

Some research questions to frame a European Union (EU) overview of LIS research

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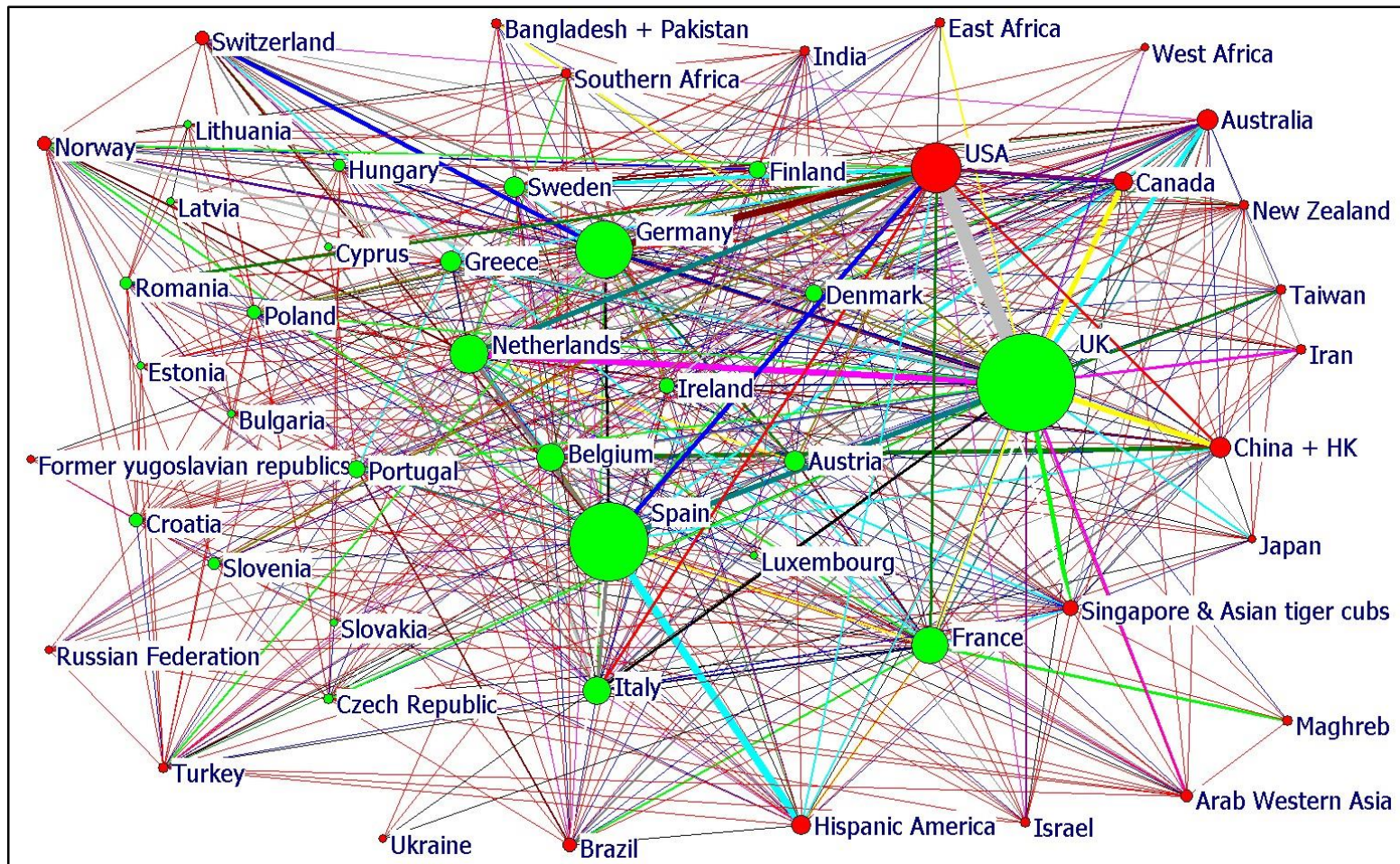
Universitat de Barcelona. Facultat de Biblioteconomia i
Documentació

Outline

1. Introduction
2. EU overview on LIS research (1990-2014 & 2010-2014)
 - I. Production
 - II. Collaboration
3. Questions to frame the overview
 - How to delimit the LIS research field?
 - How to define research?
 - How to assess the research agendas?
4. Looking ahead: Will we keep living apart together?
 - How to overcome the isolation of LIS researchers?

1. Introduction:

What does the EU map of LIS research look like?



2. EU overview on LIS research (1990/2010-2014):

I. Production, II. Collaboration,

- An exploratory bibliometrical approach centered on the 28 EU countries.
- 29,337 bibliographic records (8,732 of which are from the EU countries) taken from a selection of 151 titles (mostly journals, but also some proceedings) indexed in Scopus between 2010-2014 within the category of LIS. We worked also with 15 core titles for the trend analysis of 1990-2014.
- For the 2010-2014 analysis we excluded titles that were also present in other thematic categories of Scopus and whose citing profile is very distant from the pattern observed for the total of 210 titles indexed in LIS category. An exception was made for journals on archives and document management.
- All papers presented at the Spanish Conference on Documentation (1984-2013) were analyzed for the presence and level of collaboration among authors from academia and those working as professionals in the field.

