within a statistical unit, whatever the source of funds. The R&D expenditure comprises current costs and capital expenditure on R&D.

The indicator “R&D personnel” measures the human resources going directly into R&D activity, responsible for creation, application and dissemination of new knowledge. R&D personnel include all persons employed directly in R&D, as well as those providing direct services (R&D managers, administrators and clerical staff). R&D personnel comprise three categories - researchers, technicians and other personnel. Personnel in full-time equivalent (FTE) are calculated on the basis of working time spent on R&D activity during the reference year.

R&D expenditure and R&D personnel are distributed in four institutional sectors: business enterprise sector, government sector, higher education sector and private non-profit sector.