



GOVERNMENT BUDGET ALLOCATIONS FOR R&D, 2021 – 2022

The share of the Government Budget appropriations or outlays for the R&D in GDP amounted to 0.72% in 2021

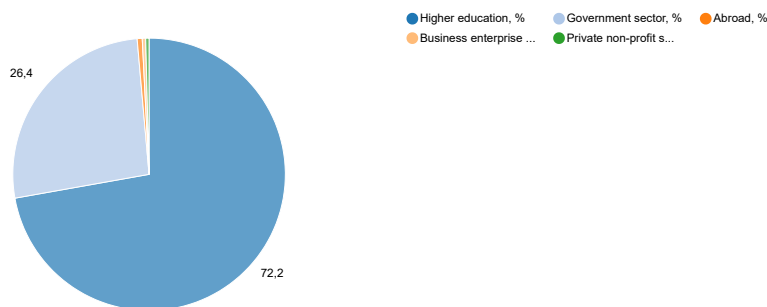
In 2021, the amount of 3.1 billion kuna of the Government Budget appropriations or outlays was spent for the R&D activity.

The biggest share of the Government Budget appropriations or outlays for the R&D activity in 2021 was intended for the Higher education sector (72.2%). The Government sector followed with 26.4%, while the lowest share was intended for the Business enterprise sector (0.4%) and Private non-profit sector (0.4%).

Regarding the socio-economic objectives, the highest amount (64.7%) of the Government Budget appropriations or outlays for the R&D activity in 2021 was spent for the objective General advancement of knowledge: R&D financed from general university funds (GUF). The objective General advancement of knowledge: R&D financed from sources other than GUF followed with 23.4%, while the smallest amount was spent for the objective Defence (0.1%).

The planned Government Budget appropriations or outlays for the R&D activity in 2022 (according to the adopted Government Budget for 2022) amounted to 3.3 billion kuna, of which over half of funds (59.4%) were intended for the objective General advancement of knowledge: R&D financed from general university funds (GUF).

