

A Model for Assessment of the Publication Output at Research Institutions

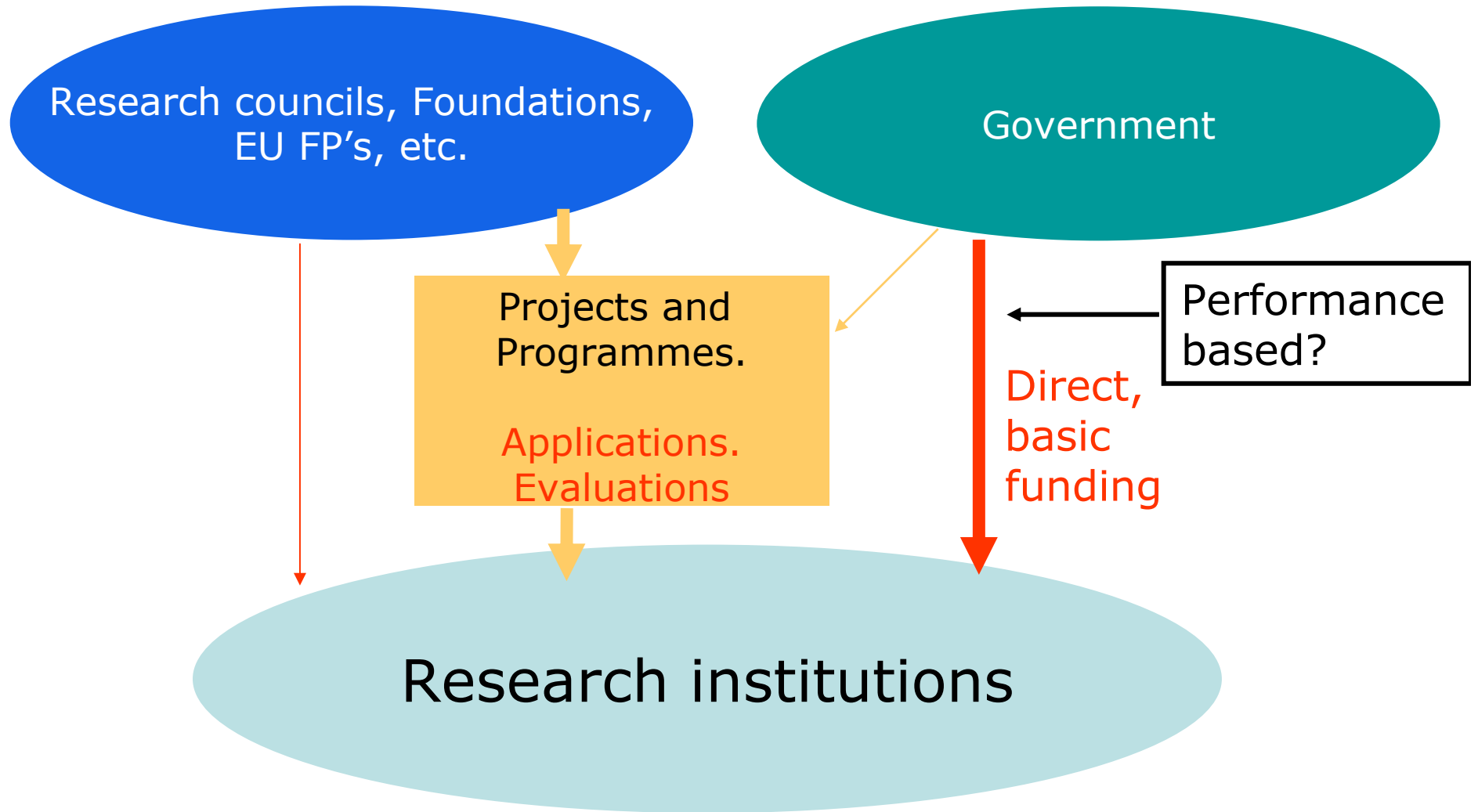
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Overview of this presentation:

- The background
- The model
- The experiences

"The dual funding system"



Models for performance based funding of research institutions

	Panel evaluation, ranking	Bibliometric models
All disciplines; all publications		<p>AUS → N DK</p> <p>SF → N</p> <p>S → B</p>
All disciplines; selected publications	<p>GB</p>	
Selected disciplines; all publications		
Selected disciplines; ISI data		<p>B</p>

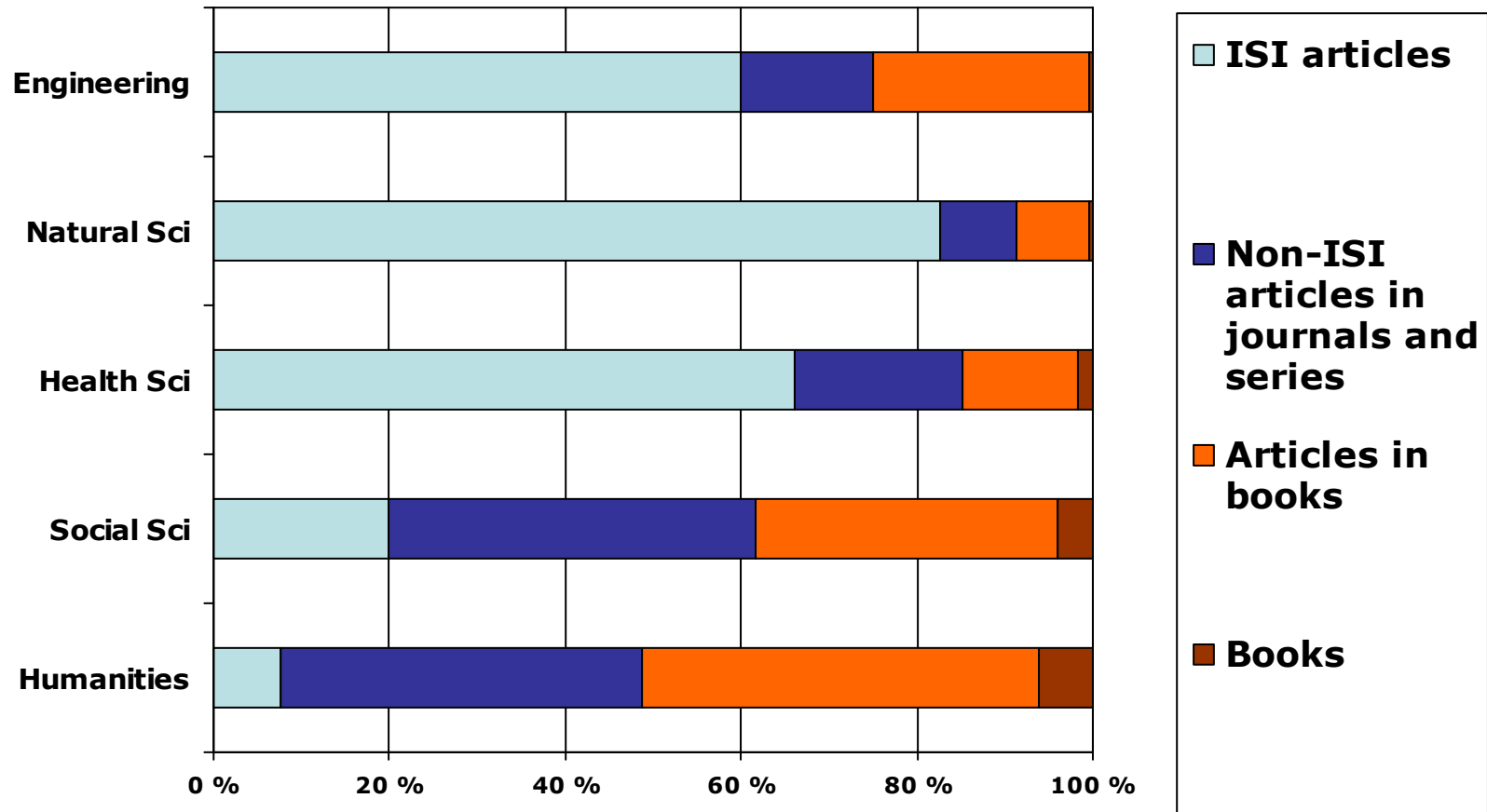
A performance indicator based on scholarly publishing was developed in 2004 by the Norwegian Association of Higher Education Institutions