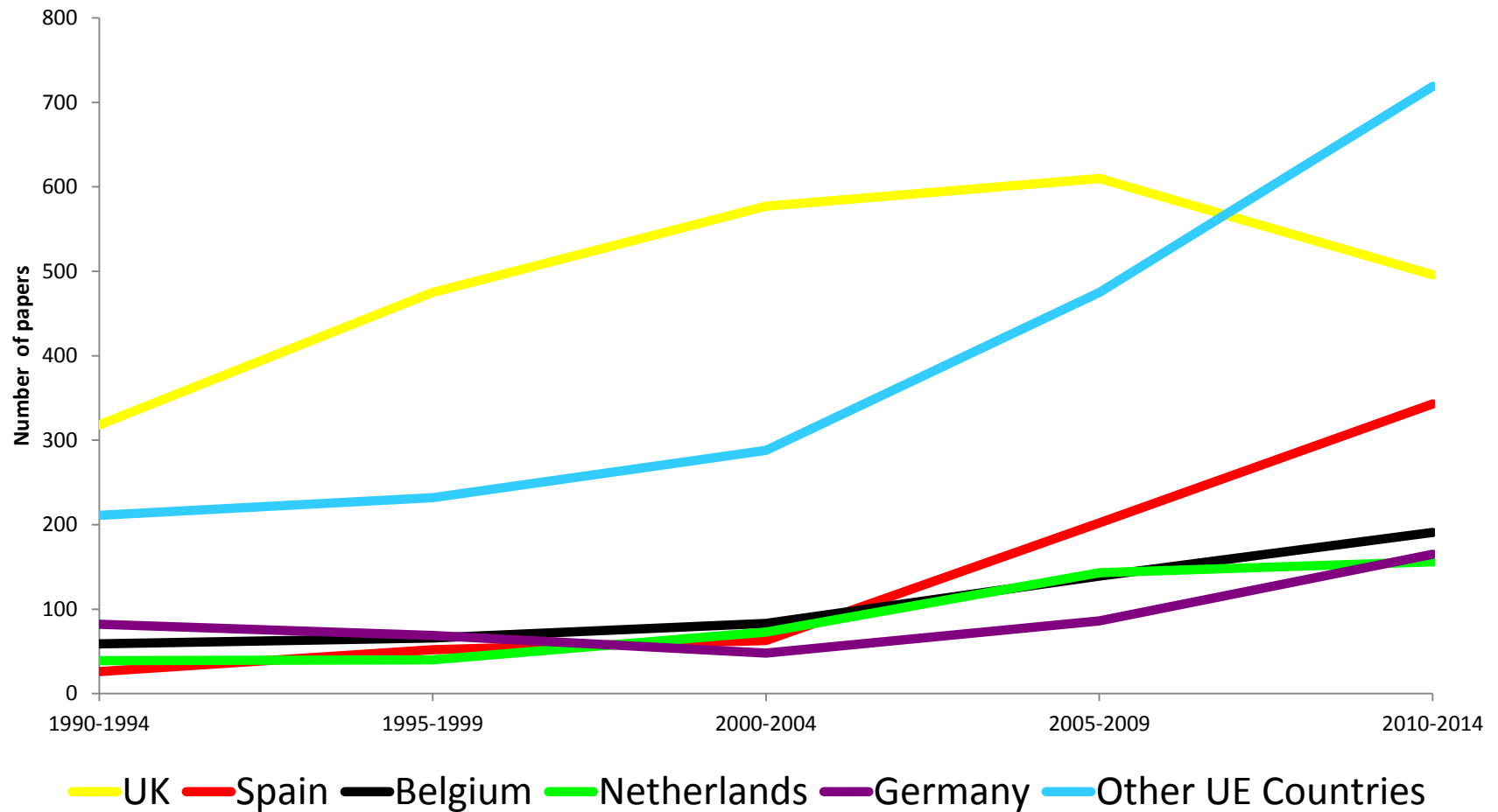
2. EU overview on LIS research (1990/2010-2014):

I. Production, II. Collaboration,

| Journals (151) selected on the basis of citation profile correlation for the period 2010-2014 | Pearson Coef. | Representative core journals selected (15) for the period 1990-2014 |
|--|------------------|--|
| Aslib Journal of Information Management | 0,78 | Aslib Journal of Information Management |
| Library and Information Science Research | 0,73 | Electronic Library |
| Library Review | 0,73 | Information Processing & Management |
| Journal of Librarianship and Information Science | 0,70 | Information Technology and Libraries |
| International Information and Library Review | 0,70 | Interlending & Document Supply |
| Journal of Academic Librarianship | 0,68 | JASIST |
| Proceedings of the ASIST Annual Meeting | 0,67 | Journal of Academic Librarianship |
| Journal of Educational Media and Library Science | 0,66 | Journal of Documentation |
| Information-Wissenschaft und Praxis | 0,66 | Journal of Information Science |
| Webology | 0,66 | Journal of Librarianship and Information Science |
| Canadian Journal of Information and Library Science | 0,65 | Library & Information Science Research |
| Information Research | 0,64 | Library Journal |
| Library Trends | 0,64 | Library Trends |
| Journal of Documentation | 0,61 | Libri |
| Library Hi Tech | 0,61 | Scientometrics |
| Up to 151 titles | > 0,08 | |

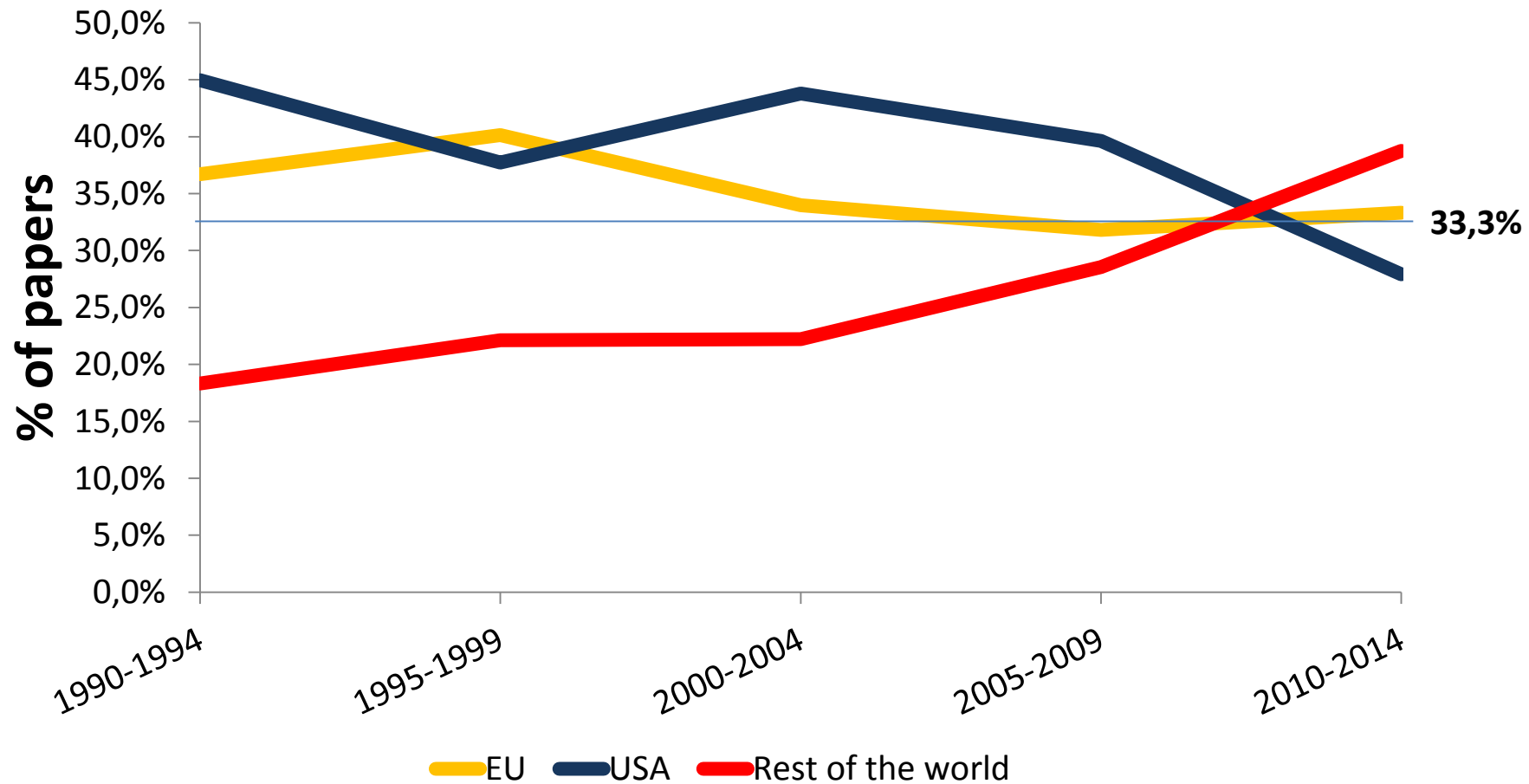
I. Production

Papers: trends in total LIS output for EU countries
(1990-2014: 15 core journals)