G-1 SHARE OF GOVERNMENT BUDGET APPROPRIATIONS OR OUTLAYS FOR R&D, BY SECTORS (ACTUAL PAYMENTS), 2021

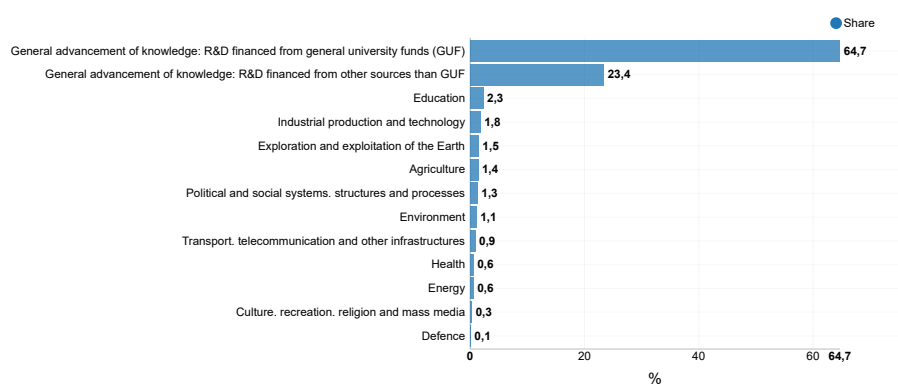


1 GOVERNMENT BUDGET APPROPRIATIONS OR OUTLAYS FOR R&D, BY SOCIO-ECONOMIC OBJECTIVES AND SECTORS (ACTUAL PAYMENTS), 2021

Thousand kuna

	Total	Business enterprise sector	Government sector	Higher education	Private non-profit sector	Abroad
Total	3 113 472	12 765	822 266	2 249 635	11 136	17 670
Exploration and exploitation of the Earth	48 266	432	24 663	21 070	2101	-
Environment	32 985	624	21 539	10 822	-	-
Exploration and exploitation of space	-	-	-	-	-	-
Transport, telecommunication and other infrastructures	28 535	536	1 409	26 590	-	-
Energy	19 882	449	2287	17 146	-	-
Industrial production and technology	56 269	717	-	55 552	-	-
Health	17 199	1 003	14 693	831	672	-
Agriculture	43 623	1095	32 098	10 430	-	-
Education	70 606	1031	1 418	68 157	-	-
Culture, recreation, religion and mass media	9 750	-	6 810	2898	42	-
Political and social systems, structures and processes	40 757	389	39 387	872	109	-
General advancement of knowledge: R&D financed from GUF	2 014 344	-	58 866	1 954 747	731	-
Natural sciences	200 150	-	34 297	165 853	-	-
Engineering	451 036	-	-	451 036	-	-
Biomedicine and health	496 865	-	4 637	492 228	-	-
Biotechnical sciences	430 211	-	3 112	426 369	731	-
Social sciences	300 836	-	10 692	290 144	-	-
Humanities	135 246	-	6 129	129 118	-	-
General advancement of knowledge: R&D financed from sources other than GUF	729 283	6 489	619 096	80 450	7 481	15 767
Natural sciences	328 668	442	303 853	19 813	561	3 999
Engineering	16 434	177	912	14 611	225	509
Biomedicine and health	107 835	1 476	69 530	29 797	1 117	5 915
Biotechnical sciences	57 745	73	49 739	7 725	93	115
Social sciences	88 554	704	76 942	4 786	894	5 228
Humanities	130 047	3 617	118 120	3 718	4 592	-
Defence	1 973	-	-	70	-	1 903

G-2 SHARE OF GOVERNMENT BUDGET APPROPRIATIONS OR OUTLAYS FOR R&D, BY SOCIO-ECONOMIC OBJECTIVES IN TOTAL GOVERNMENT BUDGET APPROPRIATIONS OR OUTLAYS FOR R&D (ACTUAL PAYMENTS), 2021

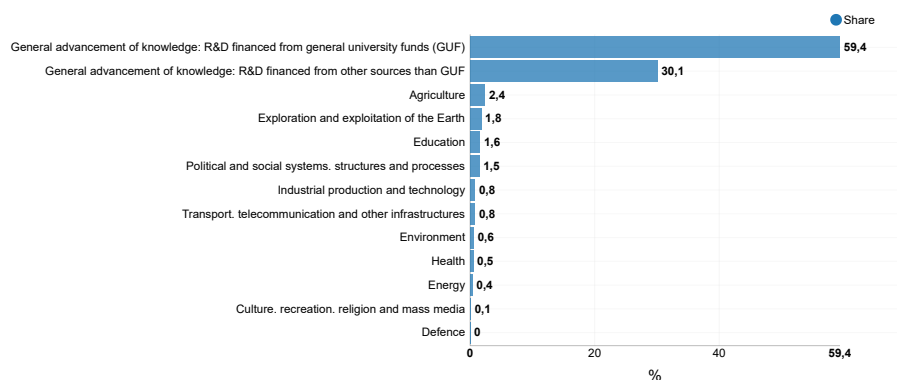


2 GOVERNMENT BUDGET APPROPRIATIONS OR OUTLAYS FOR R&D (ADOPTED BUDGET FOR 2022), BY SOCIO-ECONOMIC OBJECTIVES, 2022

Thousand kuna

	Total
Total	3 312 746
Exploration and exploitation of the Earth	60 759
Environment	18 314
Exploration and exploitation of space	-
Transport, telecommunication and other infrastructures	25 829
Energy	12 325
Industrial production and technology	26 260
Health	17 901
Agriculture	78 393
Education	53 839
Culture, recreation, religion and mass media	4 362
Political and social systems, structures and processes	50 129
General advancement of knowledge: R&D financed from GUF	1 968 232
General advancement of knowledge: R&D financed from sources other than GUF	995 843
Defence	560