The Norwegian Higher Education Sector:	The Norwegian Government required from us:
16,000 researchers... 9,000 scientific and scholarly publications annually...	Collect complete, standardized, verifiable and analyzable data for all publications!
From theology to geology, from internal medicine to international relations, from macroeconomics to nano-technology...	Weight the publications in a comparable way that at the same time stimulates research of good quality!
Seven universities and forty-seven other HE institutions with different missions and subject areas...	Make the sector agree on the model!

Publication patterns in different areas of research.

Based on complete data from Norwegian HE institutions. Fractionalized publication counts: N = 22.133,6 publications from 2005-2007.

Scholarly publication types in Norway's HE sector



A National Research Information System (NRIS) with complete structured metadata for all scholarly publications from all Norwegian research institutions

The screenshot displays the Frida website interface. At the top left is the 'Frida' logo. To its right is the tagline 'Research results, information and documentation of scientific activities'. Below the logo is a 'Norsk versjon' link with a Norwegian flag icon. A registration notice states: 'In order to register data in Frida, you must be a academic or administrative employee.' A vertical navigation menu on the left includes links for 'Main page', 'Research results', 'Researchers', 'Projects', 'Research Groups', 'Log on', and 'About Frida'. The main content area features search filters: 'Back to search', 'Short format', and 'Full format'. A 'Search criteria' box shows filters for 'From: 2007 To: 2007 Reporting year Unit: Department of Economics (UiO) Main category: Journal publication Main category: Book Main category: Part of a book/report All publishing channels'. Below this, it indicates 'Showing results 1-50 of 53' with navigation arrows. A list of six search results follows, each with a numbered link, author names, title, journal information, and the institution 'UiO'.

Frida Research results, information and documentation of scientific activities

[Back to search](#) [Short format](#) [Full format](#)

Search criteria:
From: 2007 To: 2007 Reporting year Unit: Department of Economics (UiO) Main category: Journal publication Main category: Book Main category: Part of a book/report All publishing channels

Showing results 1-50 of 53 << Previous 1 2 Next >>

- [1. Alders, Maarten; Keilman, Nico; Crujisen, Harri.](#)
Assumptions for long-term stochastic population forecasts in 18 European countries.. *European Journal of Population* 2007 ;Volume 23. p. 33-69
UiO
- [2. Asheim, Geir Bjarne.](#)
Can NNP be used for welfare comparisons?. *Environment and Development Economics* 2007 ;Volume 12.(1) p. 11-31
UiO
- [3. Asheim, Geir Bjarne.](#)
Economic analysis of sustainability.. I: *Justifying, Characterizing and Indicating Sustainability*. Springer Science+Business Media B.V. 2007 ISBN 978-1-4020-6199-8. p. 1-15
UiO
- [4. Asheim, Geir Bjarne; Buchholz, Wolfgang; Hartwick, John M.; Mitra, Tapan; Withagen, Cees.](#)
Constant savings rates and quasi-arithmetic population growth under exhaustible resource constraints. *Journal of Environmental Economics and Management* 2007 ;Volume 53.
UiO
- [5. Asheim, Geir Bjarne; Mitra, Tapan; Tungodden, Bertil.](#)
A new equity condition for infinite utility streams and the possibility of being Paretian. I: *Intergenerational Equity and Sustainability*. Macmillan 2007 ISBN 0-230-00786-4.
UiO
- [6. Barrett, S; Hoel, Michael Olaf.](#)
Optimal disease eradication. *Environment and Development Economics* 2007 ;Volume 12. p. 627-652
UiO

Principles behind the use of NRIS-data in a performance based funding model

- **Completeness:** All scholarly publications should be included
- **Simplicity:** All researchers should understand the indicator and its measurement
- **Transparency:** Every institution can see and check all other institutions' data. The NRIS is also online and open to society at large.
- **Bottom up:** Data are collected at the institution level. Mutual quality control of data.
- **Multiple use of the data:** CV's, applications, evaluations, annual reports, internal administration, bibliography for Open Archives, links to full text, etc.

