

What value have Usage Statistics for your library?

*Measuring the effects of electronic
information services on academic
research*

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Manager*

2008



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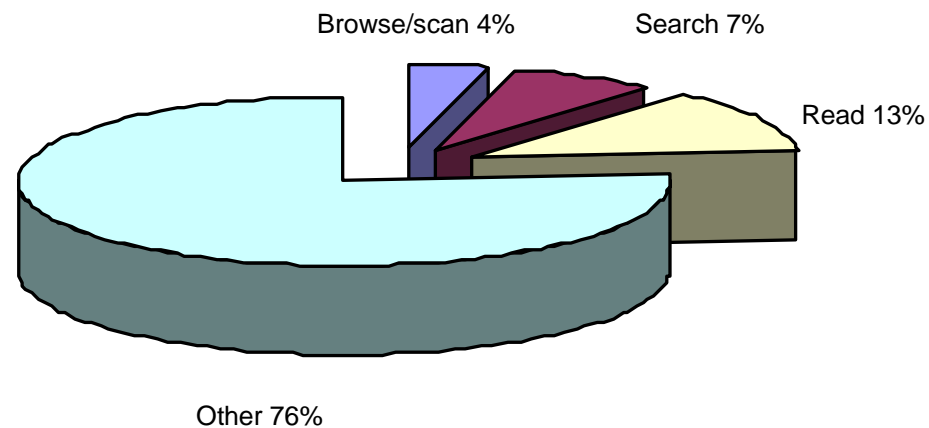
1. Kollöffel study (2004)
2. Possible correlation between improved access, reading and article output
3. Discussion of the major findings

Kollöffel study

- A study by Elsevier, undertaken in 2004, in cooperation with the Biochemistry Department of the University of Utrecht (The Netherlands), requesting participants to estimate the effects of electronic information services on academic research

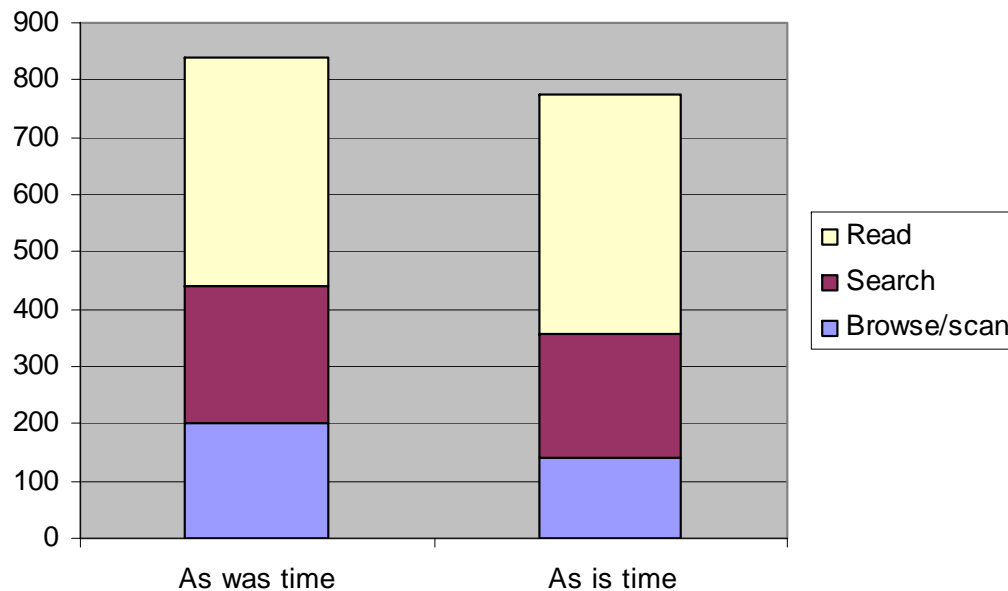
Kollöffel study: major estimations

- Content related activities account for about a quarter of all time spend in a research project