G-3 SHARE OF GOVERNMENT BUDGET APPROPRIATIONS OR OUTLAYS FOR R&D, BY SOCIO-ECONOMIC OBJECTIVES IN TOTAL GOVERNMENT BUDGET APPROPRIATIONS OR OUTLAYS FOR R&D (ADOPTED BUDGET FOR 2022), 2022



3 SHARE OF GOVERNMENT BUDGET APPROPRIATIONS OR OUTLAYS FOR R&D, BY SOCIO-ECONOMIC OBJECTIVES IN TOTAL GOVERNMENT BUDGET APPROPRIATIONS OR OUTLAYS FOR R&D FOR EUROPEAN UNION COUNTRIES AND THE REPUBLIC OF CROATIA, 2021

96

	Exploration and exploitation of the Earth	Environment	Exploration and exploitation of space	Transport, telecommunication and other infrastructures	Energy	Industrial production and technology	Health	Agriculture	Education	Culture, recreation, religion and mass media	Political and social systems, structures and processes	General advancement of knowledge: R&D financed from GUF	General advancement of knowledge: R&D financed from sources other than GUF	Defence
EU-27¹⁾	1.81	2.59	5.64	3.18	4.67	10.07	7.78	2.99	1.49	1.15	1.86	35.93	16.99	3.84
Croatia	1.55	1.06	-	0.92	0.64	1.81	0.55	1.40	2.27	0.31	1.31	64.70	23.42	0.06
Austria	1.41	0.81	0.63	1.66	2.63	14.91	5.05	1.24	1.39	0.52	1.27	55.27	13.05	0.17
Belgium	1.47	0.65	8.25	0.48	1.90	33.41	1.75	1.76	0.29	1.45	3.87	17.17	26.75	0.82
Bulgaria	4.02	0.31	0.96	4.47	0.69	6.96	2.41	17.43	1.07	1.05	1.95	11.54	46.79	0.36
Cyprus	0.20	0.74	0.00	0.14	0.03	0.02	6.02	7.08	2.30	0.54	0.14	30.83	51.89	0.07
Czech Republic	1.91	2.10	1.75	4.53	4.33	11.57	7.54	4.53	0.62	0.67	2.06	23.01	34.53	0.83
Denmark	0.40	1.18	1.07	0.07	6.58	5.04	17.51	4.49	2.97	1.52	2.25	42.72	13.84	0.35
Estonia	1.10	0.91	3.21	0.51	0.37	2.19	1.56	4.70	0.22	1.28	4.04	17.82	59.85	2.23
Finland	0.67	2.78	1.39	1.33	2.73	22.42	2.27	3.15	0.31	0.46	2.38	32.66	25.29	2.15
France	0.81	2.89	11.10	8.71	7.12	0.78	7.23	2.01	0.16	1.46	0.16	24.29	22.61	10.66
Greece	2.01	3.66	1.36	8.96	2.90	13.53	9.96	3.47	1.01	9.25	7.34	30.59	4.57	1.39
Ireland	0.61	4.67	0.78	0.43	1.26	22.27	6.08	8.86	5.85	0.43	0.72	17.34	30.70	0.00
Italy	6.59	2.44	12.24	1.27	3.20	9.77	11.10	2.55	3.01	0.93	3.57	39.93	2.90	0.51
Latvia	0.76	9.38	0.40	1.72	3.60	8.29	10.28	13.12	3.40	2.51	2.82	8.52	33.59	1.61
Lithuania	3.12	0.29	0.53	3.50	3.28	10.93	2.19	5.25	0.63	3.29	3.08	51.25	10.44	2.21
Luxembourg	0.00	1.78	0.01	0.08	0.16	9.67	18.65	0.04	2.26	0.08	4.22	32.61	30.44	0.00
Hungary	2.59	3.08	6.03	3.08	5.75	24.84	20.36	5.68	2.35	0.68	2.27	2.36	19.77	1.17
Malta	1.70	1.87	1.13	0.16	0.57	3.77	0.61	2.78	0.33	1.36	1.35	84.38	...	0.00
Netherlands	0.87	0.71	2.12	1.74	2.16	5.65	7.75	3.32	0.63	0.27	1.32	55.03	16.84	1.58
Germany	1.36	3.22	4.43	2.18	5.96	13.56	7.13	2.87	1.77	1.16	1.89	35.75	14.38	4.34
Poland	0.08	0.60	0.38	0.25	0.37	0.97	3.13	0.19	0.00	0.01	0.12	56.76	32.16	5.00
Portugal	1.24	4.29	0.60	2.70	2.08	5.02	9.92	2.29	2.70	1.56	1.69	57.21	8.47	0.24
Romania	3.00	5.12	1.55	2.56	2.56	8.97	4.06	5.85	8.33	0.57	1.45	...	52.48	3.50
Slovakia	2.18	3.19	1.50	1.78	1.34	8.84	8.68	2.68	1.98	3.22	1.82	42.30	18.57	1.93
Slovenia	2.71	5.33	0.26	2.83	3.96	11.37	11.84	5.11	1.48	2.23	3.13	0.28	48.36	1.11
Spain	1.81	3.06	5.37	2.46	2.71	8.61	12.47	6.85	2.07	1.02	1.49	32.99	18.16	0.96
Sweden	1.85	2.31	0.79	5.35	3.75	2.33	2.47	1.89	0.63	0.12	2.49	49.64	24.19	2.20

