

First estimates of Research & Development expenditure R&D expenditure in the EU stable at slightly over 2% of GDP in 2014

Almost two thirds spent in the business sector

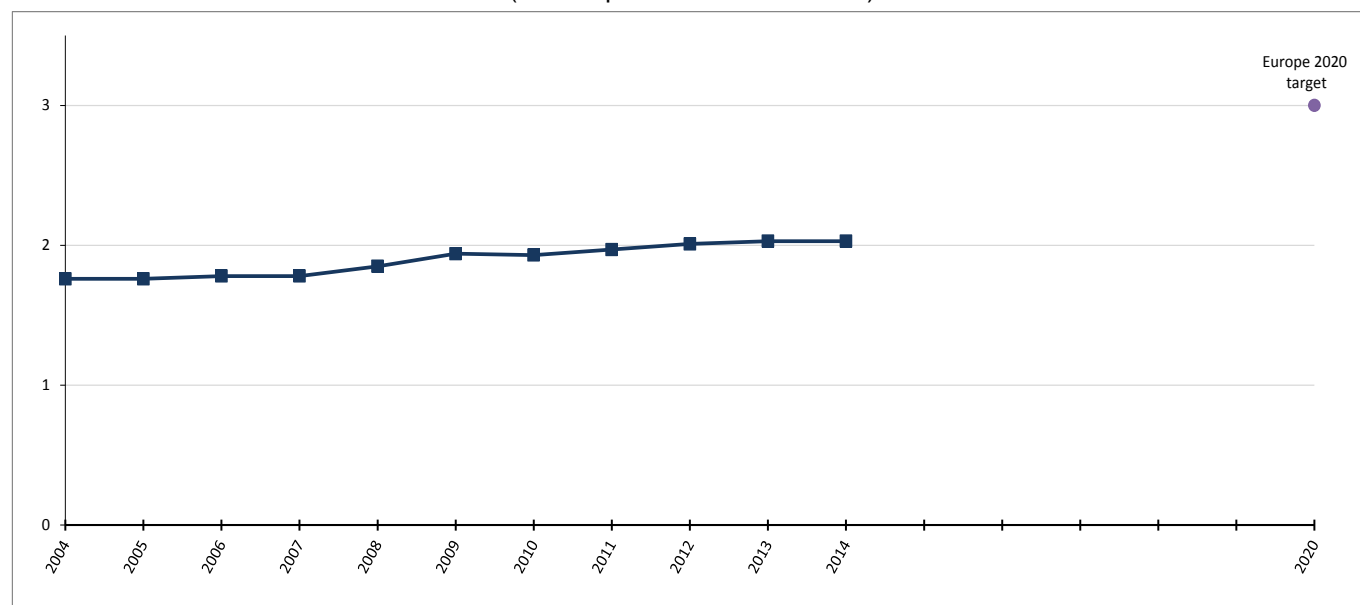
In 2014, the Member States of the **European Union** (EU) spent all together around €283 billion on Research & Development (R&D). The R&D intensity, i.e. R&D expenditure as a percentage of GDP, stood at 2.03% in 2014, the same as in 2013. Ten years ago (2004), R&D intensity was 1.76%.

With respect to other major economies, R&D intensity in the **EU** was much lower than in **South Korea** (4.15% in 2013) and **Japan** (3.47% in 2013) and lower than in the **United States** (2.81% in 2012), while it was about the same level as in **China** (2.08% in 2013) and higher than in **Russia** (1.15%). In order to provide a stimulus to the EU's competitiveness, an increase by 2020 of the R&D intensity to 3% in the **EU** is one of the five headline targets of the Europe 2020 strategy.

The business enterprise sector continues to be the main sector in which R&D expenditure was spent, accounting for 64% of total R&D conducted in 2014, followed by the higher education sector (23%), the government sector (12%) and the private non-profit sector (1%).

This information on Research and Development in the EU is published by **Eurostat, the statistical office of the European Union**. R&D is a major driver of innovation, and R&D expenditure and intensity are two of the key indicators used to monitor resources devoted to science and technology worldwide.

Research and development intensity in the EU, 2004-2014
(R&D expenditure as % of GDP)