I. Production

Papers: trends in the world share of LIS papers
(1990-2014: 15 core journals)



I. Production

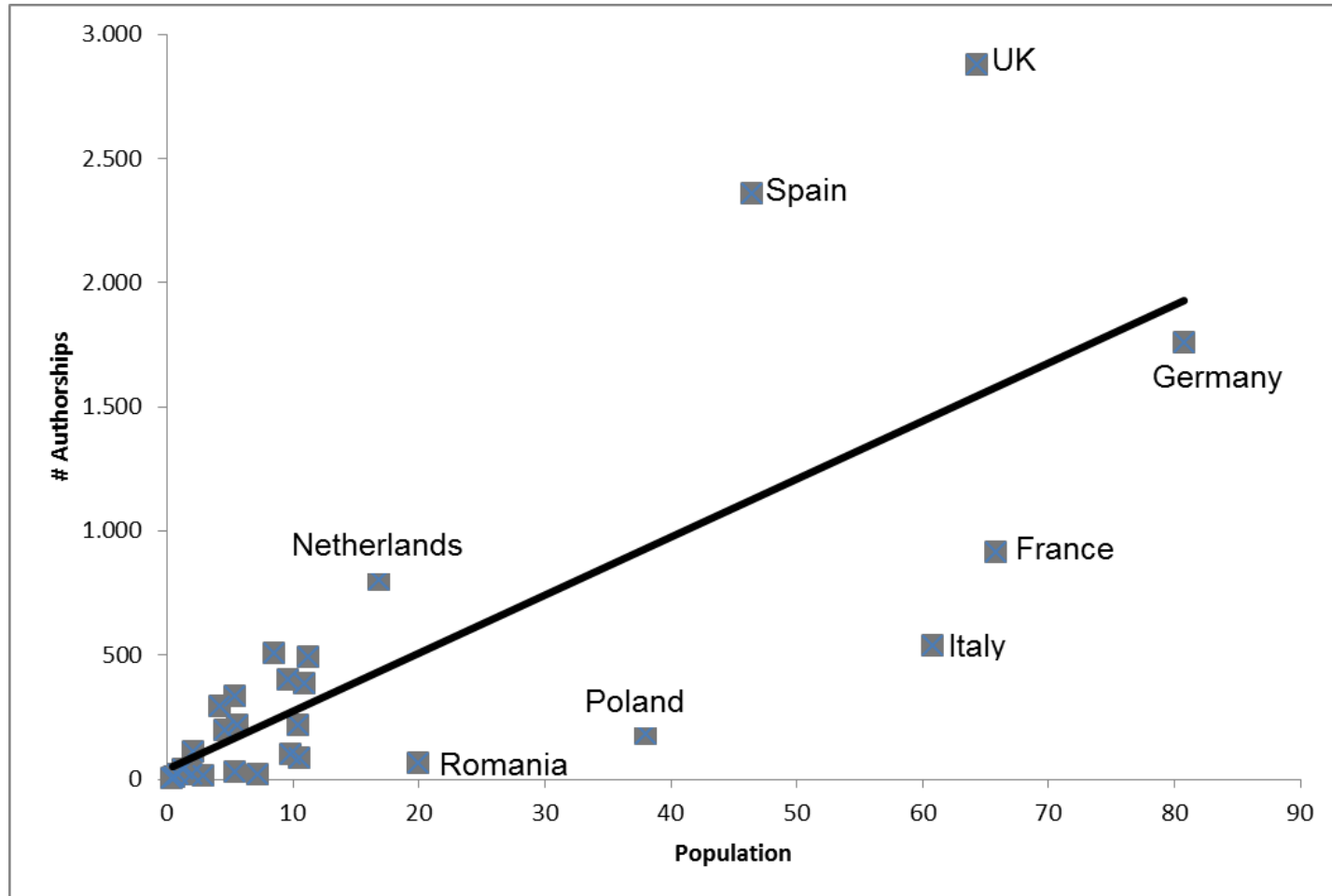
Authorship: share by EU countries VS USA and rest of world (2010-2014)

| | | World share |
|-------------|--------|-------------|
| EU | 12.957 | 30,1% |
| UK | 2.876 | 6,7% |
| Spain | 2.358 | 5,5% |
| Germany | 1.756 | 4,1% |
| France | 914 | 2,1% |
| Netherlands | 800 | 1,9% |
| Italy | 539 | 1,3% |
| Austria | 505 | 1,2% |
| Belgium | 491 | 1,1% |
| Sweden | 400 | 0,9% |
| Greece | 385 | 0,9% |
| Finland | 333 | 0,8% |
| Croatia | 294 | 0,7% |
| Denmark | 215 | 0,5% |
| Portugal | 215 | 0,5% |

| | | |
|-------------------|---------------|---------------|
| Ireland | 194 | 0,5% |
| Poland | 182 | 0,4% |
| Slovenia | 110 | 0,3% |
| Hungary | 99 | 0,2% |
| Czech Republic | 86 | 0,2% |
| Romania | 65 | 0,2% |
| Estonia | 36 | 0,1% |
| Slovakia | 29 | 0,1% |
| Bulgaria | 20 | 0,0% |
| Cyprus | 16 | 0,0% |
| Latvia | 16 | 0,0% |
| Lithuania | 12 | 0,0% |
| Luxembourg | 10 | 0,0% |
| Malta | 1 | 0,0% |
| Rest of the world | 30.039 | 69,9% |
| USA | 15.089 | 35,1% |
| Total | 42.996 | 100,0% |

I. Production

Authorship VS country population (2010-2014)