1) Data for EU Member States, except for Croatia, Bulgaria, Cyprus, Denmark, Latvia, Luxembourg and Malta are provisional.

Data source: Eurostat (website https://ec.europa.eu/eurostat/databrowser/view/gba_nabsfin07/default/table?lang=en)

NOTES ON METHODOLOGY

Purpose of the survey

This survey collects data on the Government Budget appropriations or outlays according to the socio-economic objectives, including all grants to the international R&D programmes or institutions abroad. The objective of the survey is to enable the monitoring of the state R&D policy through its financing of the R&D activities. As opposed to the research imposed to organisations engaged in the R&D activities, this survey focuses on organisations that finance the R&D activity.

The survey is conducted on the basis of the Annual Implementation Plan for Statistical Activities of the Republic of Croatia (NN, No. 42/22) and the Official Statistics Act (NN, No. 25/20). The legal basis of the European Union for the implementation of the survey is Decision No. 1608/2003/EC of the European Parliament and of the Council of 22 July 2003 concerning the production and development of Community statistics on science and technology and Commission Implementing Regulation (EU) No. 995/2012 of 26 October 2012 laying down detailed rules for the implementation of Decision No. 1608/2003/EC.

Data sources

Data are the result of statistical processing of annual reports collected from budgetary and extra-budgetary users of the Government Budget in 2022. The Ministry of Science and Education provided data in the Annual Report on the Government Budget Appropriations or Outlays for the R&D Activity – PIIR-1 form, while other government bodies provided data in the Annual Report on the Government Budget Appropriations or Outlays for the R&D Activity – PIIR-2 form.

Pursuant to the Official Statistics Act (NN, No. 25/20), the confidentiality of all data provided by the reporting units in the form is guaranteed. The data collected are used solely for statistical purposes and are published in aggregate form.

Coverage and comparability

The statistical survey on the Government Budget appropriations or outlays for the R&D activity in the period from 2021 to 2022 covers budgetary and extra-budgetary users of the Government Budget in the Republic of Croatia, that is, all government bodies who in 2021 financed and in 2022 planned to finance the R&D activity. The data are based on the actual Government Budget appropriations or outlays for 2021 (money paid out during the year) and the adopted Government Budget for 2022 (amount enacted by the Croatian Parliament before the rebalancing of the Budget).

