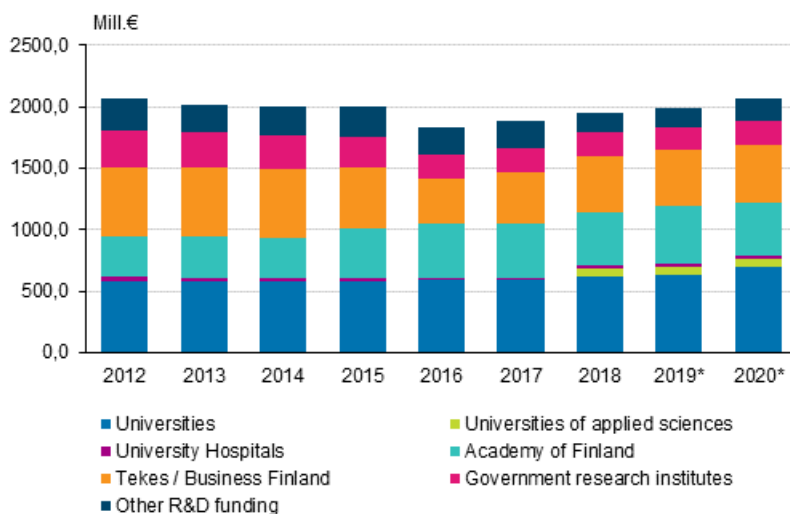


Government R&D funding in the state budget 2020

R&D funding grows in the 2020 budget

According to Statistics Finland, appropriations for research and development in the government budget increase by EUR 68.6 million from the year before. In the state budget 2020, the total appropriations for research and development activities amount to EUR 2,062.5 million. The share of public research funding in gross domestic product is estimated to be 0.83 per cent.

Government R&D funding by organisation in 2010 to 2020



*data may become revised based on supplementary budgets.

The majority of government R&D funding is directed to universities. In the 2020 budget, the R&D funding of universities totals EUR 690.4 million, which is a growth of around EUR 60 million from the previous year's budget. The increase is the result of growth in university appropriations and a higher research share. The R&D funding of Business Finland also grows in the 2020 budget by around EUR 26 million to EUR 477.5 million. The R&D funding of the Academy of Finland, in turn, decreases by EUR 46.5 million in the 2020 budget and the research funding amounts to EUR 423.6 million in total. The R&D funding of central government research institutes and university central hospitals, on the other hand, increases in the 2020 budget.

Among administrative sectors, research and development activities are financed most in the Ministry of Education and Culture and the Ministry of Economic Affairs and Employment. The major provider of funding is the Ministry of Education and Culture, whose R&D funding in the budget for 2020 is EUR 1,236.6 million. The increase from the appropriations in the budget one year before is around EUR 31 million. The R&D funding of the Ministry of Economic Affairs and Employment also grows in the 2020 budget, by EUR 24.5 million, the majority of which is an increase in the funding of Business Finland.

Government budget allocations for R&D (GBARD) in 2020

| | R&D funding € million | Share of R&D funding, % | Change from 2019, € million * | Real change from 2019, % * |
|--|-----------------------|-------------------------|-------------------------------|----------------------------|
| R&D funding total | 2 062,5 | 100,0 | 68,6 | 0,7 |
| Main administrative branches (ministries) | | | | |
| Ministry of Education and Culture | 1 236,6 | 60,0 | 30,5 | -0,2 |
| Ministry of Employment and the Economy | 588,2 | 28,5 | 24,5 | 1,6 |
| Ministry of Agriculture and Forestry | 57,8 | 2,8 | 3,0 | 2,7 |
| Ministry of Social Affairs and Health | 75,1 | 3,6 | 4,0 | 2,8 |
| Funding organisations | | | | |
| Universities | 690,4 | 33,5 | 59,9 | 6,6 |
| Universities of applied sciences | 72,9 | 3,5 | 5,3 | 5,0 |
| Business Finland | 477,5 | 23,2 | 26,3 | 3,0 |
| Academy of Finland | 423,6 | 20,5 | -46,5 | -12,3 |
| Government research institutes | 193,8 | 9,4 | 10,3 | 2,8 |
| Other R&D funding | 179,3 | 8,7 | 12,0 | 4,4 |
| Universitetssjukhus | 25,0 | 1,2 | 1,2 | 2,3 |