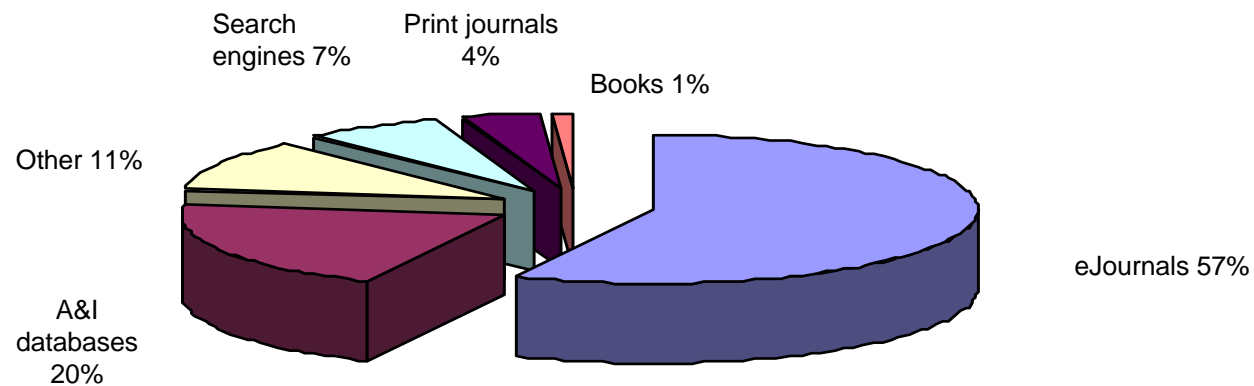
Kollöffel study: major estimations

In 2004 was estimated that overall slightly less time was spend on content related activities. Significantly less time was spend on Browse/scan (-/-30%) and Search (-/-10%) and slightly more time was spend on Read (+5%)



Kollöffel study: major estimations

- Most time on content use is spend on eJournals, followed by Abstract & Indexing databases

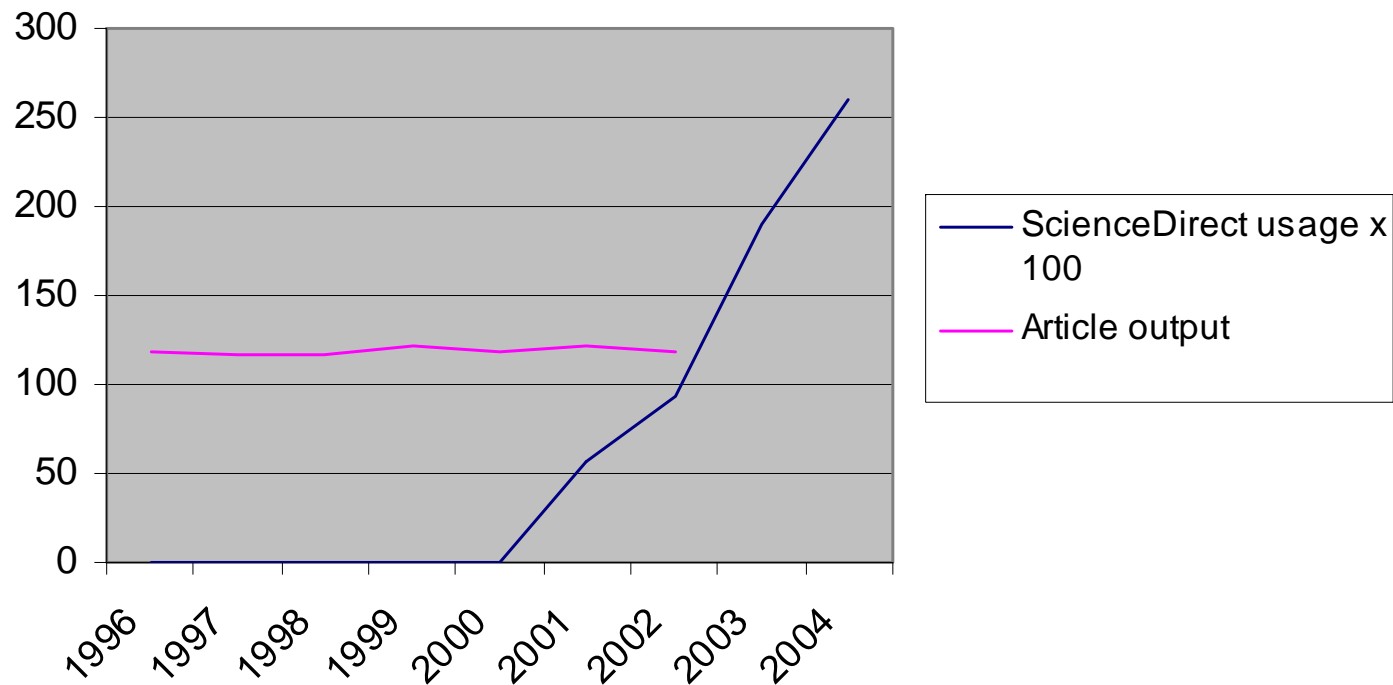


Kollöffel study: major findings

- A correlation between number of Full Text Articles requested and article production could not be derived from this study

Kollöffel study: major findings

- Between 2000 and 2003 the amount of Full Text Article requests grew with about 100% annually, article production between '96 and '02 increased with 3% annually



What are we looking for?