The First Release includes data on funds that the Ministry of Science and Education directly allocated for the R&D purposes in 2021 from the Government Budget of the Republic of Croatia activity in the Ministry's competence as well as data submitted to the Ministry by reporting units. The First Release includes data related to institutions from the system of science and higher education (institutions of higher education and public scientific institutes).

Since October 2013, the Ministry of Science and Education has no longer funded the scientific/research projects (z-projects). The financing of research projects is carried out by the Croatian Science Foundation through its programme Research Projects and other programmes such as Installation Research Projects.

The data published in this First Release are comparable with data for previous years, including data for 2009 and 2010.

The methodological basis for the implementation of the survey is the internationally acknowledged standard, which was set up and published in the Frascati Manual 2015 by the OECD.

Definitions and explanations

Definitions of the R&D field are based on the international methodology – the Frascati Manual 2015 (Frascati Manual, 2015: Guidelines for Collecting and Reporting Data on Research and Experimental Development, the Measurement of Scientific, Technological and Innovation Activities, publisher: OECD, Paris, 2015).

The Nomenclature for the Analysis and Comparison of Scientific Programmes and Budgets – NABS 2007 was used in monitoring of the allocation of the Government Budget appropriations or outlays according to the socio-economic objectives, which is correlated with the Frascati Manual. This Nomenclature explains the socio-economic objectives, that is, the purpose of the spent appropriations or outlays for the R&D in 13 categories.

Research and development (R&D) comprise systematic creative work aimed at increasing knowledge about man, culture and society and its application in practice. For an activity to be an R&D activity, it must satisfy five criteria. The activity must be novel, creative, uncertain, systematic and transferable and/or reproducible. There are three types of research and development: basic research, applied research and experimental development.

Business enterprise sector comprises enterprises and institutions the main activity of which is production of goods and services intended for market at commercial price. It includes public enterprises as well as non-profit institutions that are market producers of goods or services.

Government sector comprises all units of central and local government, including social security funds, except institutions of higher education as well as all non-profit institutions that are controlled by government units, and that are not themselves part of the Higher education sector.

Private non-profit sector comprises non-market, non-profit institutions serving households (that is, the general public), except those mainly controlled and financed by the government, their main characteristic being that they should not be the source of revenue or profit to the institutions controlling them.

Higher education includes all institutions providing formal tertiary education programmes, whatever their source of finance or legal status, and all research institutes and centres that have their R&D activities under the direct control of, or administered by, tertiary education institutions.

Abroad includes all institutions and individuals located outside the political borders of a country as well as all international organisations (except business enterprises) including facilities and operations within the country borders.

Socio-economic objective represents the basic allocation of funds for R&D set up by the OECD and expressed in 13 categories.

Abbreviations

EC	European Community
EU	European Union
Eurostat	Statistical Office of the European Union
GDP	gross domestic product
GUF	general university funds
NN	Narodne novine, official gazette of the Republic of Croatia
OECD	Organisation for Economic Co-operation and Development
R&D	research and development

Symbols

-	no occurrence
...	data not available
0.00	value not zero but less than 0.005 of the unit of measure used

Published by the Croatian Bureau of Statistics, Zagreb, Ilica 3, P. O. B. 80

Phone: (+385 1) 48 06 111
Press corner: press@dzs.hr

Persons responsible:
Milenka Primorac Čačić, Director of Business Statistics Directorate
Lidija Brković, Director General

Prepared by:
Matija Škegro Vdović and Vesna Furjan

USERS ARE KINDLY REQUESTED TO STATE THE SOURCE.

Customer Relations and Data Protection Department

Information and user requests
Phone: (+385 1) 48 06 138, 48 06 154
E-mail: stat.info@dzs.hr

Subscription
Phone: (+385 1) 48 06 115
E-mail: prodaja@dzs.hr