

The Danish Foundation Knowledge Center – Our work on data

**Fonden
Videnscenter**

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The Danish Foundation Knowledge Center - what we do:



We collect and analyze knowledge about the foundations and their work



We share our knowledge with our members and the public



We are a meeting place for our members that provides easy access to new knowledge and knowledge sharing as well as networks with other foundations

How do we measure foundations?

2 pillars for data and analysis

1. Partnership with Statistics Denmark:

2. Own register + collection from surveys and desk research studies

- Sensitive (investments)
- Own standard
- Limit access to data

Basis for our own analysis

Survey example – comparison on availability of private foundation data in 17 EU countries

- No reporting standards (except for annual report)
- Most EU member states collect some data grants, expenditure, and assets
- Limited access as they are kept by public authorities
- Data (grant amount/purpose, expenditure, and foundational assets) are difficult to obtain
- Comparisons are difficult - beyond comparing individual foundations

Limited European Data on foundations as donors

Collaboration: Statistics Denmark

**Register of
Foundation
grants**

Benefit:

Standardized collection (Data quality, Replicability)

Data security (GDPR compliant/Exception)

Reporting standard (e.g. Frascati-manual)

Access

Data-exchange with other registers (e.g. patents)

**Register of
foundation
ownership**

Challenge:

Lack of “hands-on” / they need help

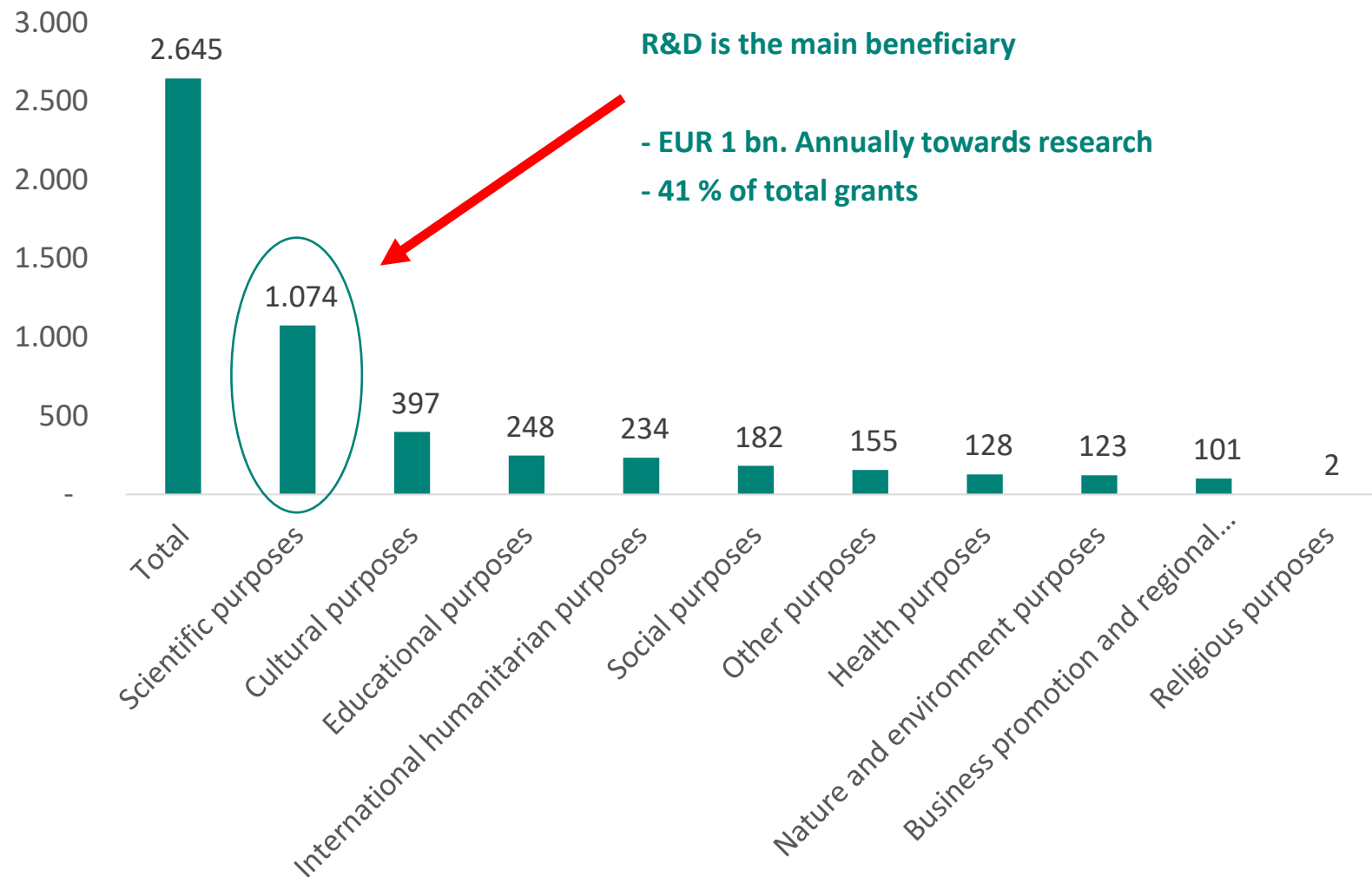
Dependent on own knowledge of possibilities