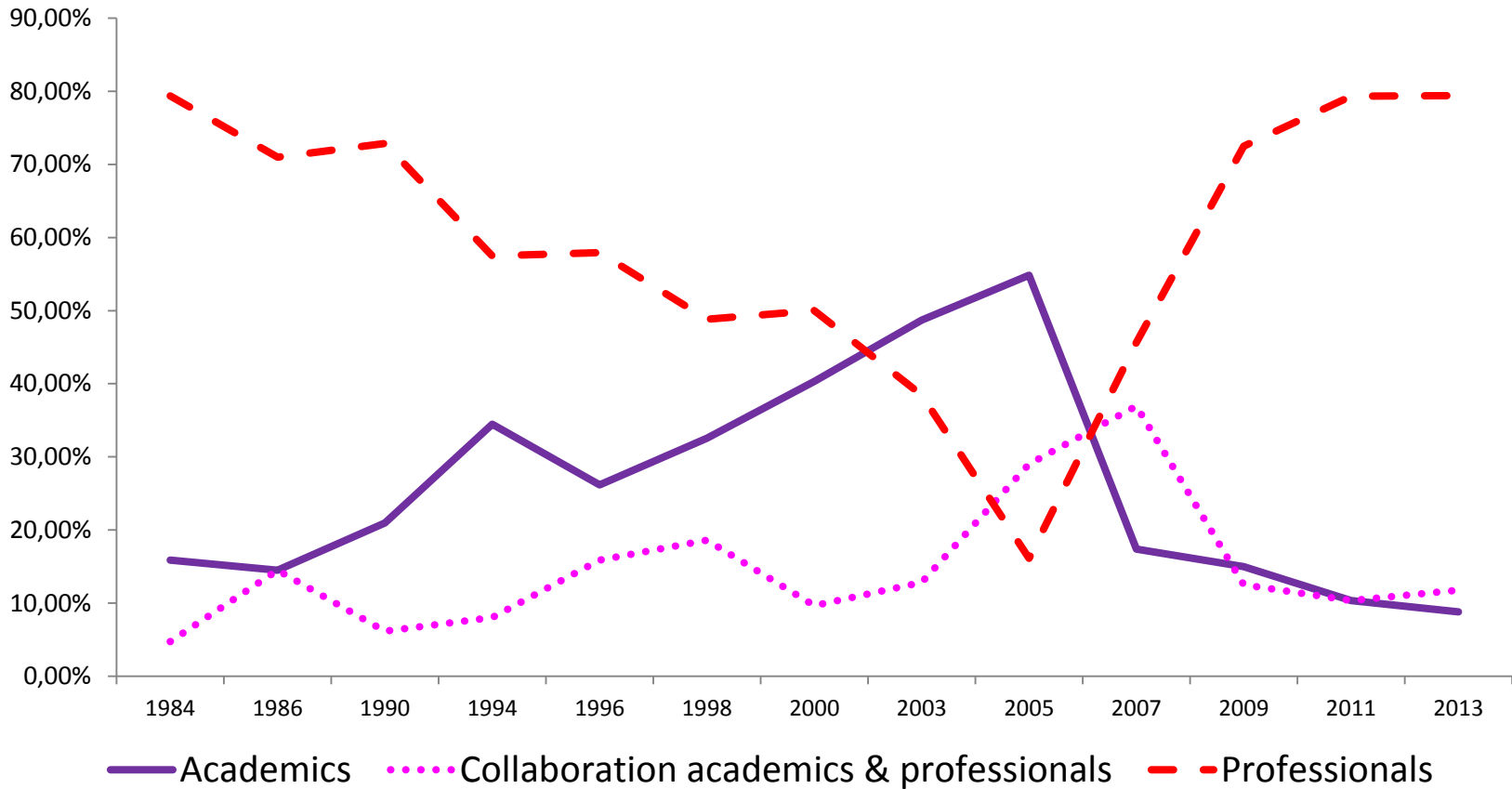


$R^2 = 0,5796$

I. Production

Spain: desertion of academics from national professional conferences?

(share of papers in *Jornadas Españolas de Documentación*, 1984-2013)



I. Production

Sources: top 10 titles with greatest number of EU papers
(2010-2014)

| | ON EACH GEOGRAPHIC AREA | | | | ON EACH JOURNAL | |
|--|-------------------------|-------------------|---------|----------|-----------------|------------|
| | EU papers | % total EU papers | EU Rank | USA Rank | % from EU | % from USA |
| Scientometrics | 707 | 8,1% | 1 | 8 | 28,8% | 12,2% |
| Americas Conference on information Systems | 632 | 7,2% | 2 | 1 | 22,2% | 48,3% |
| JASIST | 384 | 4,4% | 3 | 3 | 25,5% | 36,4% |
| Profesional de la Información | 365 | 4,2% | 4 | 122 | 84,5% | 1,6% |
| Intelligent Systems Reference Library * | 265 | 3,0% | 5 | 24 | 33,2% | 20,3% |
| VOEB-Mitteilungen | 202 | 2,3% | 6 | 145 | 97,6% | 0,0% |
| Zeitschrift fur Bibliothekswesen und Bibliographie | 200 | 2,3% | 7 | 141 | 95,2% | 0,5% |
| Information-Wissenschaft und Praxis | 176 | 2,0% | 8 | 135 | 96,2% | 1,1% |
| International Journal of Information Management | 174 | 2,0% | 9 | 49 | 28,7% | 15,7% |
| Information Communication and Society | 161 | 1,8% | 10 | 13 | 30,3% | 44,4% |

I. Production

Sources: top 10 titles with fewest EU papers (2010-2014)

| | ON EACH GEOGRAPHIC AREA | | | | ON EACH JOURNAL | |
|--|-------------------------|-------------|---------|----------|-----------------|------------|
| | EU papers | % EU papers | EU Rank | USA Rank | % from EU | % from USA |
| Journal of Interlibrary Loan, Document Delivery and Electronic Reserve | 1 | 0,0% | 134 | 40 | 0,8% | 88,4% |
| Journal of Library and Information Services in Distance Learning | 1 | 0,0% | 134 | 51 | 0,9% | 85,3% |
| Journal of Web Librarianship | 1 | 0,0% | 134 | 23 | 0,6% | 96,4% |
| Library Resources and Technical Services | 1 | 0,0% | 134 | 49 | 1,0% | 92,2% |
| Libres | 1 | 0,0% | 134 | 103 | 2,5% | 52,5% |
| Pakistan Journal of Library and Information Science | 1 | 0,0% | 134 | 130 | 2,1% | 6,4% |
| Reference Librarian | 1 | 0,0% | 134 | 16 | 0,5% | 93,6% |
| School Library Media Research | 1 | 0,0% | 134 | 61 | 1,3% | 89,6% |
| Science and Technology Libraries | 1 | 0,0% | 134 | 28 | 0,6% | 87,0% |
| Technical Services Quarterly | 1 | 0,0% | 134 | 17 | 0,5% | 94,7% |