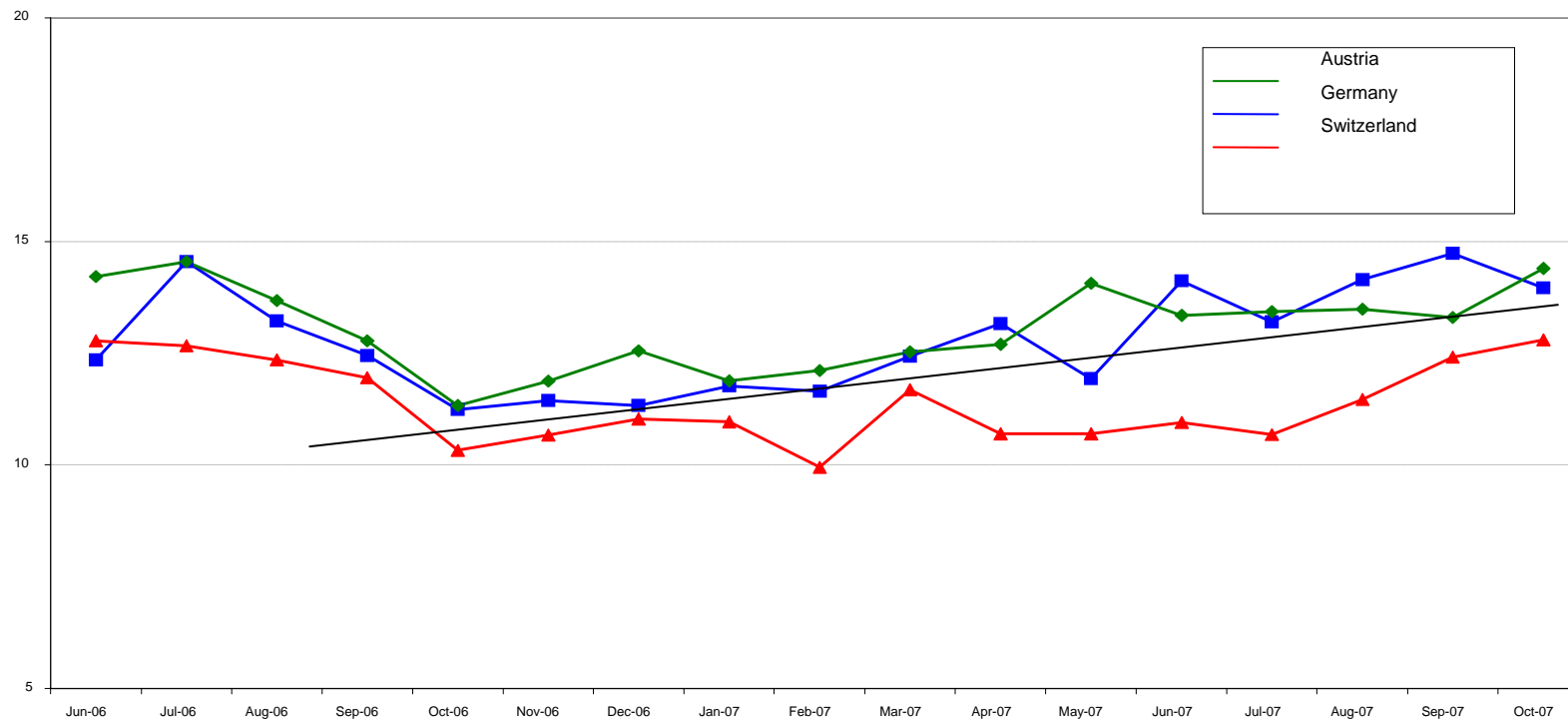
- Do researchers indeed spend less time on Search?
- Do researchers [download and] Read more?
- Is a larger content offering leading to more [downloads and] Read?
- Is there a correlation between [downloading and] Read and article production?

Is there less time spend on Search?

- In the period Oct. 2006 trough Oct. 2007 the average session length for Austria, Germany and Switzerland followed more or less the same pattern
- For Austria and Germany varied the average session length per user session between about 11 and 15 minutes
- For Switzerland varied the average session length per user session between about 10 and 13 minutes