Research and development expenditure, 2004 and 2014

	R&D intensity (R&D expenditure as % of GDP)		R&D expenditure (in millions of euro)	
	2004	2014	2004	2014
EU	1.76	2.03	194 341	283 009
Belgium	1.81	2.46	5 404	9 875
Bulgaria	0.48	0.80	99	335
Czech Republic	1.15	2.00	1 100	3 091
Denmark	2.42	3.08	4 897	7 952
Germany	2.42	2.84	54 967	82 866
Estonia	0.85	1.46	83	286
Ireland	1.18	1.55	1 840	2 871
Greece	0.53	0.83	1 021	1 482
Spain	1.04	1.20	8 946	12 725
France	2.09	2.26	35 693	48 108
Croatia	1.03	0.79	345	340
Italy	1.05	1.29	15 253	20 770
Cyprus	0.34	0.47	47	83
Latvia	0.40	0.68	47	163
Lithuania	0.75	1.02	137	370
Luxembourg	1.62	1.24	448	614
Hungary	0.87	1.38	721	1 429
Malta	0.49	0.85	24	67
Netherlands	1.81	1.97	9 469	13 075
Austria	2.17	2.99	5 250	9 833
Poland	0.56	0.94	1 139	3 864
Portugal	0.73	1.29	1 110	2 229
Romania	0.38	0.38	235	575
Slovenia	1.37	2.39	379	890
Slovakia	0.50	0.89	174	670
Finland	3.31	3.17	5 253	6 512
Sweden	3.39	3.16	10 426	13 612
United Kingdom	1.61	1.72	29 834	38 323
Iceland*	2.69	1.89	364	243
Norway	1.55	1.71	3 290	6 437
Switzerland**	2.68	2.96	8 486	15 357
Serbia	:	0.78	:	256
Turkey***	0.52	0.95	1 630	5 845
China***	1.23	2.08	19 097	145 097
Japan***	3.13	3.47	117 396	128 645
Russia	1.15	1.19	5 473	16 634
South Korea***	2.68	4.15	15 595	40 787
United States**	2.49	2.81	245 711	353 007

: Data not available

* 2005 data instead of 2004

** 2012 data instead of 2014

*** 2013 data instead of 2014

2014 data are preliminary for all countries, except Croatia, Hungary, Poland, Romania, Slovakia, Finland, Iceland, Serbia and Russia.
The source dataset can be found [here](#).

Research and development expenditure in the EU Member States by performing sector
(% of total)

	Business enterprise		Government		Higher education		Private non-profit	
	2004	2014	2004	2014	2004	2014	2004	2014
EU	63	64	13	12	22	23	1	1
Belgium	69	71	8	8	22	20	1	0
Bulgaria	24	65	67	25	9	9	1	1
Czech Republic	62	56	22	18	15	25	0	0
Denmark	68	64	7	2	24	33	1	0
Germany	70	68	14	15	17	17	-	-
Estonia	39	43	13	11	45	44	2	1
Ireland	66	73	8	5	27	22	-	-
Greece	31	34	20	27	48	38	1	1
Spain	54	53	16	19	30	28	0	0
France	63	65	17	13	19	21	1	2
Croatia	42	48	21	26	37	26	-	-
Italy	48	56	18	14	33	27	2	3
Cyprus	21	17	36	14	35	53	7	16
Latvia	44	36	19	24	36	41	0	-
Lithuania	21	30	25	17	54	53	-	-
Luxembourg	88	53	11	29	1	19	-	-
Hungary	41	72	30	14	25	13	-	-
Malta	66	60	3	9	31	31	0	0
Netherlands	54	56	13	11	33	32	-	-
Austria	68	71	5	4	27	24	0	0
Poland	29	47	39	24	32	29	0	0
Portugal	36	46	16	6	37	45	12	2
Romania	55	41	34	43	10	15	0	0
Slovenia	67	77	20	12	13	10	0	0
Slovakia	49	37	30	28	20	34	0	0
Finland	70	68	9	9	20	23	1	1
Sweden	74	67	3	4	23	29	0	0
United Kingdom	63	64	11	8	25	26	2	2

- not applicable

0 means less than 0.5%

Shares might not add up to 100% due to rounding

The source dataset can be found [here](#).

Methods and definitions

Research and development, abbreviated as R&D, refers to creative work undertaken on a systematic basis in order to increase the stock of knowledge (including knowledge of man, culture and society), and the use of this knowledge to devise new applications.

Eurostat's statistics on R&D expenditure are compiled using guidelines laid out in the [Frascati Manual](#) (2002 edition) published by the [OECD](#). They cover intramural expenditure, in other words, all expenditures for R&D performed by enterprises or institutions in every sector of the economy in the EU Member States.

R&D intensity for a country is defined as the total R&D expenditure as a percentage of gross domestic product (GDP).

The main analysis of R&D statistics is based on **four institutional sectors of performance**. These four sectors are the business enterprise sector, the government sector, the higher education sector, and the private non-profit sector. Expenditure data considers the research performed on the national territory, regardless of the source of funds.

Revisions and timetable

2014 data on R&D expenditure presented in this News Release are preliminary and might therefore be revised. Following national calendar for the transmission of data, updated figures will be published in March and November 2016 respectively.

For more information

Eurostat website section dedicated to science, technology and innovation statistics.

Eurostat database on science and technology.

Eurostat website section dedicated to Europe 2020 indicators. See also Eurostat publication "Smarter, greener, more inclusive? - Indicators to support the Europe 2020 strategy" (2015 edition).

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