* Data for 2019 partly updated

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R&D funding grows in the 2020 budget

In the state budget for 2020, the total appropriations for research and development activities amount to EUR 2,062.5 million. The appropriations increase by EUR 68.6 million from 2019, which translates to a 3.4 per cent nominal and 0.7 per cent real growth. The proportion of funds allocated to R&D activities of overall government spending exclusive of debt servicing is 3.6 per cent. The GDP share of public R&D funding is an estimated ¹⁾0,83 per cent in 2020.

1. R&D funding by administrative sector

Research and development activities are clearly financed most in the Ministry of Education and Culture, whose R&D funding in the budget for 2020 amounted to EUR 1,236.6 million. The research funding of the Ministry of Education and Culture corresponds to 60 per cent of the entire government R&D funding. The R&D appropriations of the administrative sector of the Ministry of Education and Culture increase by EUR 30.5 million compared with the budget one year before. The R&D funding of the Ministry of Economic Affairs and Employment also grows, by EUR 24.5 million, as the R&D funding of Business Finland increases. Among other administrative sectors, the R&D funding of the Ministry of the Environment increases by around EUR 10 million and the R&D funding of the Ministry of Defence decreases by close on EUR five million in the 2020 budget.

The ministries that hand out most R&D funding, the Ministry of Education and Culture and the Ministry of Economic Affairs and Employment, are also the most R&D intensive ministries. In all, 18.1 per cent of the Ministry of Education and Culture's expenditure and 20.5 per cent of the Ministry of Economic Affairs and Employment's expenditure are directed at research and development activities. The Ministry of Finance and the Ministry of the Interior have the lowest R&D intensities.

Central government R&D funding and its share in government expenditure in 2019 and 2020

| | Year EUR million | | Change 2019–2020 | | |
|--|---------------------|----------------|------------------|------------|------------|
| | 2019 ¹⁾ | 2020 | EUR million | Nom. % | Real. % |
| Total R&D funding | 1 993,9 | 2 062,5 | 68,6 | 3,4 | 0,7 |
| Total government expenditure | 55 495,0 | 57 552,0 | 2 057,0 | 3,7 | 2,0 |
| Government expenditure excluding debt servicing | 54 315,0 | 56,679,0 | 2 364,0 | 4,4 | 2,6 |
| R&D funding share of government expenditure excluding debt servicing | 3,7 | 3,6 | .. | .. | .. |

1) Data for 2019 partly updated

2. R&D funding by organisation

The R&D funding of universities grows in the 2020 budget by around EUR 60 million to EUR 690.4 million. The estimate of universities' research and development funding for the current year is affected by the increased share of realised research expenditure in universities' basic funding used in the calculations and the growth of government funding of universities in its entirety. The R&D funding of universities of applied sciences is EUR 72.9 million in the 2020 budget, which is around EUR five million more than in last year's budget. The funding of Business Finland's R&D activities also grows from last year's budget by around EUR 26 million and amounts to EUR 477.5 million in total. The R&D funding of central government research institutes and university central hospitals increases in 2020. The R&D funding of the Academy of Finland, on the other hand, decreases in the 2020 budget by over EUR 46 million from last year's budget.

With the help of the EuroHPC collaboration, a high-level research environment for computing and data management is created in Europe. In June 2019, it was decided that one of three leading edge EuroHPC supercomputers for research use is to be placed in CSC - IT Center for Science Ltd's datacenter in Kajaani.

1) GDP 2020 forecast by the Ministry of Finance.