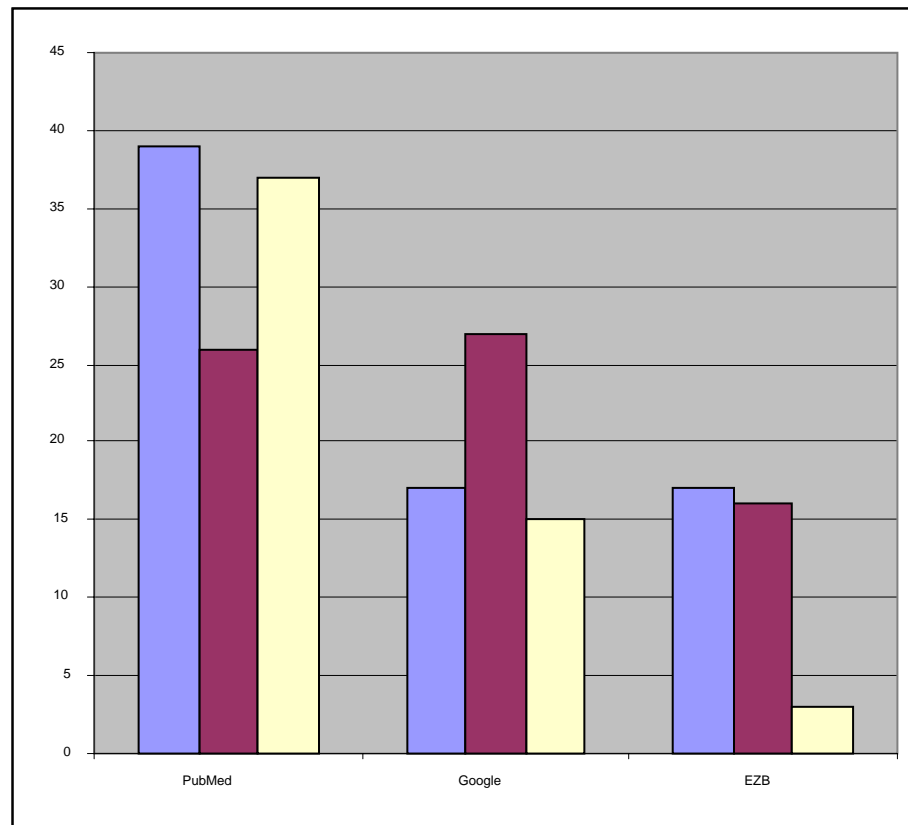
Is there less time spend on Search?

- In the period Oct. 2006 trough Oct. 2007 the average session length in the Abstract and Citation database Scopus increased 27% for all 3 countries



Referrers as guides to Full Text

- The major referrers, e.g. (abstract & indexing) databases, search engines and other Internet platforms, in Austria, Germany and Switzerland are: PubMed, Google and the EZB (Regensburg)



Blue=Austria

Pink=Germany

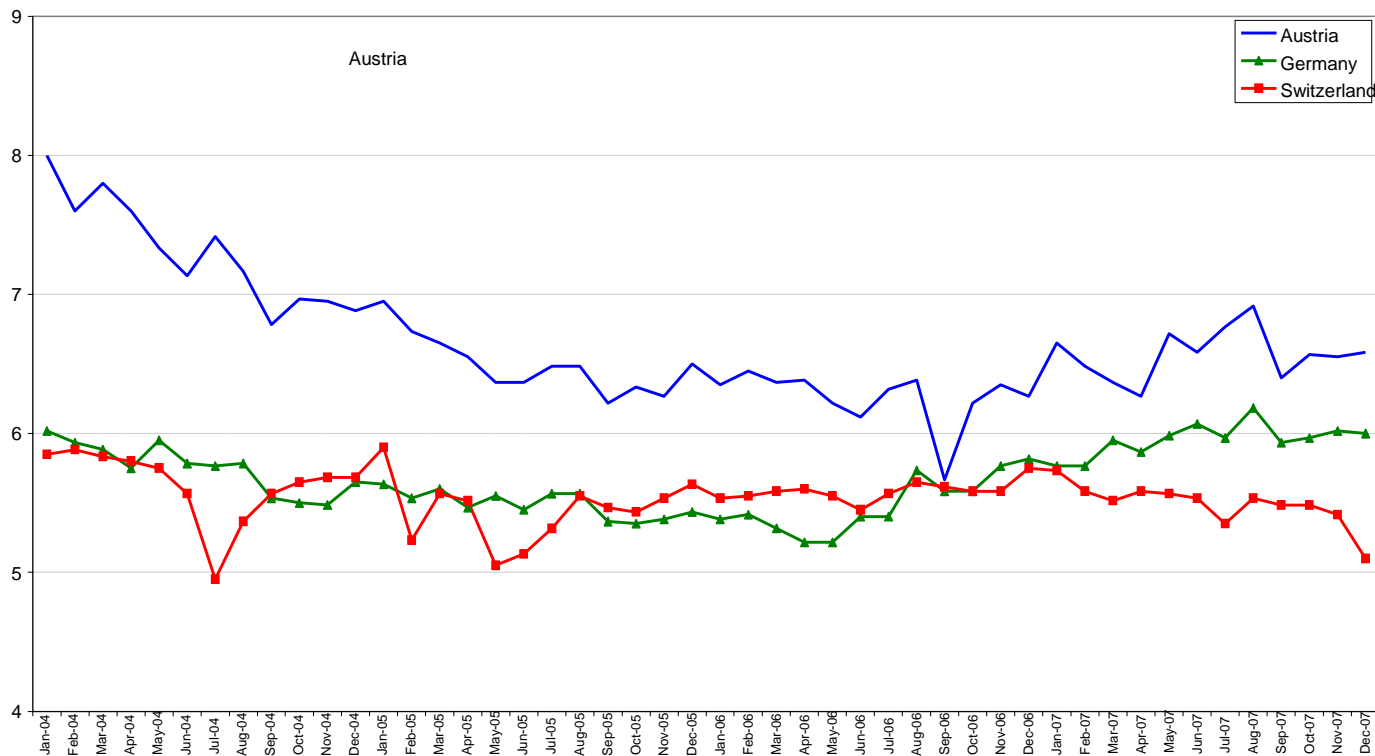
White=Switzerland

Is there less time spend on Search?