I. Production

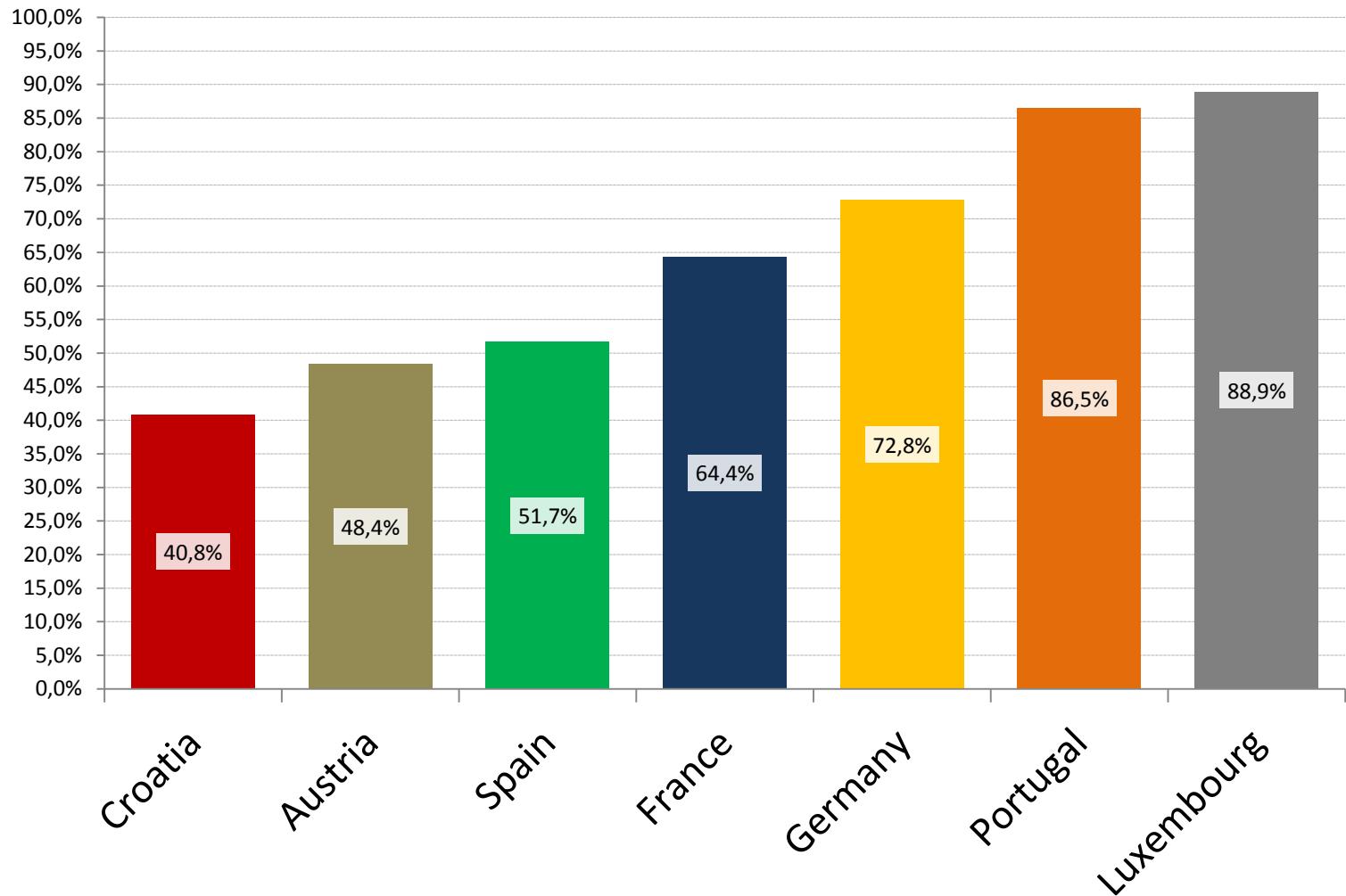
Sources: share for the 3 top titles in principal countries
(2010-2014)

| Country | 1st Source | % authorships | cumulative % of authorships for 3 top sources | # total sources |
|-------------|---|---------------|---|-----------------|
| Austria | VOEB-Mitteilungen | 47,9% | 58,7% | 47 |
| Belgium | Scientometrics* | 31,7% | 49,7% | 59 |
| France | Documentaliste: Sciences de l'Information | 20,5% | 40,0% | 76 |
| Germany | Americas Conference on information Systems | 26,1% | 52,0% | 88 |
| Italy | Scientometrics* | 19,4% | 33,0% | 74 |
| Netherlands | Scientometrics* | 14,8% | 33,8% | 72 |
| Spain | Profesional de la Información | 22,0% | 42,4% | 88 |
| Sweden | Americas Conference on information Systems | 11,0% | 27,5% | 64 |
| UK | International Journal of Information Management | 4,5% | 13,5% | 125 |

* Scientometrics appears among the 3 top sources for 21 of the 28 countries

I. Production

Language: countries with less than 95% of papers in English and influence of “national language” journals (2010-2014)



I. Production

Subjects reflected in keywords: Do they represent the research agenda? (2010-2014)



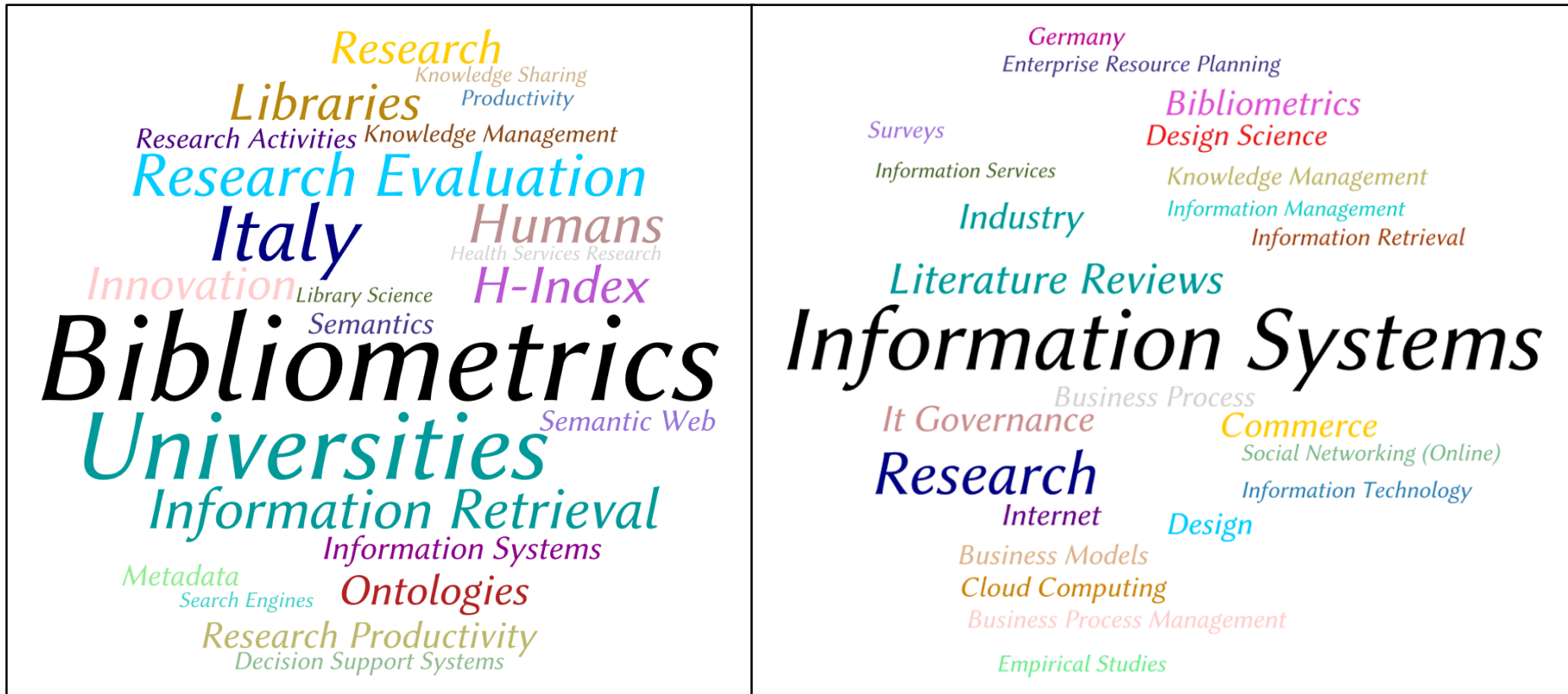
I. Production

Subjects reflected in keywords: Are there different national research agendas? [Spain VS UK] (2010-2014)