Lack of control if disagreement

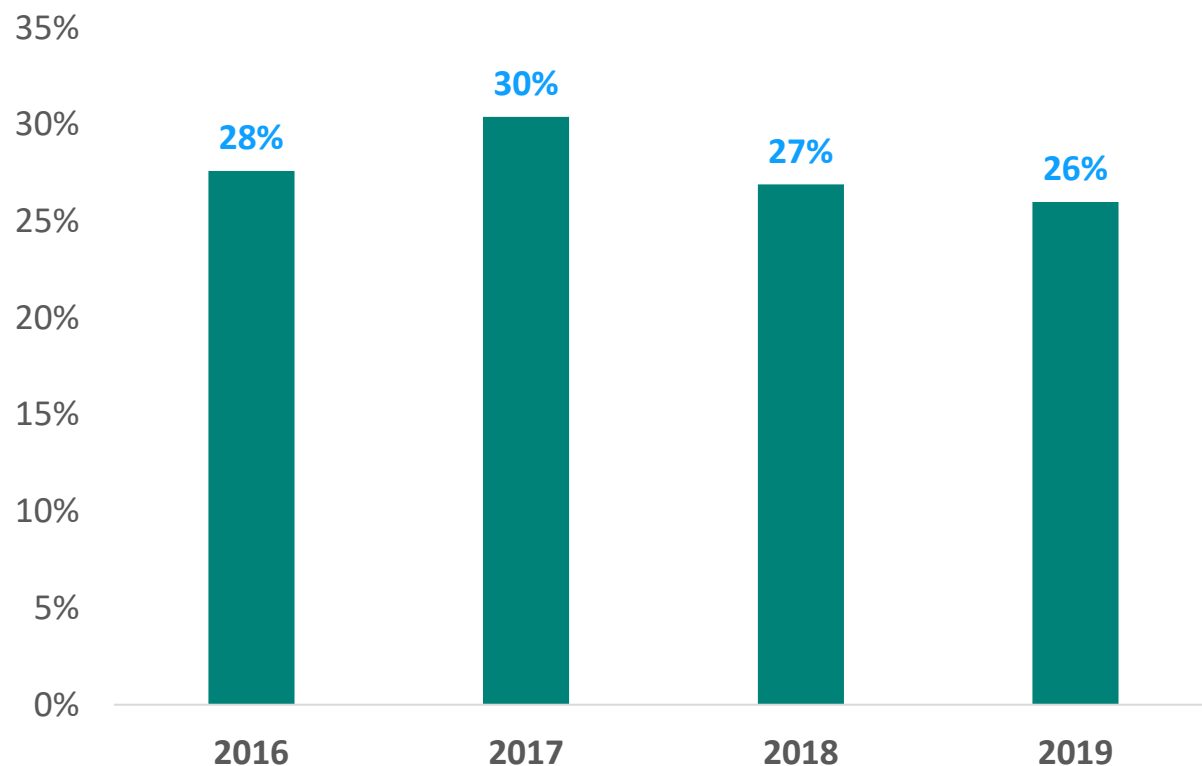
Data is no better, than those who report it

If the reporting standard has challenges, the data is challenged

Private foundation grants in EUR mn. divided by purpose 2019



Foundation grants to research measured by share of the total public research budget from 2016-2019



Why is it important!