- In the period Jan. 2004 trough Dec. 2007 the average session length in Full Text Repositories for Germany and Switzerland followed more or less the same pattern, whereas Austria showed a different pattern
- For Germany and Switzerland varied the average session length per user session between about 5 and 6 minutes
- For Austria varied the average session length per user session between about 6 and 8 minutes

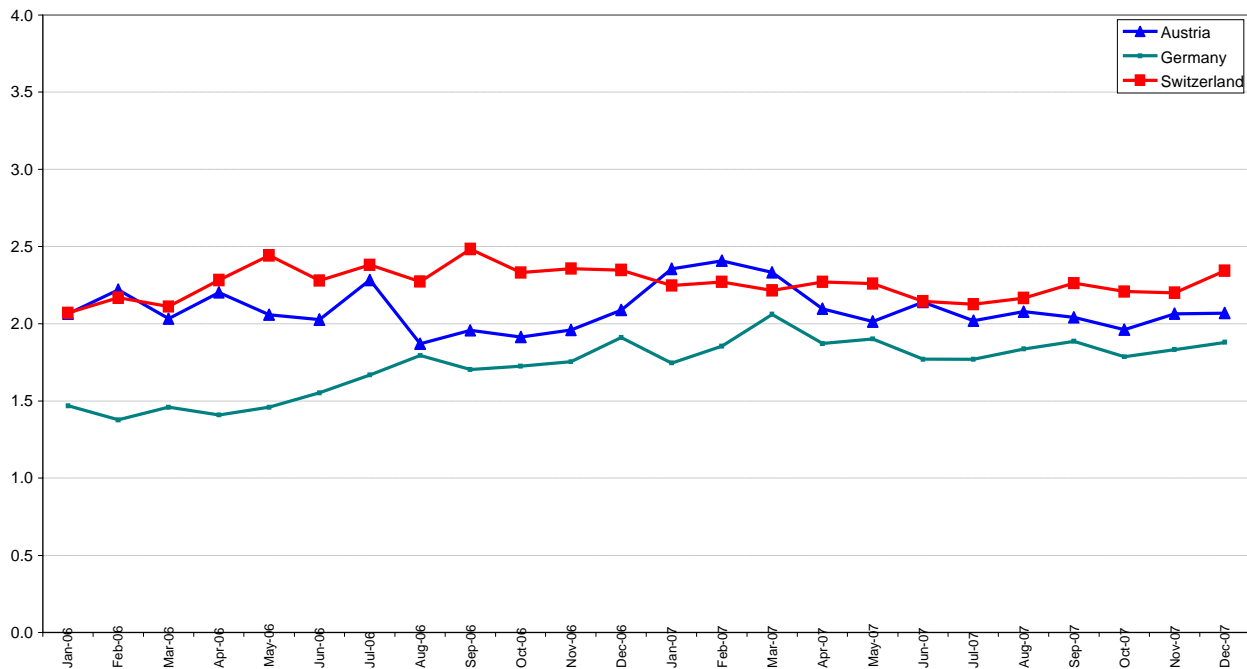
Is there less time spend on Search?

- With the exception of Austria in 2004, showed non of the countries a significant change in average session length in ScienceDirect (Jan 2004-Dec 2007)



Do researchers read more?

- None of the countries showed a significant change in average number of Full Text Articles requested per SciencDirect session (Jan 2006-Dec 2007)



Is there less time spend on Search?

- In the period Jan. 2006 through Dec. 2007 the average number of Full Text Articles requested per user session in Austria and Switzerland varied between about 2 and 2 ½
- In the period Jan. 2006 through Dec. 2007 the average number of Full Text Articles requested per user session in Germany varied between about 1 ½ and 2

Is a larger content offering leading to more [downloads and] reading?

