

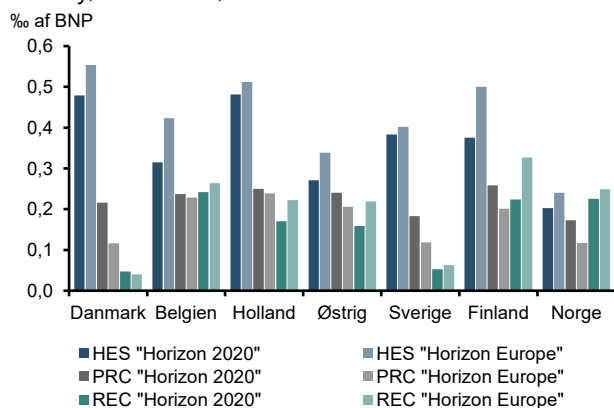
Strengthen Denmark's participation in European research and innovation programs

Denmark's participation in the EU's research programs, including Horizon Europe and the European Defence Fund, enhances the quality of Danish research and innovation (R&I). This is beneficial for Danish R&I and for Denmark's economy, as knowledge environments engage in international competition and subsequent collaboration. Danish universities secure more EU funds than most universities in the EU, but private companies and non-commercial research institutions secure fewer funds than many of their counterparts in the EU. Danish R&I can be strengthened if the portion of the expected EU funding that Danish researchers and companies receive, which exceeds Denmark's contribution to the EU's research programs, is not offset in the public research budget or returned to the Danish R&I system.

Denmark's EU Funding

With a budget of €95.5 billion for the period 2021-2027, Horizon Europe is the largest European program supporting R&I. Horizon Europe succeeded Horizon 2020, which had a budget of €80 billion for the period 2014-2020. The European Defence Fund (EDF) has a budget of €8 billion for the period 2021-2027.

Figure 1: Sector-specific Horizon funding for Denmark, Belgium, the Netherlands, Austria, Finland, Sweden, and Norway, % of GDP, 2014-2022



Note.: HES: Higher Education Institutions, PRC: Private Commercial Enterprises, and REC: Non-Commercial Research Institutions

Source: European Commission's eCORDA database, EuroStat, and own calculations

Danish universities' funding from Horizon 2020, as a per mille of GDP, was higher than or on par with the funding in Sweden, Finland, Belgium, Austria, Norway, and the

Netherlands. This has since increased, and the universities' funding from Horizon Europe is now the highest among the seven countries. Conversely, Danish companies' funding from Horizon 2020 was lower than in the other countries, except for Sweden and Norway, and has further declined under Horizon Europe. Finally, Danish non-commercial research institutions, including the Approved Technological Service Institutes (GTS institutes), sector research institutes, and others, have had lower Horizon funding in both periods compared to the other countries.

Stop Offsetting EU Funds

In recent years, there has been criticism from various quarters regarding the offsetting of Danish researchers' EU funding in Denmark's public research budget. This is due to the fact that the expected EU funding for Danish researchers, which exceeds Denmark's contribution to the EU's research programs, is included in the calculation of the public research budget. Since 2016, the public research budget has been around 1% of GDP. Consequently, the portion of the expected EU funding that exceeds Denmark's EU contribution, attributable to the quality and relevance of Danish research, is offset in the public research budget.

The Danish Calculated Contribution to and Expected Return from the EU's Research Programs:²

Denmark's contribution to the EU's research programs is included in the overall Danish EU membership fee, and therefore, there are no specific budget figures for Denmark's contribution to the EU's research programs. It can thus be calculated as the Danish financing share of the EU's total budget.

The expected return from the EU's research programs is calculated based on Denmark's average annual return rate in the most recent completed EU budget period. Denmark's expected return rate each year from 2021 to 2027 is 2.23%, calculated based on the average annual return for the period 2014 to 2020. Thus, the expected EU return is not adjusted from year to year, as might be inferred from the debate.

Danish researchers' and companies' expected annual EU return was on average approximately 325 million DKK higher than Denmark's contribution to the EU's research programs in the period 2015-2023. It is expected to be approximately 400 million DKK higher in the period 2024-

2027. If the offsetting of the EU return is stopped, the research reserve will increase accordingly. This will strengthen the incentives for Danish R&I environments to participate in the EU's research programs.

Denmark can, inspired by Norway, also channel the funds back through existing and new schemes, which can further strengthen the incentives for Danish researchers and companies to apply for EU funds.