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Delimitation of publication data by definition

Definition

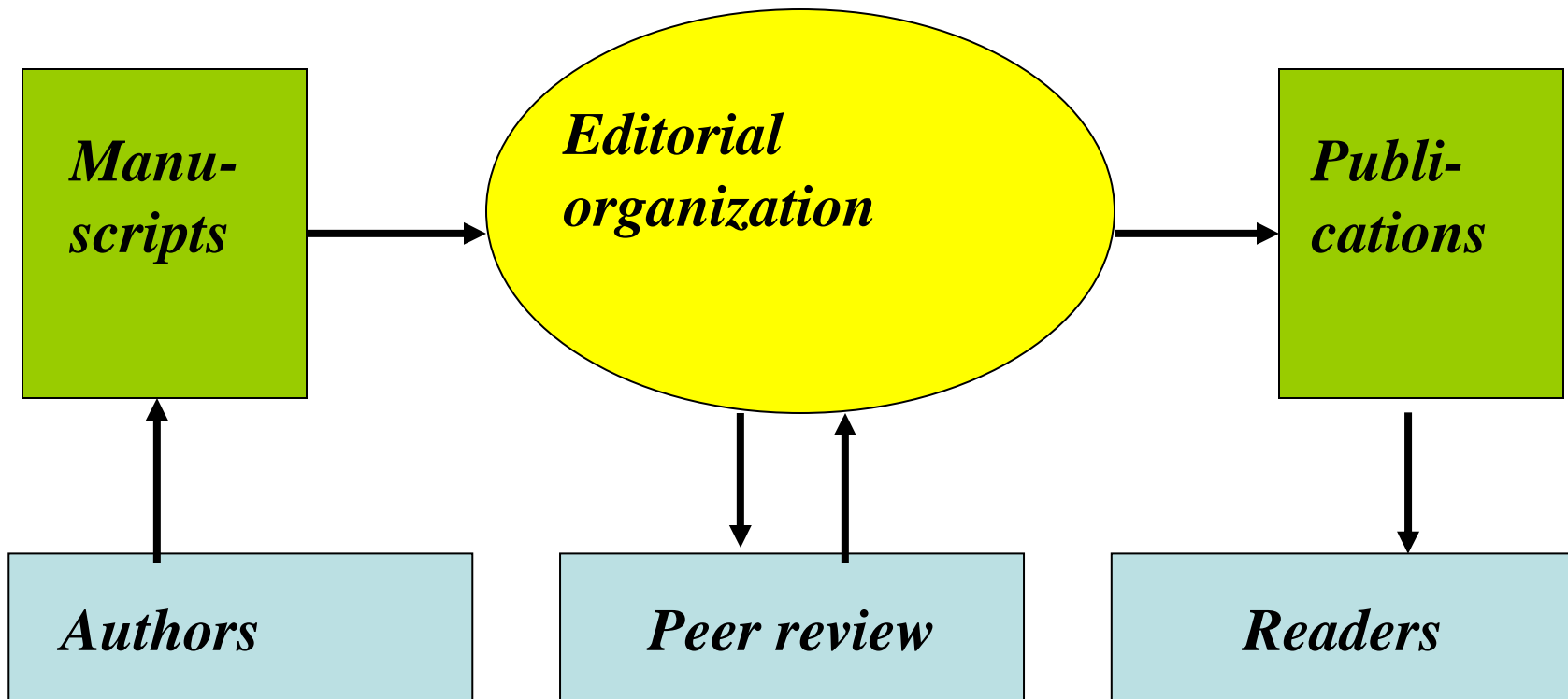
A scientific or scholarly publication must:

1. present new insight
2. in a form that allows the research findings to be verified and/or used in new research activity
3. in a language and with a distribution that makes the publication accessible for a relevant audience
4. in a publication channel with peer review*)

*) In addition: Publication channels with authors coming mainly from only one institution are not included.

"Publication channels", not only journals

Some specific **periodicals, series and web sites (ISSN)**
act as *scientific or scholarly publication channels*
Some specific **publishers of ISBN-titles** do as well



Three main publication types

- 1) Article in ISSN-title
- 2) Article in ISBN-title
- 3) ISBN-title

<i>Channel</i>		
	<i>Type</i>	E.g. scientific article in <i>Nature</i> or scholarly ISBN-title on <i>Oxford University Press</i> .

Dynamic records of scientific and scholarly ISSN-titles og ISBN-publishers

17 000 ISSN-titles og 960 book publishers so far

0001-9887	Africa Today
0001-9909	African Affairs
1062-4783	African American Review
0263-0338	African Archaeological Review
0001-9933	African Arts
1017-6772	African Development Review
0145-2258	African Economic History
1021-3589	African Entomology
1472-5843	African Identities
1684-5315	African Journal of Biotechnology
1021-9730	African Journal of Crop Science
0141-6707	African Journal of Ecology
1438-7890	African Journal of Environmental Assessment and Management
1684-5378	African Journal of Food, Agriculture, Nutrition
1015-8618	African Journal of Neurological Sciences
0065-4000	African Literature Today

CABI Publishing
Cambridge University Press
Cappelen Akademisk Forlag
Carfax Publishing
Carl Heymanns Verlag
Carlsson bokförlag
Catholic University of America Press
Central European University Press
Channel View Publications
Chinese University Press
Christian Ejlers's Forlag

All channels can be searched, and new channels can be suggested

The screenshot shows a web browser window with the address bar containing "Norwegian register of scientific journals and publishers". The page header includes "You are here: NSD: Information on research and higher education:" and "Norwegian version". The main title is "Norwegian register of scientific journals and publishers". A left sidebar contains the NSD logo and the text "DBH". The search section is titled "Search" and contains the following fields and controls:

- Title:
- ISSN: [\[Search help\]](#)
- Level:
- Administrative Status:
- Scientific dicipline:
- Type (journal/publisher):
- Subject area:

Below the search fields, there is a text prompt: "Are you missing a specific journal/serie/publisher? [Make a suggestion to the register](#). To check status for your previous suggestions, go to ["My user account"](#)".

At the bottom right, there is a footer: [\[My user account\]](#) - NSD © [Contact NSD](#)