- Only less than half of all Full Text Articles requested involved the institutes' own collections

Sub-collection	Consortium "A" (%)	Consortium "B" (%)
Subscribed at institute only	10	29
Subscribed both at institute and via UTL	31	20
Subscribed via UTL only	41	37
Not in UTL and not in subscribed list	18	15

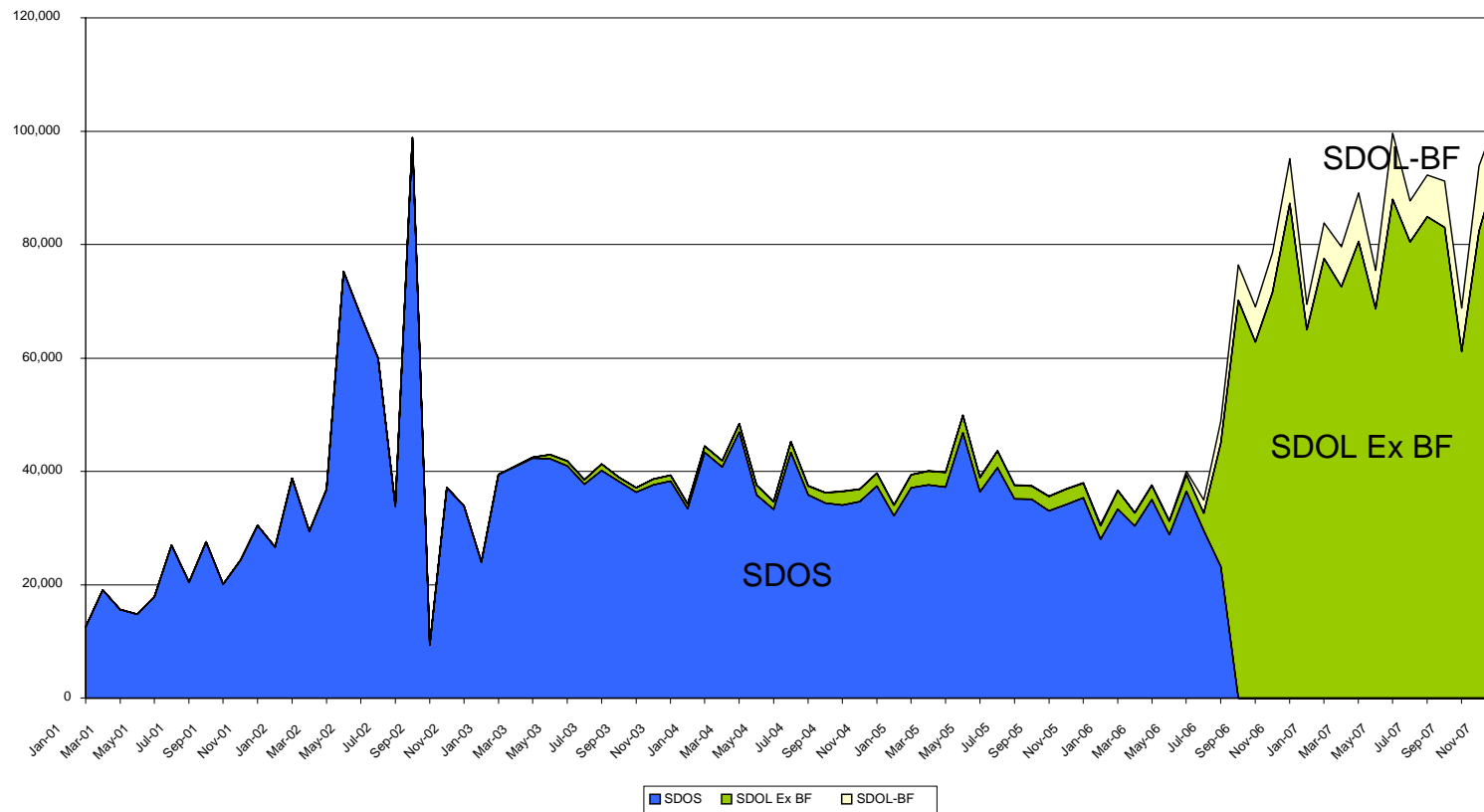
Is a larger content offering leading to more [downloads and] reading?

- Whereas usage of the institute's collection decreased, access to content because of participation in a consortium, increased dramatically

Year	Subscribed at institute only via SDOS (in%)	Subscribed both at institute and via UTL (in%)	Total (in%)
2001->2002	112		112
2002->2003	-/-14		-/-13
2003->2004	-/-3	153	-/-1
2004->2005	-/-10	49	-/-7
2005->2006	-/-47	1033	32
2006->2007		183	78

Is a larger content offering leading to more [downloads and] reading?

- Migration to a larger content offering leads to almost double the amount of Full Text Article requests and continues to grow



Is a larger content offering leading to more article output?

- Austria has the highest GDP per Capita, but Switzerland has the highest R&D spend per Capita and relative to GDP

	Austria	Germany	Switzerland
GDP (xMio)	283	2,872	256
R&D spending (xMio)	6.8	65.8	7.4
Pop. (xMio)	8.1	82.4	7.5
GDP/Capita (xThousand)	35	32	34
R&D spending/Capita	839	798	988
R&D spending in % of GDP	2.4%	2.5%	2.9%

Is a larger content offering leading to more article output?