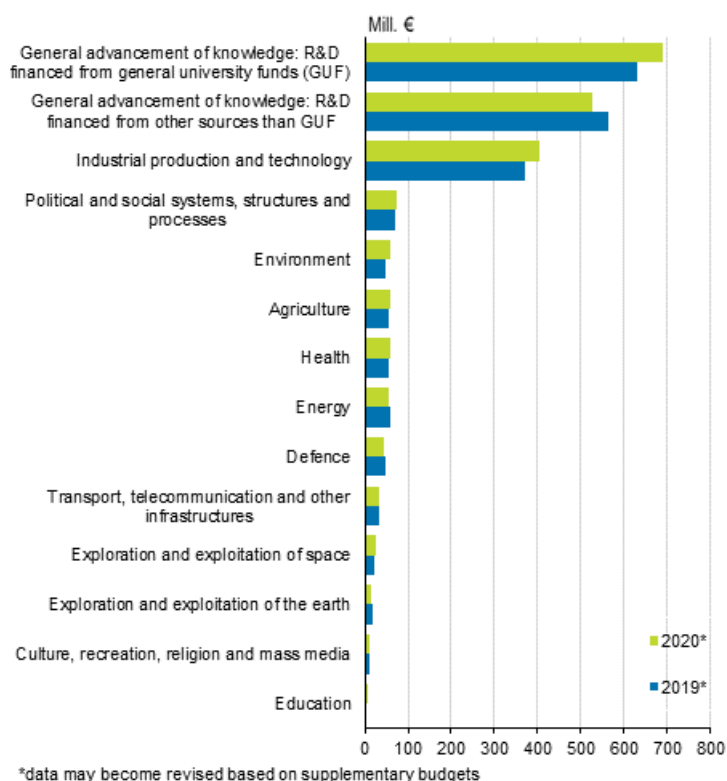
The hosting of the European high-performance computing supercomputer located in Kajaani affects the category other R&D funding in the 2020 budget.

Universities' proportion of the total government R&D funding is the highest among the organisations. Universities' share of government R&D funding is over 30 per cent in the 2020 budget. Correspondingly, Business Finland's share increases slightly and is around 23 per cent. The Academy of Finland's share decreases by a few percentage points and is around 21 per cent. Central government research institutes get a share of around nine per cent of the funding and the share of other funding is also nine per cent of the entire government R&D funding. The EUR 72.9 million R&D funding of universities of applied sciences corresponds to four per cent of government R&D funding. One per cent of government R&D funding is directed to university central hospitals.

3. R&D funding by socioeconomic objective

According to socioeconomic objective, a majority of government R&D funding is directed to universities' research and development activities and general advancement of science. The funding of general advancement of science decreases by around EUR 35 million, mainly due to a decrease in the Academy of Finland's research appropriations. Research funding directed at industrial production and technology, which includes, for example, research aimed at developing technology, grows by around EUR 31 million and totals EUR 403.1 million in the 2020 budget. Investments in environmental protection research have increased in recent years and R&D funding allocated to environmental protection also increases by around EUR 13 million in the 2020 budget. Among other big objective categories, more R&D funding is allocated, for example, to the objective category Political and social systems, structures and processes, the research funding of which increases by around EUR three million.

Figure 1. Government R&D funding by organisation in 2019 and 2020



4. Funding of international R&D activities

State budget R&D funding directed at international research organisations or international R&D programmes²⁾ increases by around EUR four million to EUR 83.0 million. EUR 49.6 million in total are allocated to 2) Programmes or organisations where research and development (R&D) is the main type of activity.

Europe-wide R&D programmes between countries that are arranged, for example, within the framework of Horizon 2020. European international research organisations, such as CERN, the European Organization for Nuclear Research, receive EUR 18.8 million in research funding from the government budget in 2020. Around EUR 9.8 million are directed at bilateral or multilateral R&D programmes between the governments of EU countries. The remaining EUR 4.9 million are directed at other international players for projects that have no ERA (European Research Area) dimension.

5. Budget funding and external financing of central government research institutes

The main task of government research institutes is to acquire, produce and disseminate data as basis for political decision-making and development of society. In addition to research duties the institutes have a varying number of different expertise, supervision, training, guidance and other official functions, as well as, for example, charged and other service activities. Research institutes produce services horizontally to many different administrative branches and the rest of the public sector, as well as enterprises and third sector operators. At the moment, 12 research institutes are financed from the state budget.