Publication channels on two quality levels

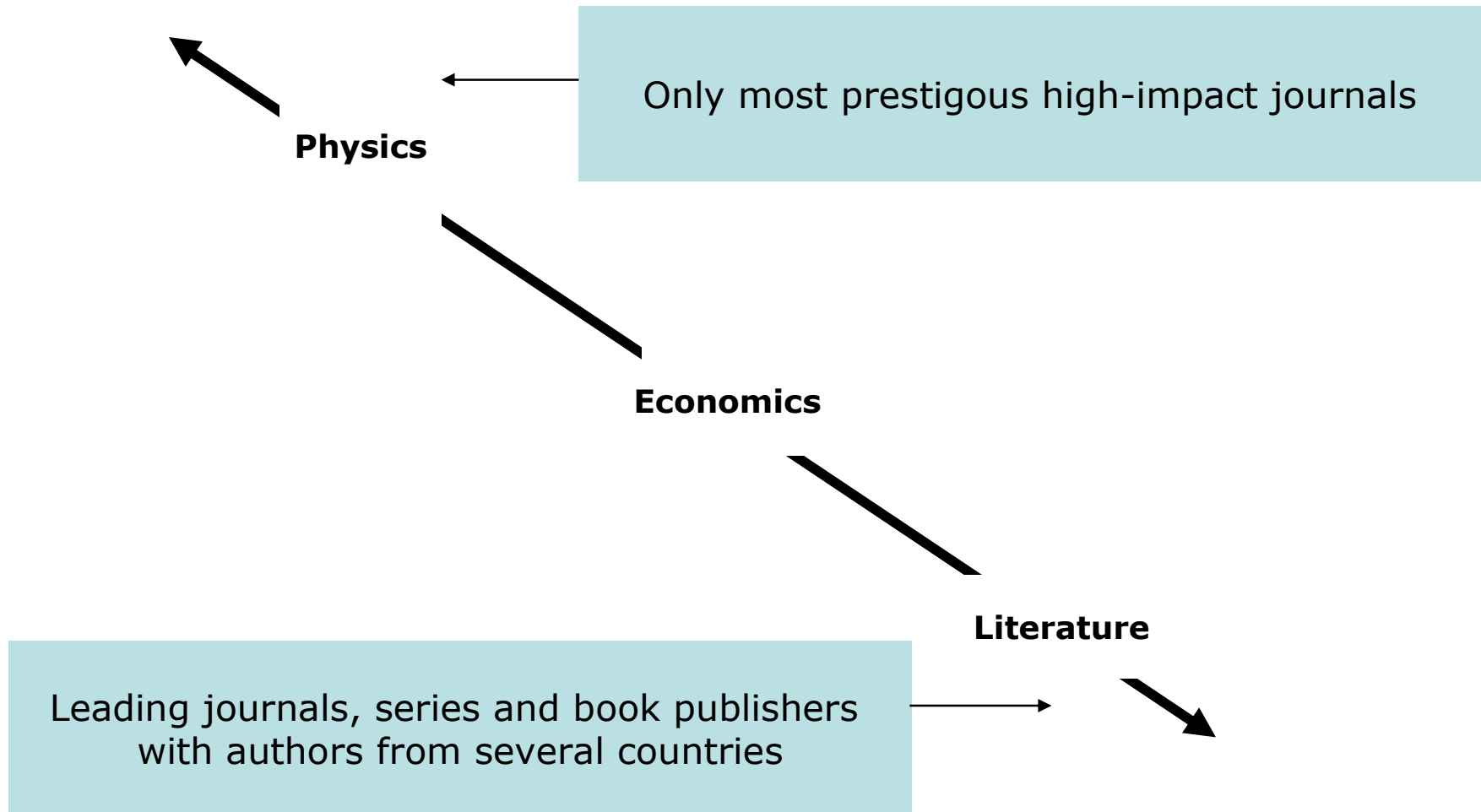
Level 2 consists of specific publication channels nominated in collaboration with **the national councils in each field of research.**

These publication channels may not publish more than **20 per cent** (worldwide) of the publications in the field.

Level 2: Higher points

Level 1: Normal points

Differentiated criteria for nomination to level 2

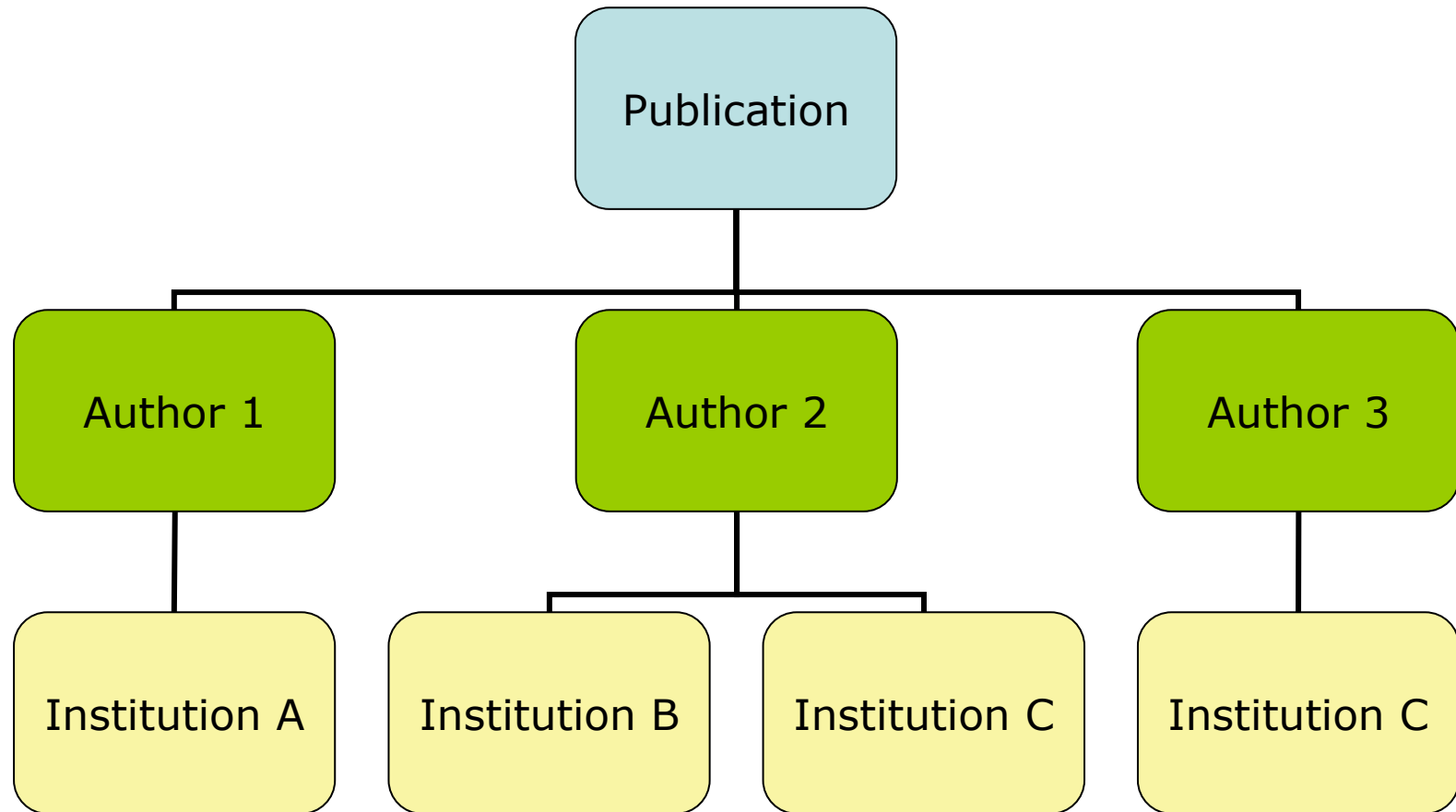


Why two levels?