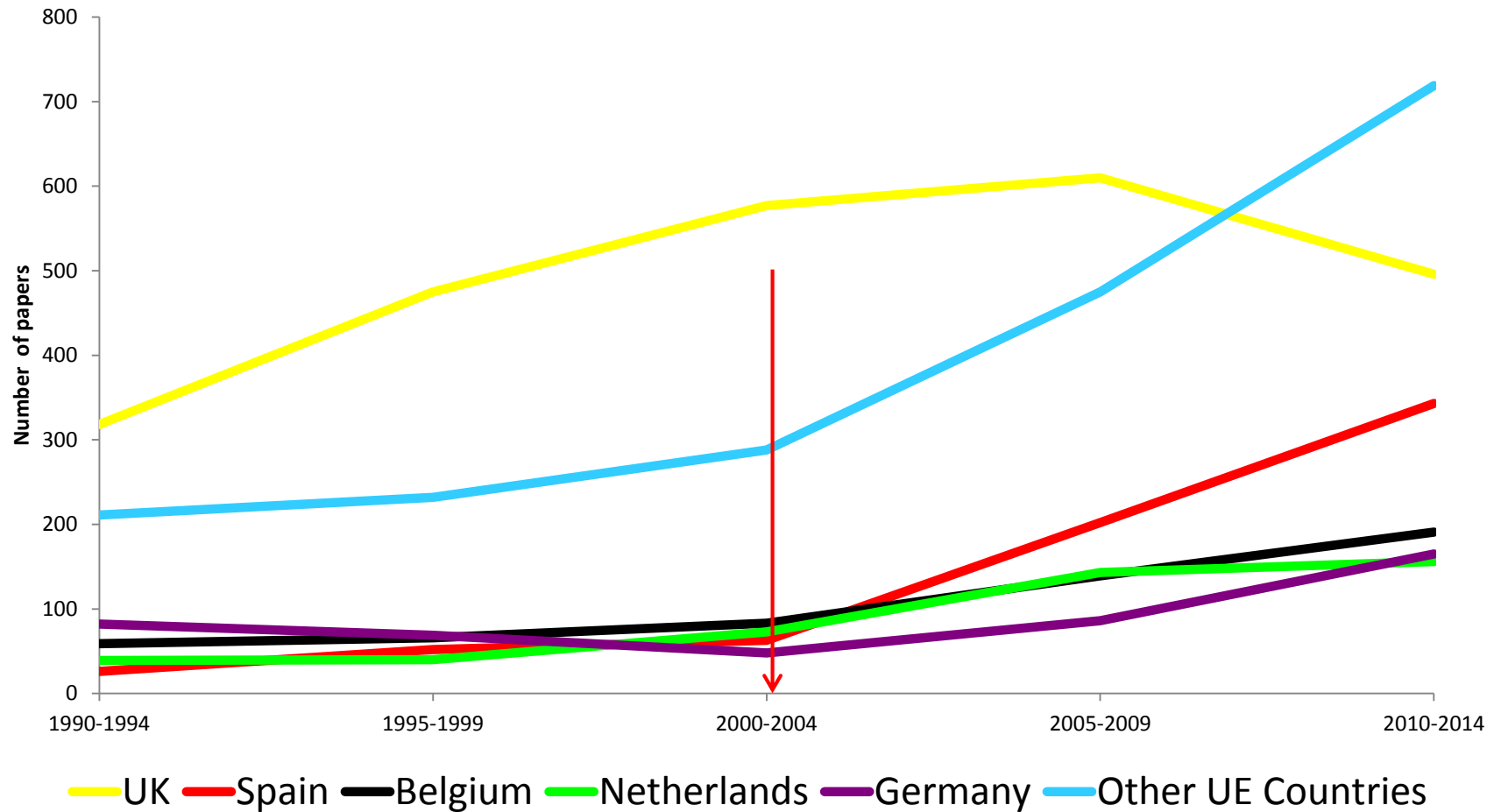
I. Production

Subjects reflected in keywords: Are there different national research agendas? [Italy VS Germany] (2010-2014)



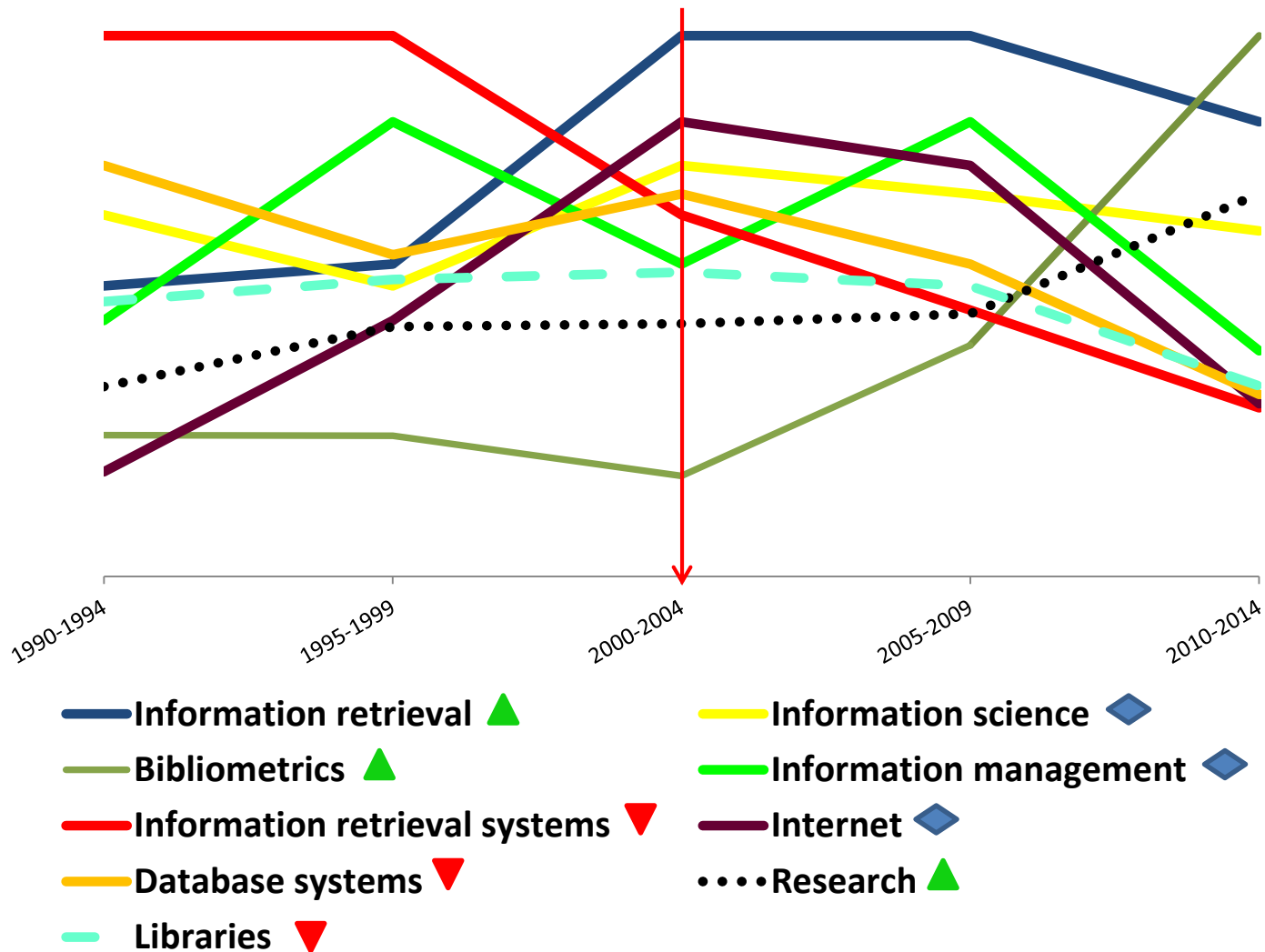
I. Production

Coupling the inflection point of production and subjects
(1990-2014: 15 core journals)