Budget funded R&D activities of central government research institutes

The total amount of R&D funding for central government research institutes ³⁾from their own administrative branches' budgets for 2020 is EUR 193.8 million. Central government research institutes' budget funding increases by around EUR 10 million from the previous year. Budget funding for VTT, the Technical Research Centre of Finland, increases by EUR two million to EUR 80 million and the budget funding for the Natural Resources Institute Finland increases by EUR 3.5 million to EUR 51.5 million.

Total research funding and EU funding of research institutes

In addition to budget appropriations, the R&D activities of research institutes are increasingly financed by external funding consisting of income from charged services, EU funding and funding from elsewhere than the institute's own budget classes. External funding mainly comes on a competitive basis from several sources and from both domestic public and private sectors and international sources. Its amount is based on the institutes' performance targets and is thus estimated.

Total R&D funding for research institutes (budget funding and external funding) is EUR 463.7 million in 2020, which is EUR 6.5 million more than in 2019. External funding for research institutes decreases by around EUR four million from the previous year and amounts to EUR 269.9 million in total in 2020. The share of external funding of research institutes' total funding is around 60 per cent. VTT, the Technical Research Centre of Finland, has the highest external funding of the research institutes, and in 2020 it amounts to EUR 163.4 million in total, which is around EUR three million less than one year earlier. Regarding the figures for 2020, the change in calculation method implemented in 2019 had an increasing impact on the funding of the Finnish Environment Institute. Research institutes estimate that they will receive EUR 64 million from the EU, which is around EUR five million more than one year ago.

3) Incl. the non-profit special assignment state enterprise VTT Oy.

Appendix tables

Appendix table 1. Development of central government's total expenditure and funding of R&D activities in 2010 to 2020

| Year ¹⁾ | Central government expenditure (EUR million) | Central government expenditure excluding debt servicing (EUR million) | R&D funding (EUR million) | Share of R&D funding in central government expenditure, % | Central government expenditure, real change, % | Central government expenditure excluding debt, real change, % | R&D funding, real change, % |
|--------------------|--|---|---------------------------|---|--|---|-----------------------------|
| 2010 | 49 880,0 | 48 013,0 | 2 065,3 | 4,3 | 6,4 | 6,6 | 7,1 |
| 2011 | 50 382,0 | 48 475,0 | 2 071,7 | 4,3 | -1,5 | -1,5 | -2,7 |
| 2012 | 53 446,0 | 51 582,0 | 2 064,2 | 4,0 | 2,7 | 3,0 | -3,6 |
| 2013 | 54 587,0 | 52 850,0 | 2 017,9 | 3,8 | 0,1 | 0,5 | -4,2 |
| 2014 | 54 234,0 | 52 521,0 | 2 001,6 | 3,8 | -1,9 | -1,9 | -2,7 |
| 2015 | 53 700,0 | 52 170,0 | 2 001,6 | 3,8 | -1,4 | -1,1 | -1,0 |
| 2016 | 54 419,0 | 52 898,0 | 1 836,4 | 3,5 | 1,3 | 1,4 | -7,9 |
| 2017 | 55 042,0 | 53 711,0 | 1 885,9 | 3,5 | 1,6 | 2,0 | 2,6 |
| 2018 | 55 242,0 | 54 092,0 | 1 951,0 | 3,5 | -0,6 | -0,3 | 2,2 |
| 2019 | 55 495,0 | 54 315,0 | 1 993,9 | 3,7 | -0,4 | -0,5 | 0,3 |
| 2020 | 57 552,0 | 56 679,0 | 2 062,5 | 3,6 | 2,0 | 2,6 | 0,7 |

1) 2010-2018: State budget + supplementary budgets, 2019-2020: State budget proposal