- We want the institutions to encourage their researchers to seek the most competent and critical peer review and a wide relevant readership
- We want to avoid a tendency to increase publishing in less significant channels

Fractionalized publication counts

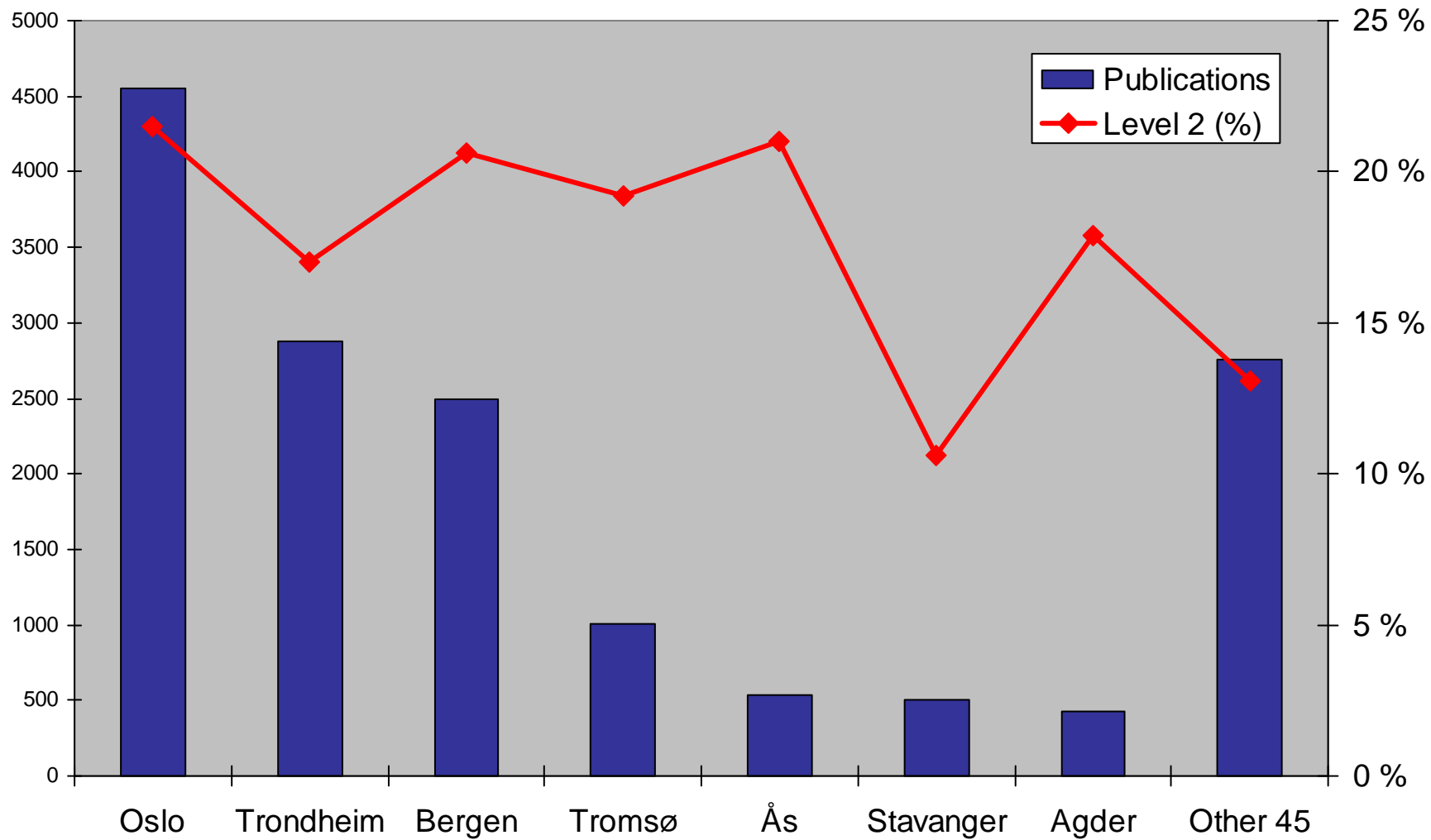
(Publications are attributed to institutions according to **the published addresses**)



Publication points for the budgets

Publication type	Level 1	Level 2
Article in ISSN-title	1	3
Article in ISBN-title	0,7	1
ISBN-title	5	8

Research activity measured by publication output at 7 Norwegian universities and 45 other HE institutions



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Poster in the toilets of the Centre of Excellence in linguistics at the University of Tromsø