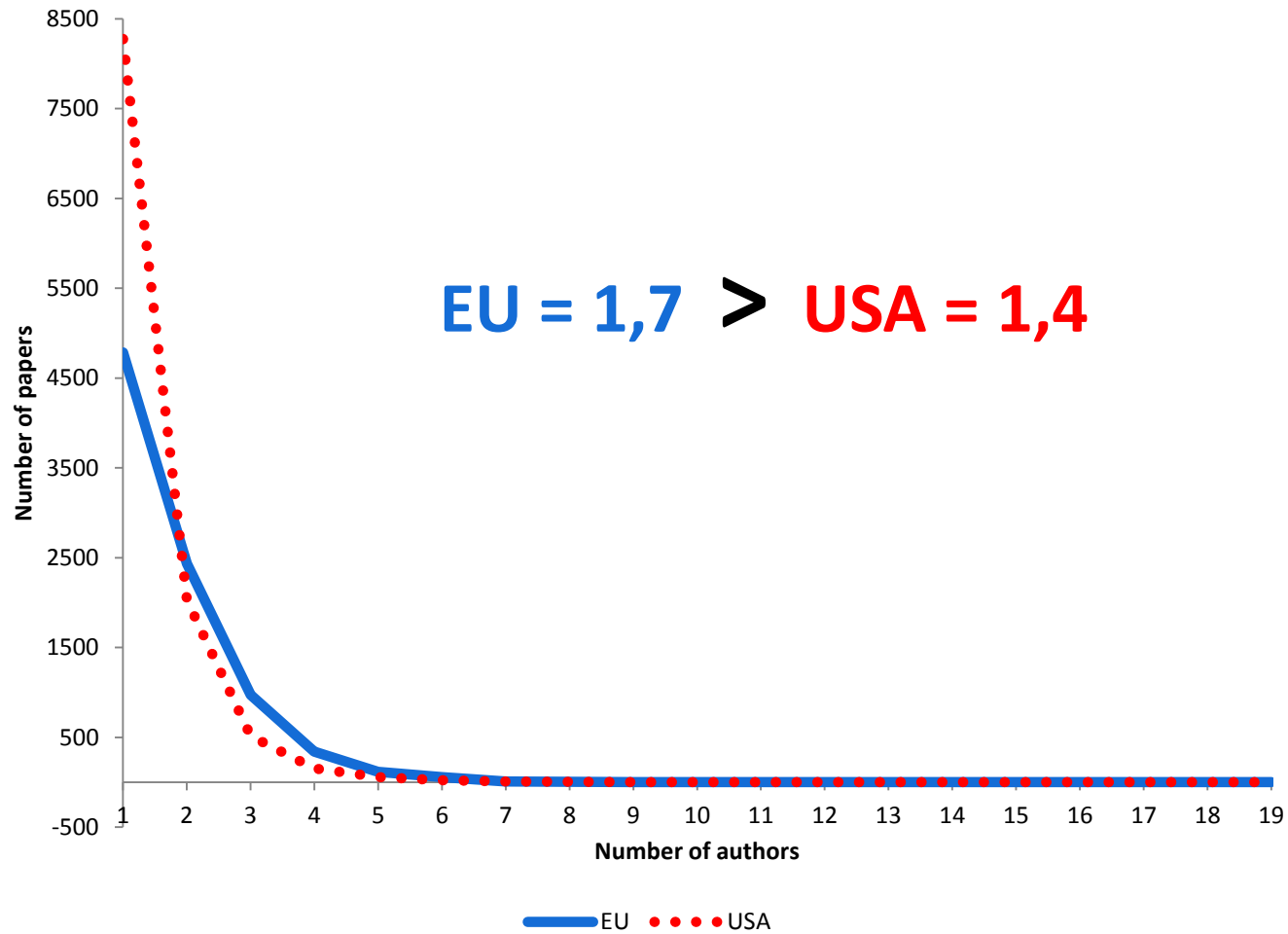
I. Production

Subjects reflected in keywords (1990-2014: 15 core journals)