Appendix table 2. Central government R&D funding and total expenditure by administrative sector in 2019 and 2020

| Administrative sector | R&D funding / Central government expenditure (EUR million) | | | | | | | | |
|---|--|----------------|-------------|-------------------------------------|-----------------|----------------|--|------------|------------|
| | R&D funding. EUR Million | | | Administrative sector's expenditure | | | R&D funding, share of administrative sector's expenditures | | |
| | 2019 | 2020 | change | 2019 | 2020 | change | 2019 | 2020 | change |
| the Parliament of Finland | 3,6 | 3,8 | 0,2 | 124,6 | 127,1 | 2,5 | 2,9 | 3,0 | 0,1 |
| Prime Minister's Office | 10,7 | 10,9 | 0,2 | 268,3 | 218,6 | -49,7 | 4,0 | 5,0 | 1,0 |
| Ministry for Foreign Affairs | 6,1 | 5,5 | -0,6 | 1 135,6 | 1 256,1 | 120,5 | 0,5 | 0,4 | -0,1 |
| Ministry of Justice | 0,8 | 1,1 | 0,3 | 978,5 | 953,7 | -24,8 | 0,1 | 0,1 | 0,0 |
| Ministry of the Interior | 0,5 | 0,5 | 0,0 | 1 496,8 | 1 519,6 | 22,8 | 0,0 | 0,0 | 0,0 |
| Ministry of Defence | 48,9 | 44,3 | -4,6 | 3 138,2 | 3 157,8 | 19,6 | 1,6 | 1,4 | -0,2 |
| Ministry of Finance | 5,1 | 5,2 | 0,2 | 17 494,4 | 18 493,2 | 998,8 | 0,0 | 0,0 | 0,0 |
| Ministry of Education and Culture | 1 206,1 | 1 236,6 | 30,5 | 6 422,6 | 6 837,0 | 414,4 | 18,8 | 18,1 | -0,7 |
| Ministry of Agriculture and Forestry | 54,8 | 57,8 | 3,0 | 2 621,3 | 2 688,5 | 67,2 | 2,1 | 2,2 | 0,1 |
| Ministry of Transport and Communications | 14,0 | 15,1 | 1,1 | 2 873,8 | 3 489,5 | 615,7 | 0,5 | 0,4 | -0,1 |
| Ministry of Economic Affairs and Employment | 563,7 | 588,2 | 24,5 | 2 500,6 | 2 863,4 | 362,8 | 22,5 | 20,5 | -2,0 |
| Ministry of Social Affairs and Health | 71,1 | 75,1 | 4,0 | 15 035,9 | 14 779,7 | -256,2 | 0,5 | 0,5 | 0,0 |
| Ministry of the Environment | 8,4 | 18,3 | 9,9 | 204,4 | 277,9 | 73,5 | 4,1 | 6,6 | 2,5 |
| TOTAL¹⁾ | 1 993,9 | 2 062,5 | 68,6 | 54 295,0 | 56 662,1 | 2 367,1 | 3,7 | 3,6 | 0,0 |

1) Total expenditure of administrative sector, excl. debt servicing and main category President of the Republic

Appendix table 3. Central government R&D funding by administrative sector in 2019 and 2020