Foundation grants for research make up 25 %+ of the research budget

Source: Statistics Denmark, processed and compiled by The Danish Foundation Knowledge Center

* The amount is defined as foundation grants for scientific purposes' share of the sum of the public research budget and foundation grants for scientific purposes

Current status on foundation individual grant register for R&D

Register on Danish grants 2019 for R&D

Registration of

- A. 1.838 individual grants
- B. EUR 883 mn.
- C. 82% of the total grants for scientific purposes

Register: Danish industrial foundation ownership



R&D sub-register

In 2019 there were 155 foundation-owned companies included in the official OECD R&D statistics (59 own-produced) which showed an impact of EUR 2,2 bn./ 11.568 R&D employees.



Potential addition: R&D sub-register

Combination with patent database

- Applications
- Approved patents

Collaboration with Prof. Steen Thomsen, Copenhagen Business School

Grants - Follow the grant from donor to recipient

Grants to scientific purposes based on research area in 2019

	Number of grants	DKK mn.	Total	Percentage of total	Scientific purposes	Number of grants	DKK mn.	Total	Percentage of total
Scientific purposes - individual grants	1.838	6.570	7.994	82%					
Natural science	290	1.933	2.031	95%	Social sciences	165	329	458	72%
Mathematics	13	49			Psychology	28	58		
Computer science	10	59			Economics	17	39		
Physics (including biophysics)	48	203			Business economics	11	39		
Chemistry	24	160			Pedagogy	11	44		
Geology and physical geography	12	49			Sociology, anthropology	33	73		
Biochemistry	38	929			Law	6	9		
Biology	110	324			Political science	22	32		
Other natural sciences	35	160			Urban planning	2	2		
Health sciences	1.115	3.139	4.029	78%	Other social sciences	35	33		
Basic medicine	205	1.346			Humanities Science	122	181	258	70%
Pharmacology and pharmaceutical chemistry	17	18			History	22	51		
Clinical medicine	504	1.348			Archaeology	19	42		
Dentistry	1	-			Linguistics and Philology	10	12		
Health care	6	7			Literature	7	8		
Care, etc.	4	9			Philosophy	16	20		
Social medicine and public health	32	32			Theology and religion	3	2		
Medical biotechnology	22	155			Music and theatre science	3	1		
Other health sciences	324	224			Art and architecture	28	36		
Technical Science	101	321	413	78%	Film and media science	2	1		
Construction and transport	12	14			Media and communication	1	6		
Electronics, electrical engineering	7	53			Other humanities sciences	11	2		
Mechanical engineering and production	3	15			Agricultural and veterinary science	10	524	554	95%
Chemistry technics	6	43			Veterinary and food science	2	6		
Materials	9	13			Biotechnology in agriculture	8	518		
Medico technics	4	-			Interdisciplinary research	35	145	251	58%
Energy and environmental engineering	9	7							
Biotechnology, energy and environment	5	8							
Industrial biotechnology	35	160							
Nanotechnology	4	8							
Other technical science	7	-							

Detailed research-areas matching Frascati

Barriers

1. Data on individual grants / consent-based
2. Getting data based on consistent definitions
3. Educating those reporting (we have seminars)
4. Administrative costs of reporting
5. Voluntary reporting variables

Our learnings

- Increased focus on the research funding eco-system – inclusion of other public and private funding sources in the same DB (like our analysis on culture)
- Standards for comparisons are very important for consistency
- Data takes time to get right / complains when changed
- Registers and annual collection increases data quality (over time)
- Education of those reporting is required to secure data quality