- Switzerland has the highest subscription spend relative to R&D spend

	Austria	Germany	Switzerland
R&D spend (xMio)	6,794	65,750	7,410
Subscription spend (xMio)*	29	223	40
Subscription spend relative to R&D spend	0.4%	0.3%	0.5%
Subscription spend/researcher	1,053	836	1,523



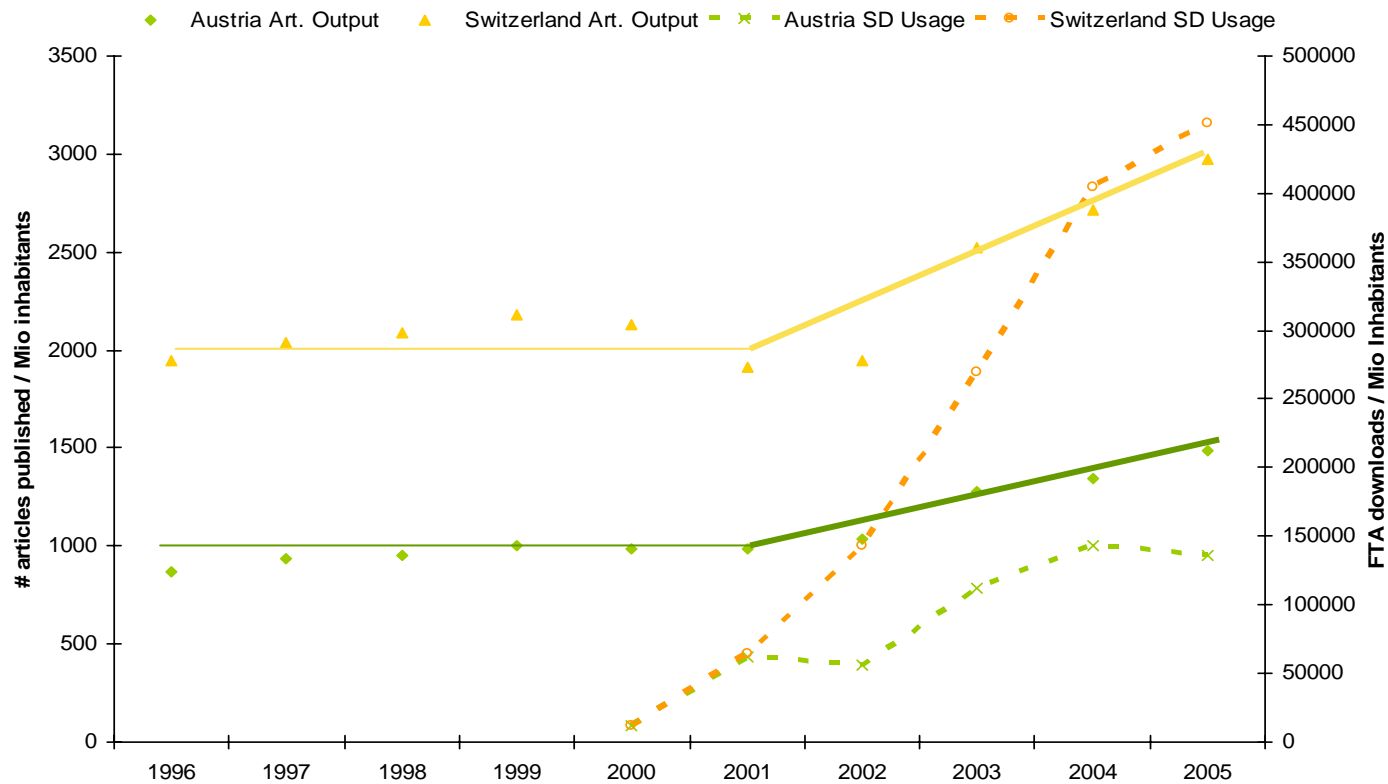
Is a larger content offering leading to more article output?