| Administrative sector / Organisation | R&D funding | | | | |
|--|-------------------|-------------------|------------------------------|-------------------------|---------------------------|
| | EUR million /2019 | EUR million /2020 | Change 2019-2020/EUR million | Change 2019-2020/Nom. % | Change 2019-2020 /Real. % |
| Ministry of Education and Culture | 1 206,1 | 1 236,6 | 30,5 | 2,5 | -0,2 |
| Universities | 630,5 | 690,4 | 59,9 | 9,5 | 6,6 |
| Universities of applied sciences | 67,6 | 72,9 | 5,3 | 7,9 | 5,0 |
| Academy of Finland | 470,1 | 423,6 | -46,5 | -9,9 | -12,3 |
| Other | 37,9 | 49,6 | 11,7 | 30,9 | 27,4 |
| Ministry of Economic Affairs and Employment | 563,7 | 588,2 | 24,5 | 4,4 | 1,6 |
| Business Finland | 451,2 | 477,5 | 26,3 | 5,8 | 3,0 |
| Government research institutions | 87,9 | 87,2 | -0,7 | -0,8 | -3,4 |
| Other | 24,5 | 23,5 | -1,1 | -4,3 | -6,8 |
| Ministry of Social Affairs and Health | 71,1 | 75,1 | 4,0 | 5,6 | 2,8 |
| Government research institutions | 22,6 | 23,6 | 1,0 | 4,2 | 1,5 |
| University Central Hospitals | 23,8 | 25,0 | 1,2 | 5,0 | 2,3 |
| Other | 24,7 | 26,6 | 1,8 | 7,4 | 4,5 |
| Ministry of Agriculture and Forestry | 54,8 | 57,8 | 3,0 | 5,5 | 2,7 |
| Government research institutions | 52,9 | 56,4 | 3,5 | 6,7 | 3,9 |
| Other | 1,9 | 1,4 | -0,5 | -26,4 | -28,4 |
| Ministry of Defence | 48,9 | 44,3 | -4,6 | -9,4 | -11,8 |
| Ministry of Transport and Communications | 14,0 | 15,1 | 1,1 | 7,8 | 4,9 |
| Government research institutions | 9,3 | 9,5 | 0,2 | 1,9 | -0,8 |
| Other | 4,7 | 5,6 | 0,9 | 19,4 | 16,3 |
| Ministry of the Environment | 8,4 | 18,3 | 9,9 | 117,0 | 111,3 |
| Government research institutions | 4,0 | 10,0 | 6,0 | 148,5 | 142,0 |
| Other | 4,4 | 8,3 | 3,9 | 88,2 | 83,3 |
| Ministry for Foreign Affairs | 6,1 | 5,5 | -0,6 | -10,4 | -12,8 |
| Ministry of Finance | 5,1 | 5,2 | 0,2 | 3,0 | 0,3 |
| Government research institutions | 3,2 | 3,5 | 0,3 | 9,5 | 6,6 |
| Other | 1,9 | 1,8 | -0,1 | -7,9 | -10,3 |
| the Parliament of Finland | 3,6 | 3,8 | 0,2 | 5,0 | 2,2 |
| Ministry of Justice | 0,8 | 1,1 | 0,3 | 31,0 | 27,5 |
| Ministry of the Interior | 0,5 | 0,5 | 0,0 | 0,0 | -2,6 |
| Prime Minister's Office | 10,7 | 10,9 | 0,2 | 2,3 | -0,4 |
| TOTAL | 1 993,9 | 2 062,5 | 68,6 | 3,4 | 0,7 |

Appendix table 4. Government research institutes' budget-funded R&D activities in 2019 and 2020

| Government research institution | EUR Million /2019 | EUR Million /2020 | Change 2019-2020 /EUR Million | Change 2019-2020/Nom. % | Change 2019-2020 /Real. % |
|---|-------------------|-------------------|-------------------------------|-------------------------|---------------------------|
| Finnish Institute of International Affairs | 3,5 | 3,6 | 0,0 | 1,4 | -1,3 |
| VATT Institute for Economic Research | 3,2 | 3,5 | 0,3 | 9,5 | 6,6 |
| Natural Resources Institute Finland | 48,0 | 51,5 | 3,5 | 7,3 | 4,5 |
| Finnish Food Authority | 0,6 | 0,5 | -0,1 | -18,3 | -20,5 |
| National Land Survey of Finland | 4,3 | 4,4 | 0,1 | 3,0 | 0,3 |
| Finnish Meteorological Institute | 9,3 | 9,5 | 0,2 | 1,9 | -0,8 |
| Geological Survey of Finland | 9,9 | 7,2 | -2,7 | -27,3 | -29,2 |
| VTT Technical Research Centre of Finland Ltd | 78,0 | 80,0 | 2,0 | 2,6 | -0,1 |
| STUK - Radiation and Nuclear Safety Authority | 1,0 | 1,3 | 0,3 | 31,7 | 28,2 |
| Finnish Institute for Health and Welfare | 13,6 | 12,3 | -1,4 | -10,0 | -12,4 |
| Finnish Institute of Occupational Health | 8,0 | 10,0 | 2,0 | 25,0 | 21,7 |
| Finnish Environment Institute | 4,0 | 10,0 | 6,0 | 148,5 | 142,0 |
| TOTAL | 183,5 | 193,8 | 10,3 | 5,6 | 2,8 |