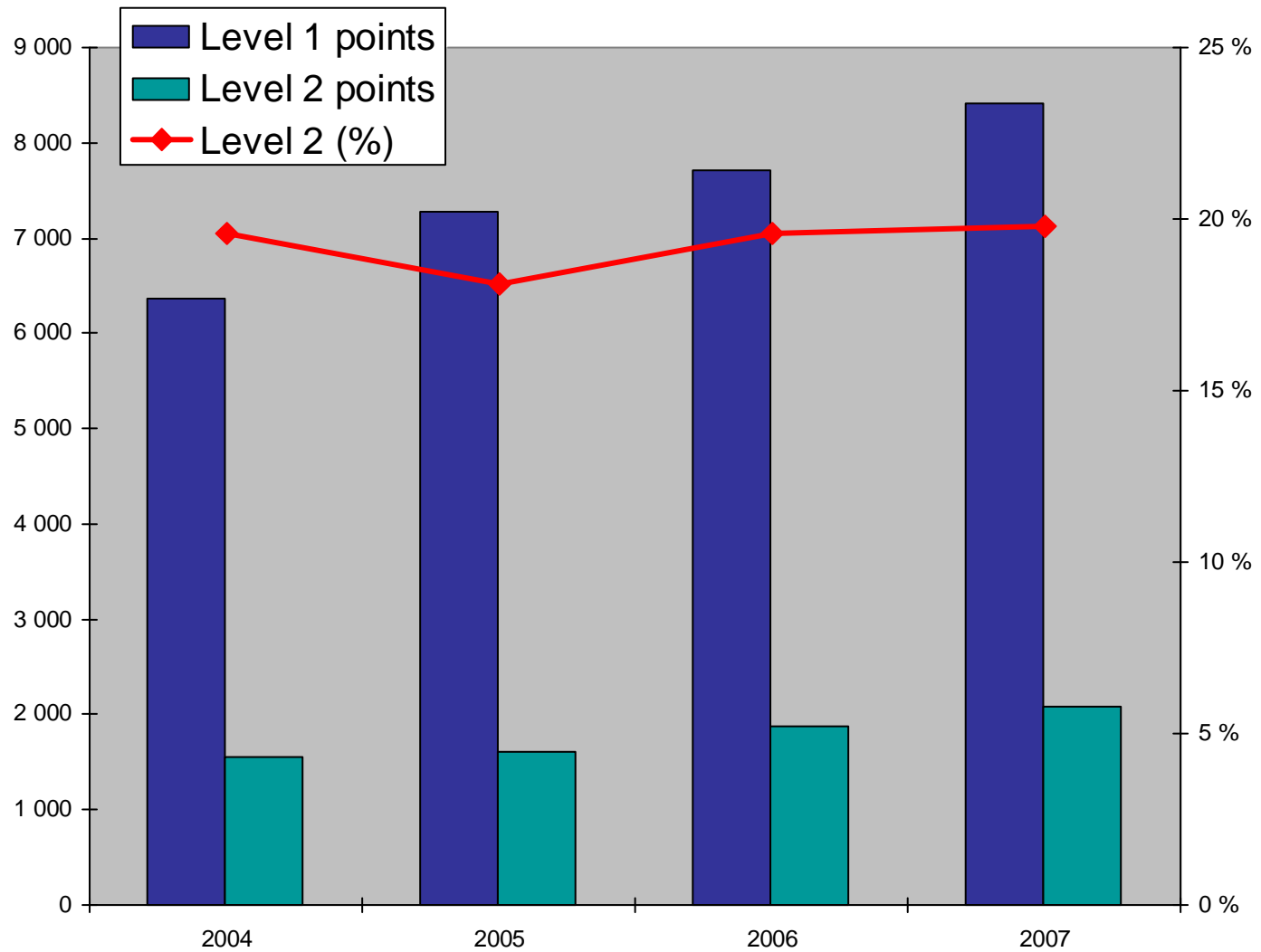
Hey! Need something to think about in here? How about this:

Which level 2 journal will you send an article to this semester?

Bilingualism Bilingualism Language and Cognition Brain and Language Canadian
Journal of Linguistics-*Revue Canadienne de Linguistique* Cognitive Linguistics Deutsche
Sprache Diachronica Die Sprache Francais Moderne Historiographia
Linguistica International Journal of Bilingual Education and Bilingualism
International Journal of Bilingualism Journal of African Languages and Linguistics
Journal of Child Language Journal of Comparative Germanic Linguistics Journal of
French Language Studies Journal of Germanic Linguistics Journal of Linguistics
Journal of Neurolinguistics Journal of Phonetics Journal of Semantics
Journal of Slavic Linguistics Language Language Acquisition Language and Speech
Lingua Linguistic Inquiry Linguistic Typology Linguistics Linguistics and
Philosophy Natural Language Semantics Natural Lg & Ling theory Phonology *Revue
des Langues Romanes* Russian Linguistics Sprachtypologie und Universalienforschung
Sprachwissenschaft Studia Linguistica Studies in Language Studies in Second Language
Acquisition Syntax Syntax and Semantics *Travaux de Linguistique* *Voprosy
jazykoznanija* Zeitschrift für Dialektologie und Linguistik Zeitschrift für Germanistische
Linguistik Zeitschrift für Sprachwissenschaft

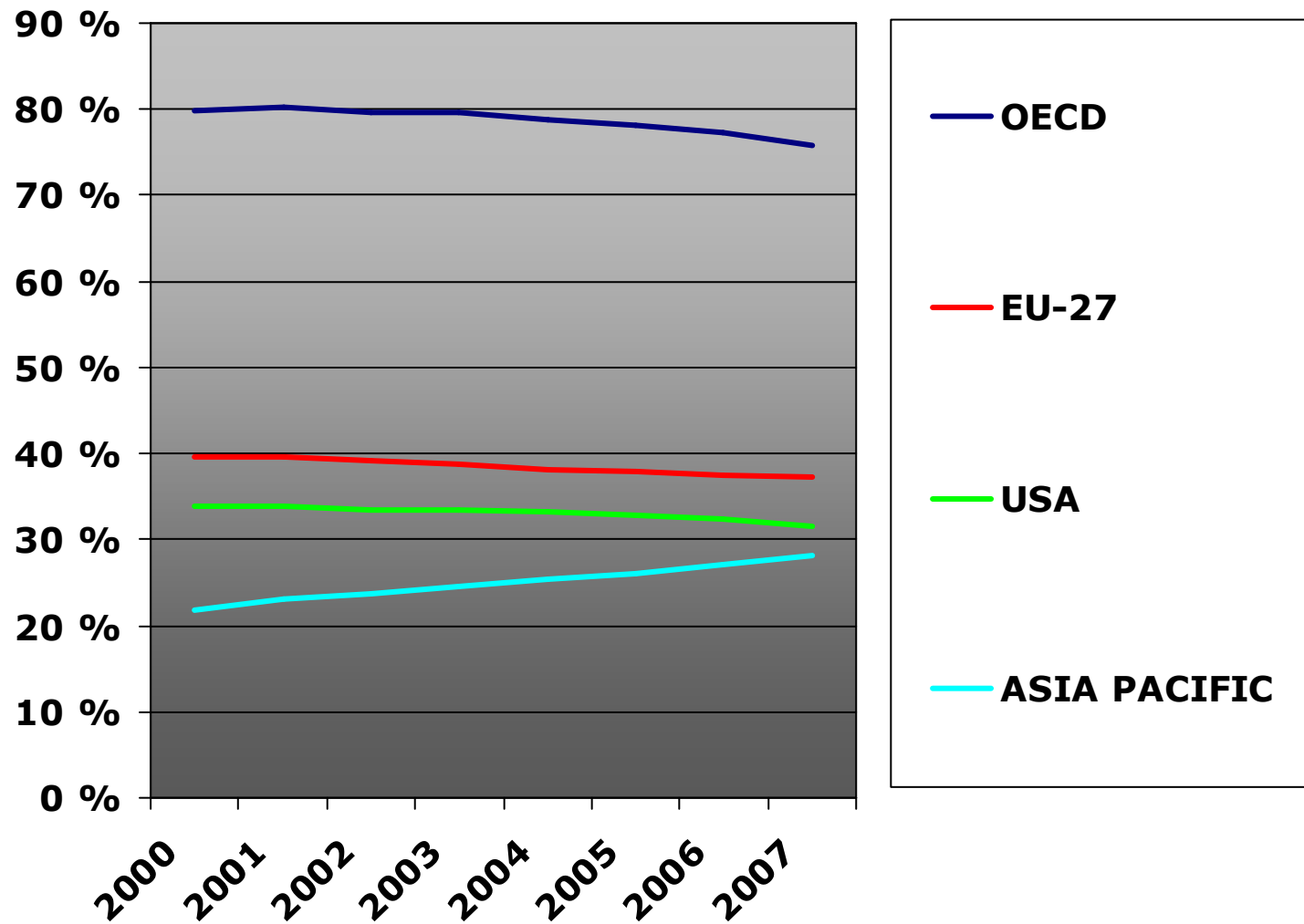
Publication points in Norway's HE sector 2004-2007