- Highest article production per researcher coincides with highest R&D spend and highest subscription spend relative to R&D spend

	Austria	Germany	Switzerland
# Researchers (x 1,000)	28	267	26
# Articles published (x1.000)	11	90	20
# Articles/researcher	0.4	0.3	0.8

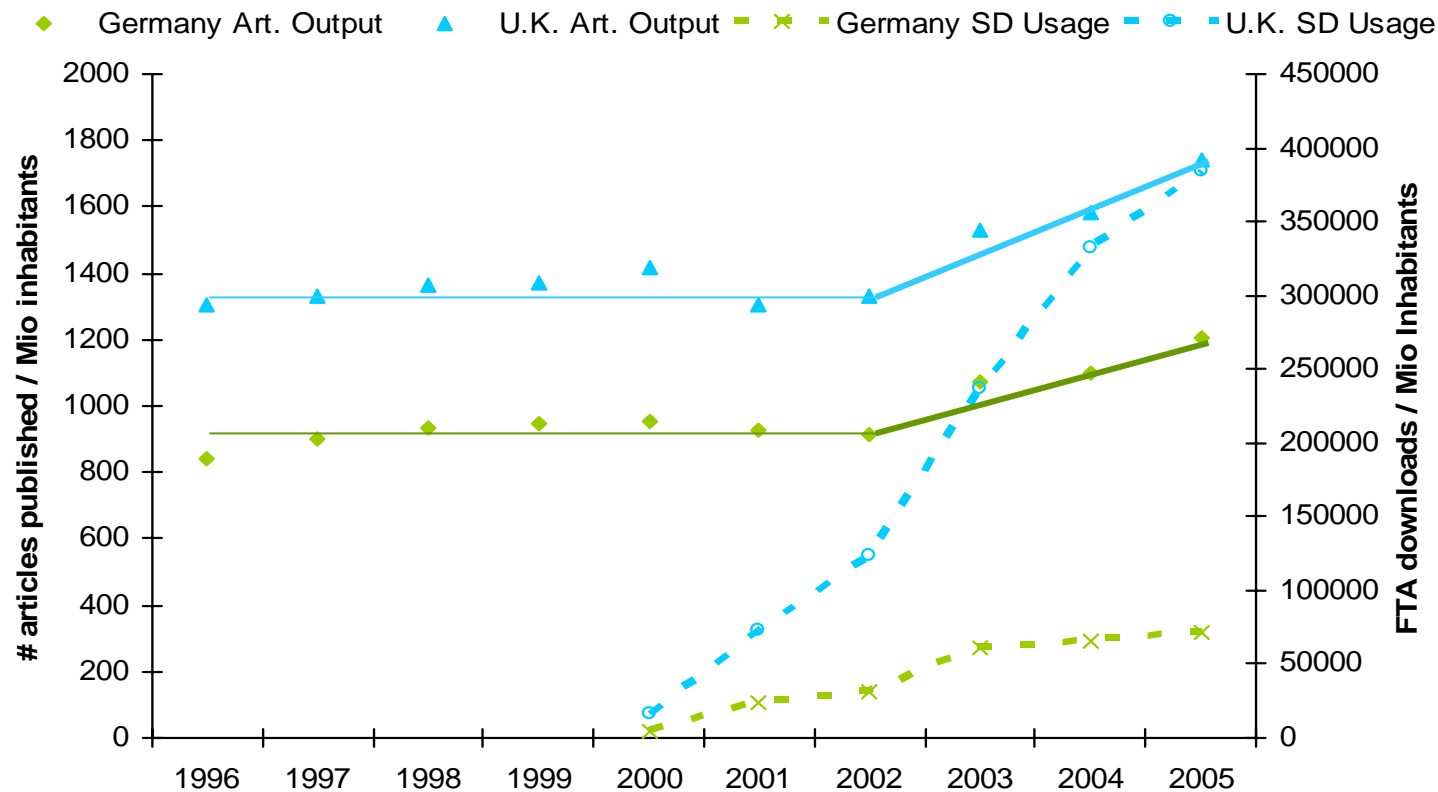
Is a larger content offering leading to more article output?

- In Switzerland and Austria there is a significant increase in article production about 2 years after the start of Full Text Articles requests



Is a larger content offering leading to more article output?

- Also in the U.K. and Germany there is a significant increase in article production about 2 years after the start of Full Text Articles requests



Discussion of the major findings

- A broader penetration of Searching amongst users less educated in online searching may cause the increased time spend on Search
- Attending online searching training may prove an effective tool to significantly reduce time spend [on Browse/scan and Search] in research projects

Discussion of the major findings

- The absence of an effect on average session length in Full Text Repositories due to a broader penetration of searching amongst users who are less trained may be because working in these repositories is far less complicated than searching databases or that requestors were directly guided by Referrers to the required Full Text Article

Discussion of the major findings

- A larger content offering coincides with a dramatic increase of Full Text Article requests, is possibly caused because research is increasingly becoming multidisciplinary
- The limited contribution of Back Files to the total number of Full Text Articles requested is possibly caused by an increasing focus on timely publication of research results, which amongst other has also led to the publication of electronic Articles-in-Press

Discussion of the major findings

- In all German speaking countries is found that there is a significant increase in article production about 2 years after the start of Full Text Articles requests [improved content access]
- The highest article output per researcher coincides with the highest subscription spend relative to R&D spend [enlarged content offering]
- The highest subscription spend coincides with the highest R&D spend relative to GDP and per Capita