Appendix table 5. Government research institutes' budget-funded R&D activities and total R&D funding in 2020

| Government research institution | Budgetary funding (EUR Million) | External funding, total (EUR Million) | External funding, share % | EU-funding (EUR Million) | R&D funding, total (EUR Million) |
|---|---------------------------------|---------------------------------------|---------------------------|--------------------------|----------------------------------|
| Finnish Institute of International Affairs | 3,6 | 0,8 | 17,5 | 0,1 | 4,4 |
| VATT Institute for Economic Research | 3,5 | 1,4 | 29,4 | 0,1 | 4,9 |
| Natural Resources Institute Finland | 51,5 | 36,5 | 41,5 | 5,9 | 88,0 |
| Finnish Food Authority | 0,5 | 0,6 | 53,8 | 0,2 | 1,1 |
| National Land Survey of Finland | 4,4 | 4,5 | 50,6 | 0,6 | 9,0 |
| Finnish Meteorological Institute | 9,5 | 15,0 | 61,2 | 5,7 | 24,5 |
| Geological Survey of Finland | 7,2 | 3,7 | 33,9 | 1,6 | 10,9 |
| VTT Technical Research Centre of Finland Ltd | 80,0 | 163,4 | 67,1 | 37,6 | 243,4 |
| STUK - Radiation and Nuclear Safety Authority | 1,3 | 0,1 | 6,3 | 0,0 | 1,4 |
| National Institute for Health and Welfare | 12,3 | 14,8 | 54,6 | 3,6 | 27,0 |
| Finnish Institute of Occupational Health | 10,0 | 6,5 | 39,4 | 3,0 | 16,5 |
| Finnish Environment Institute | 10,0 | 22,7 | 69,5 | 5,5 | 32,7 |
| TOTAL | 193,8 | 269,9 | 58,2 | 64,0 | 463,7 |

Appendix table 6. Central government R&D funding by administrative sector in 2015 to 2020

| Administrative sector | 2015 | 2016 | 2017 | 2018 | 2019 ¹⁾ | 2020 ²⁾ |
|---|----------------|----------------|----------------|----------------|--------------------|--------------------|
| the Parliament of Finland | 3,6 | 3,6 | 3,6 | 3,6 | 3,6 | 3,8 |
| Prime Minister's Office | 6,1 | 10,7 | 10,7 | 10,7 | 10,7 | 10,9 |
| Ministry for Foreign Affairs | 15,2 | 9,9 | 7,4 | 7,9 | 6,1 | 5,5 |
| Ministry of Justice | 2,0 | 1,4 | 1,2 | 1,0 | 0,8 | 1,1 |
| Ministry of the Interior | 0,2 | 0,2 | 0,3 | 0,5 | 0,5 | 0,5 |
| Ministry of Defence | 36,4 | 34,7 | 40,9 | 46,8 | 48,9 | 44,3 |
| Ministry of Finance | 6,9 | 5,6 | 5,1 | 5,4 | 5,1 | 5,2 |
| Ministry of Education and Culture | 1 089,9 | 1 112,3 | 1 123,3 | 1 163,0 | 1 206,1 | 1 236,6 |
| Ministry of Agriculture and Forestry | 94,9 | 72,1 | 71,3 | 54,8 | 54,8 | 57,8 |
| Ministry of Transport and Communications | 34,8 | 24,4 | 19,5 | 18,7 | 14,0 | 15,1 |
| Ministry of Economic Affairs and Employment | 615,0 | 477,2 | 516,2 | 552,0 | 563,7 | 588,2 |
| Ministry of Social Affairs and Health | 82,4 | 73,0 | 75,5 | 76,2 | 71,1 | 75,1 |
| Ministry of the Environment | 14,3 | 11,5 | 11,1 | 10,7 | 8,4 | 18,3 |
| TOTAL | 2 001,6 | 1 836,4 | 1 885,9 | 1 951,0 | 1 993,9 | 2 062,5 |

1) Data may become revised based on supplementary budgets.