The increases were by 14 per cent in 2005, 6 per cent in 2006, and 9 per cent in 2007



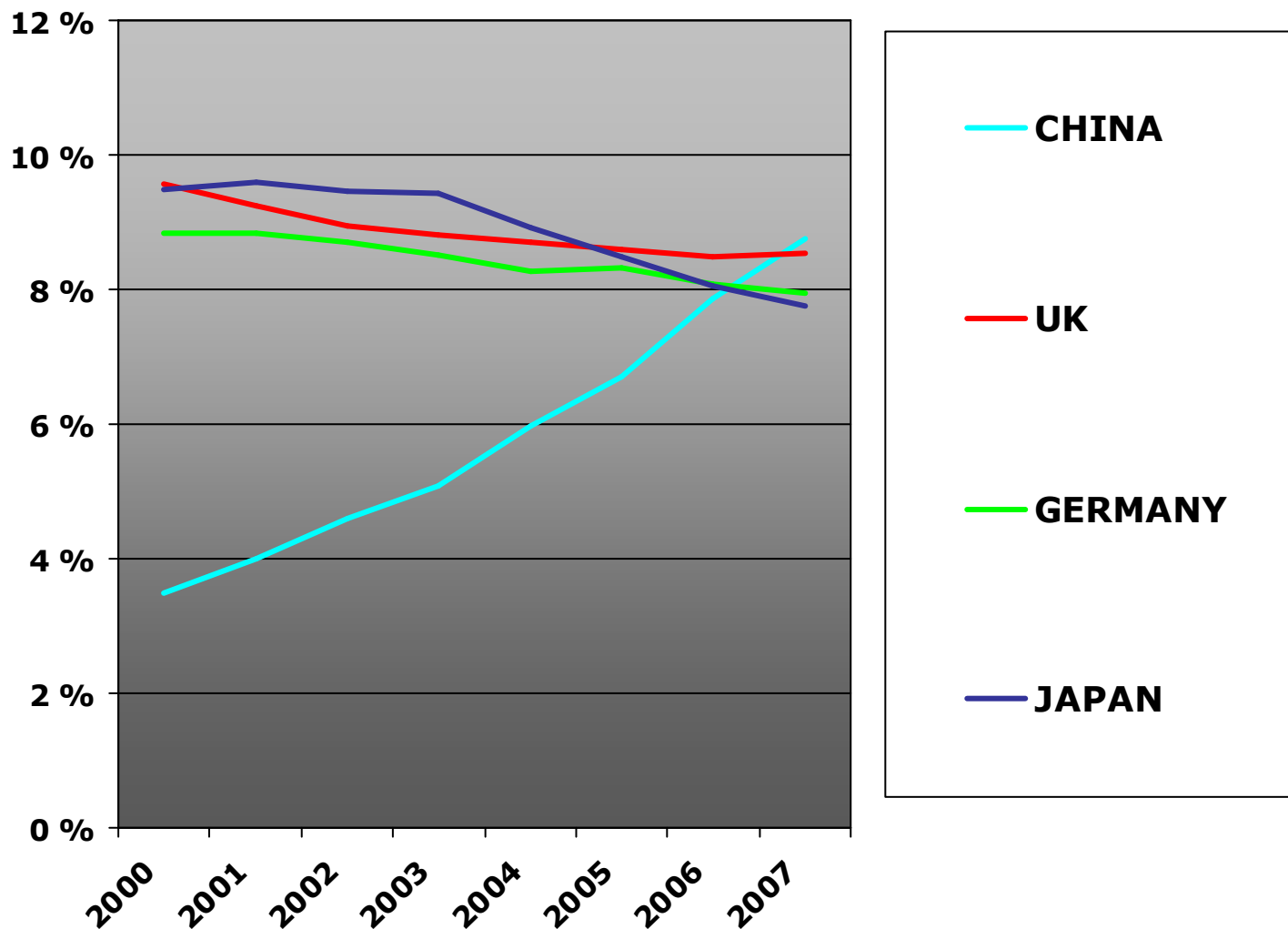
Shares in the world's scientific output (ISI 2000-2007)