Increase of EUopSTART's Grants to Coordinators

EUopSTART is a Danish grant scheme that supports the development of project ideas and the establishment of international research consortia prior to applying for Horizon Europe and the European Defence Fund. Coordinators and partners can receive up to 100,000 DKK and 75,000 DKK respectively. EUopSTART has an annual pool of approximately 21 million DKK. The grant is available to all applicants. According to an evaluation of EUopSTART, it increases the number of EU applications, but not the success rate of the applications, except for the success rate of SMEs, which nearly doubles. In 2022, 234 applications for EUopSTART funding as coordinators were submitted, of which 184 received a grant. Companies, GTS institutes, and hospitals accounted for approximately 45% of the grant recipients, and the vast majority applied for and received the maximum amount.⁷

Norway's Project Establishment Support (PES) also provides funds for project development, positioning, and capacity building to support Norway's EU funding acquisition. Coordinators can apply for approximately 320,000 DKK for Horizon Research and Innovation and Innovation Action applications, and approximately 130,000 DKK for Coordination and Support Action, Public Procurement of Innovative Solutions, and Pre-Commercial Procurement applications.

Denmark could, like Norway, increase the grant limit for coordinators from EUopSTART by, for example, 150,000 DKK. If 184 grants are awarded at the maximum amount, as in 2022, EUopSTART's pool would need to be increased by approximately 12.5 million DKK annually. A higher grant limit is expected to increase the number of applications.

Grants for Financing Indirect Costs

The co-financing of indirect costs for Horizon projects by research institutions constitutes a significant barrier for Danish researchers' EU funding acquisition. Indirect costs include expenses for administration, laboratories, and rent. Horizon Europe provides grants for these costs amounting to 25% of the direct costs, regardless of the type of institution. The portion of the indirect costs that exceeds the EU grant must be co-financed by the research institutions themselves. If institutions cannot allo-

cate funds for this purpose, researchers are unable to apply for EU funds. This occurs at universities and GTS institutes.^{9,10}

Denmark can improve the conditions for Danish environments to secure Horizon funds by financing a portion of the uncovered indirect costs. Denmark can draw inspiration from the Norwegian Retur-EU scheme, which provides grants to cover part of the research institutions' uncovered indirect costs, corresponding to between 33.3% and 50% of the total funds from Horizon Europe.¹¹

The grant for Danish research institutions could be based on the difference between Horizon Europe's overhead rate and the overhead rate of 44% provided by Danish public funds to Danish universities and sector research institutes.¹² Danish research institutions would thus receive an additional grant equivalent to 19% of the Horizon funding. In 2022, Danish research institutions secured a total of 1.9 billion DKK, with non-commercial research institutions accounting for 8% of this amount. With a total Horizon funding of 1.9 billion DKK, implementing this scheme would require an increase of 370 million DKK. Additionally, a higher grant limit for EUopSTART grants and a performance-based grant scheme similar to Norway's Retur-EU scheme are expected to increase the Horizon Europe funding secured by research institutions.

The two proposals are expected to increase Horizon funding and place Danish environments even more centrally in European collaboration. It is estimated that the two proposals could result in a grant of approximately 400 million DKK, depending on the resulting increase in Horizon funding and the size of Horizon Europe's annual pool. This amount roughly corresponds to the difference between the expected EU funding and the calculated EU contribution today. If the reinvestment of funds into the Danish R&I system increases Horizon Europe funding by 20% compared to the 2022 level, this would correspond to a total increase in R&I funds of approximately 1 billion DKK.

For further information:



Frede Blaabjerg,
Chairman of DFIR
Phone: 21 29 24 54
E-mail: fbl@et.aau.dk



Mette Birkedal Bruun,
Vice-Chairman of DFIR
Phone: 24 87 46 48
E-mail: mabb@teol.ku.dk

Notes:

¹ DFIR. 2021. [Årsrapport](#)

^{2,3} [Alm. del spørgsmål 236. Uddannelses- og Forskningsudvalget 2022-23.](#)

⁴ From 2023, it became possible to receive grants for EDF applications.

⁵ The grant limits were raised in 2023 from 75,000 DKK and 50,000 DKK, respectively.

⁶ CFA. 2022. [Evaluering af Uddannelses- og Forskningsstyrelsens tilskudsordning EUopSTART.](#)

⁷ Uddannelses- og Forskningsstyrelsen

⁸ Norges Forskningsråd. 2024. <https://www.forskningsradet.no/en/call-for-proposals/2021/project-establishment-positioning-horizon-europe/>

⁹ DEA. 2019. [Hvordan sikrer vi de bedst mulige økonomiske vilkår for universiteternes forskning?](#)

¹⁰ CFA. 2023. [Evaluering af de danske GTS-institutter](#)

¹¹ Norge Forskningsråd. 2024 [Kompensationsordning for deltagelse i Horizont Europa \(Retur-EU\).](#)

¹² The overhead rate of Danish public funds for GTS institutes is 20%, which is lower than Horizon Europe's overhead rate.