2) Data may become revised based on supplementary budgets.

Appendix table 7. Central government R&D funding by administrative sector in 2015 to 2020

| Organisation | 2015 | 2015 | 2017 | 2018 | 2019 ¹⁾ | 2020 ²⁾ |
|----------------------------------|----------------|----------------|----------------|----------------|--------------------|--------------------|
| Universities | 578,0 | 585,5 | 587,1 | 615,6 | 630,5 | 690,4 |
| Universities of applied sciences | .. | .. | .. | 66,4 | 67,6 | 72,9 |
| University Hospitals | 21,7 | 18,0 | 15,0 | 21,0 | 23,8 | 25,0 |
| Academy of Finland | 415,5 | 439,0 | 449,5 | 442,7 | 470,1 | 423,6 |
| Tekes / Business Finland | 485,7 | 369,6 | 409,5 | 452,3 | 451,2 | 477,5 |
| Government research institutes | 257,9 | 196,6 | 196,5 | 190,6 | 183,5 | 193,8 |
| Other R&D funding | 242,8 | 227,7 | 228,3 | 162,4 | 167,3 | 179,3 |
| TOTAL | 2 001,6 | 1 836,4 | 1 885,9 | 1 951,0 | 1 993,9 | 2 062,5 |

1) Data may become revised based on supplementary budgets.

2) Data may become revised based on supplementary budgets.

Appendix table 8. Central government R&D funding by socioeconomic objective in 2015 to 2020

| Socioeconomic objective (NABS 2007) | 2015 | 2016 | 2017 | 2018 | 2019 ¹⁾ | 2020 ²⁾ |
|--|----------------|----------------|----------------|----------------|--------------------|--------------------|
| Agriculture | 96,7 | 76,3 | 72,8 | 56,8 | 56,4 | 59,2 |
| Industrial production and technology | 332,4 | 295,2 | 330,1 | 383,0 | 371,7 | 403,1 |
| Energy | 177,5 | 69,7 | 55,7 | 48,8 | 60,9 | 55,7 |
| Transport, telecommunication and other infrastructures | 33,0 | 28,4 | 36,8 | 29,1 | 34,1 | 33,8 |
| Defence | 37,3 | 35,5 | 41,7 | 47,5 | 49,7 | 45,1 |
| Exploration and exploitation of the earth | 24,6 | 21,4 | 22,7 | 22,8 | 18,7 | 14,8 |
| Environment | 22,1 | 43,3 | 47,9 | 49,9 | 47,3 | 60,1 |
| Health | 71,5 | 54,7 | 59,6 | 56,9 | 56,0 | 57,6 |
| Education | 6,7 | 3,1 | 3,1 | 1,6 | 1,8 | 5,8 |
| Culture, recreation, religion and mass media | 29,1 | 16,4 | 10,3 | 10,2 | 9,6 | 9,2 |
| Political and social systems, structures and processes | 86,9 | 67,8 | 72,7 | 73,4 | 70,4 | 73,1 |
| General advancement of knowledge: R&D financed from other sources than GUF | 480,0 | 516,3 | 522,1 | 528,4 | 563,7 | 528,5 |
| General advancement of knowledge: R&D financed from General University Funds (GUF) | 578,0 | 586,8 | 588,8 | 619,8 | 630,5 | 690,4 |
| Exploration and exploitation of space | 25,8 | 21,5 | 21,7 | 22,7 | 23,2 | 26,2 |
| TOTAL | 2 001,6 | 1 836,4 | 1 885,9 | 1 951,0 | 1 993,9 | 2 062,5 |

1) Data may become revised based on supplementary budgets.

2) Data may become revised based on supplementary budgets.

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Source: Government R&D funding in the state budget, Statistics Finland