Big science spenders

More money than ever is being invested in research and development. Countries that previously spent little are now pumping money into science to secure their future economic growth. By **Alla Katsnelson**, infographic by **Alisdair Macdonald**.

TEN YEARS OF GROWTH

Growth in gross domestic expenditures on research and development (GERD) between 2003 and 2013 was relatively slow in the United States and Europe, where research spending is high overall. The strongest growth has been in Eastern Europe, Asia and Latin America¹. Growth is shown as a ratio of spending at the beginning compared with the end of the decade.

TRAVELLER'S PRODUCTIVITY

Foreign scientists and those who previously worked or studied abroad and then returned tended to garner more scientific citations than native researchers who had never lived abroad, according to data from the Global Science project — a survey of researchers in 16 countries².

● Native researcher
● Returnee
● Foreign researcher

US\$3.998 BILLION

Total research and development investment from the top 500 global companies³.

8.49 MILLION

Number of researchers worldwide (defined as professionals engaged in the conception or creation of new knowledge)³.

RESEARCH INTENSITY LEADERS

The 30 countries with the highest GERD as a percentage of their gross domestic product, based on latest available data³.

TOP PERFORMERS' BREAKDOWN

The amount of funding dedicated to basic and applied research varies between the three top spending countries. Experimental development — systematic development of new or improved products or of processes based on previous research — constitutes the lion's share of research and development. Data are latest available and in million US dollars using purchasing power parities at constant (2010) prices³.