Source: National Science Indicators (NSI), Thomson Reuters



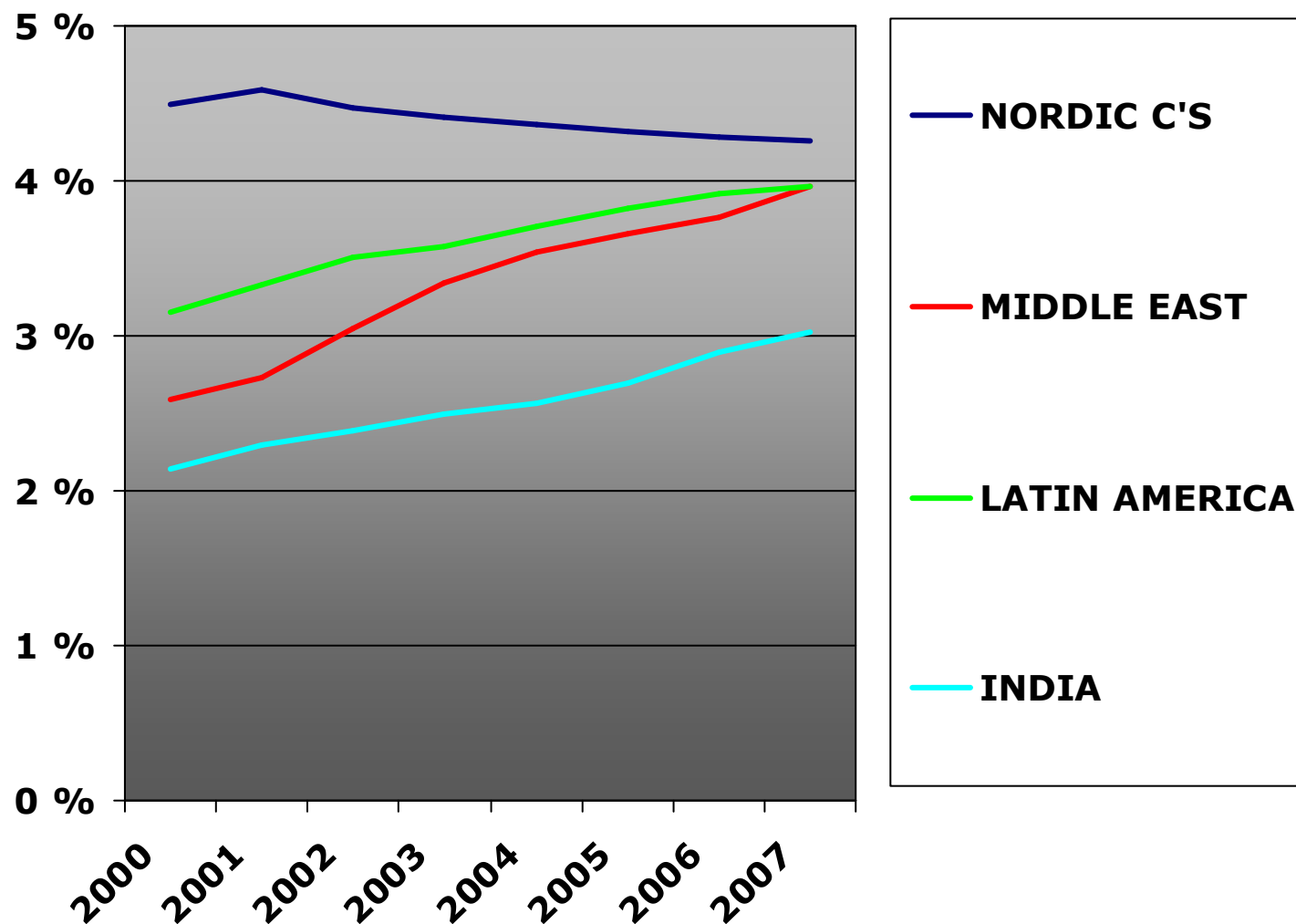
Shares in the world's scientific output (ISI 2000-2007)

Source: National Science Indicators (NSI), Thomson Reuters



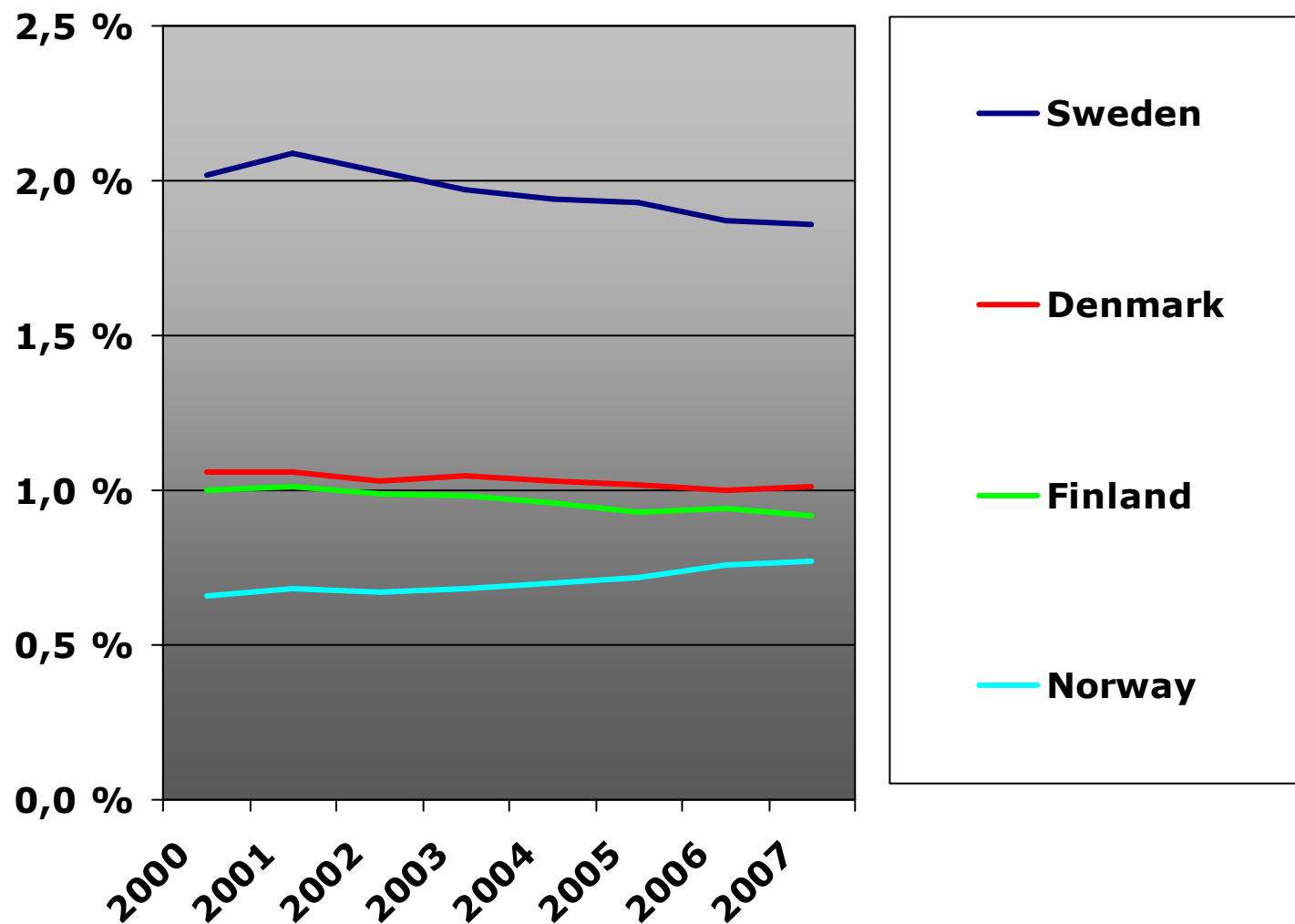
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Shares in the world's scientific output (ISI 2000-2007)

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Concluding remarks

■ Competing models?

1. Panels & Ranking
2. Publications & Citations based on ISI or Scopus
3. NRIS with complete data from the institution level

■ Combined models?

- Panels may need to be informed by bibliometrics
- Data from bibliographic data sources (ISI, Scopus) need to be validated and approved of at the institution level
- So why not validate those data in a “bottom up” NRIS that also includes the other publications?