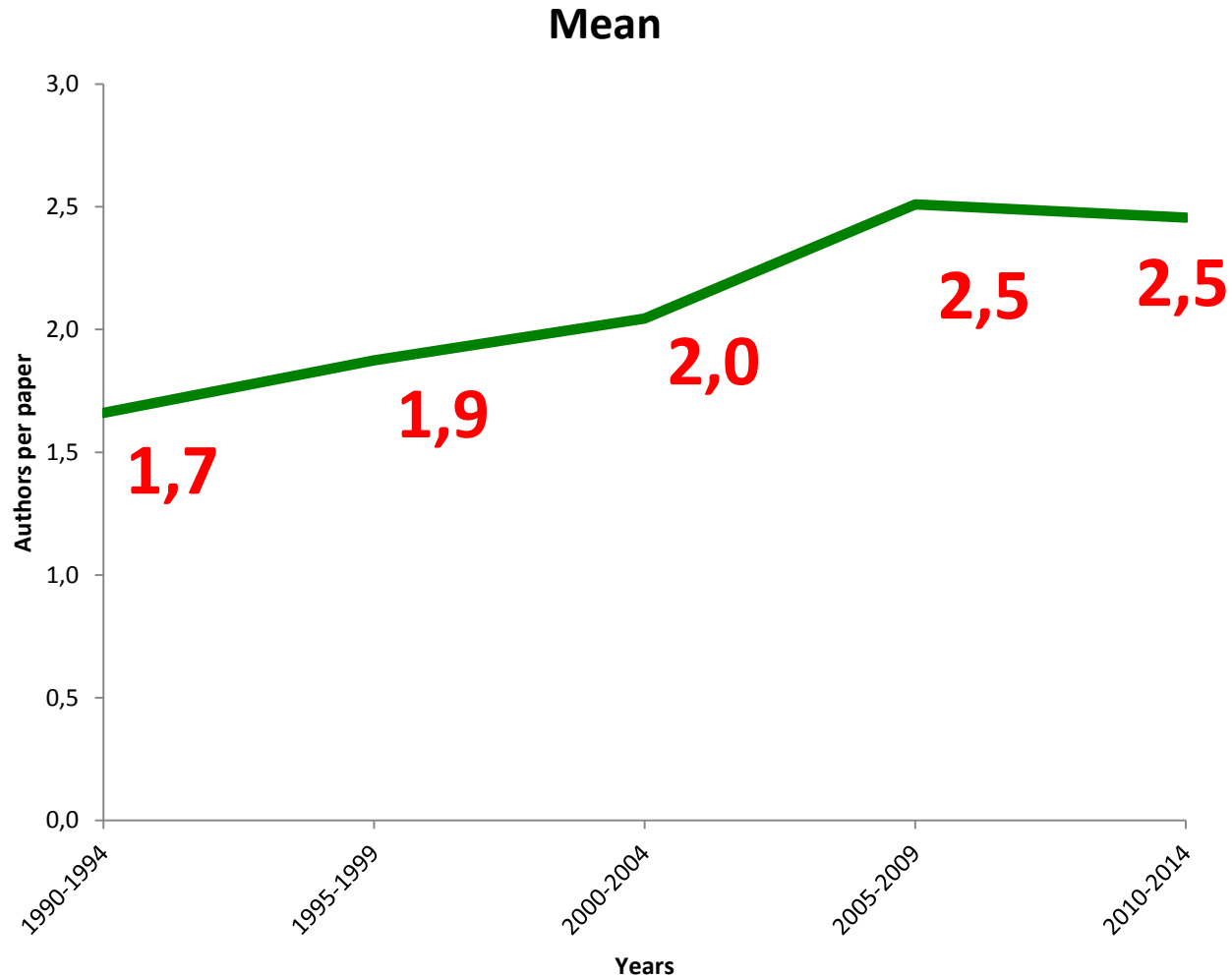
II. Collaboration

Authors per paper (2010-2014)



II. Collaboration

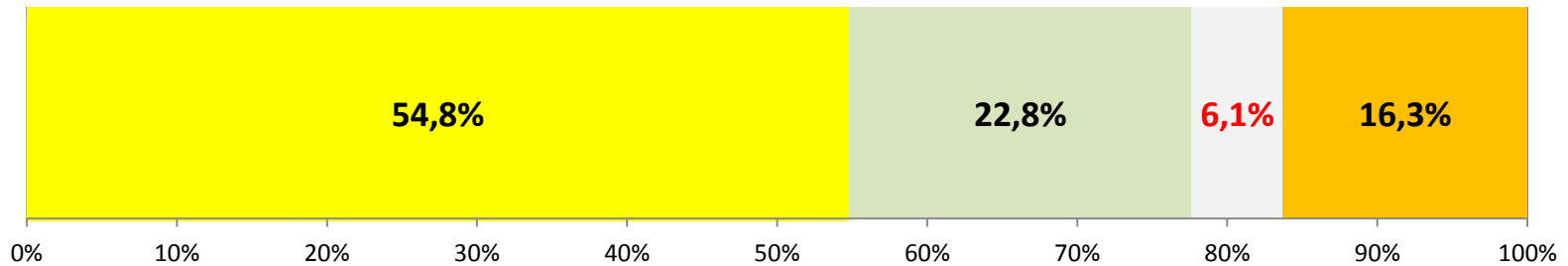
Authors per paper (trend 1990-2014 for 15 core journals)



II. Collaboration

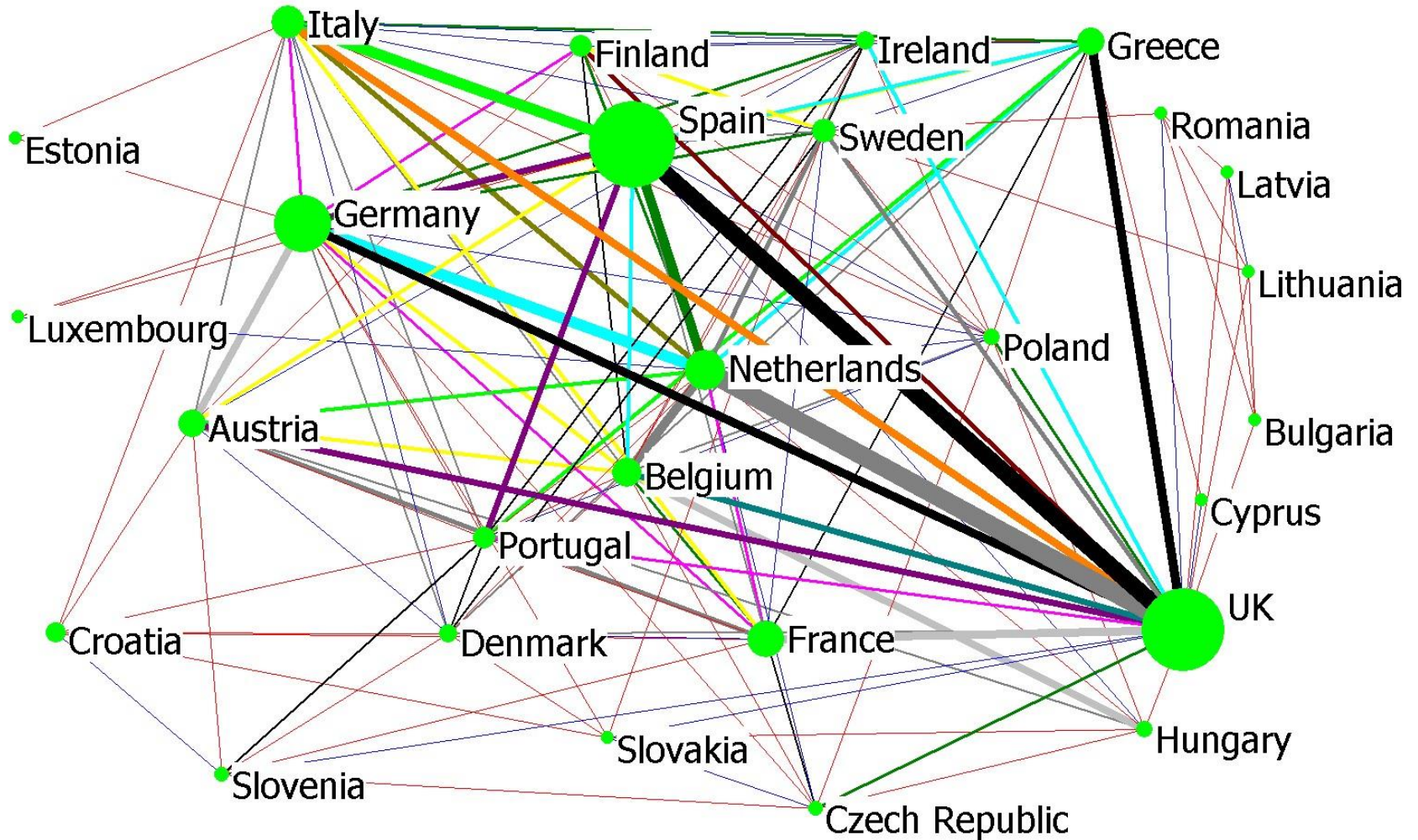
Geographical reach: national, intra-EU, and abroad (2010-2014)

| Type of collaboration | # papers | % papers |
|---|----------|----------|
| Without collaboration | 4786 | 54,8% |
| Intra-national collaboration | 1991 | 22,8% |
| International collaboration within the EU | 533 | 6,1% |
| International cooperation with countries outside EU | 1422 | 16,3% |
| | 8732 | 100% |



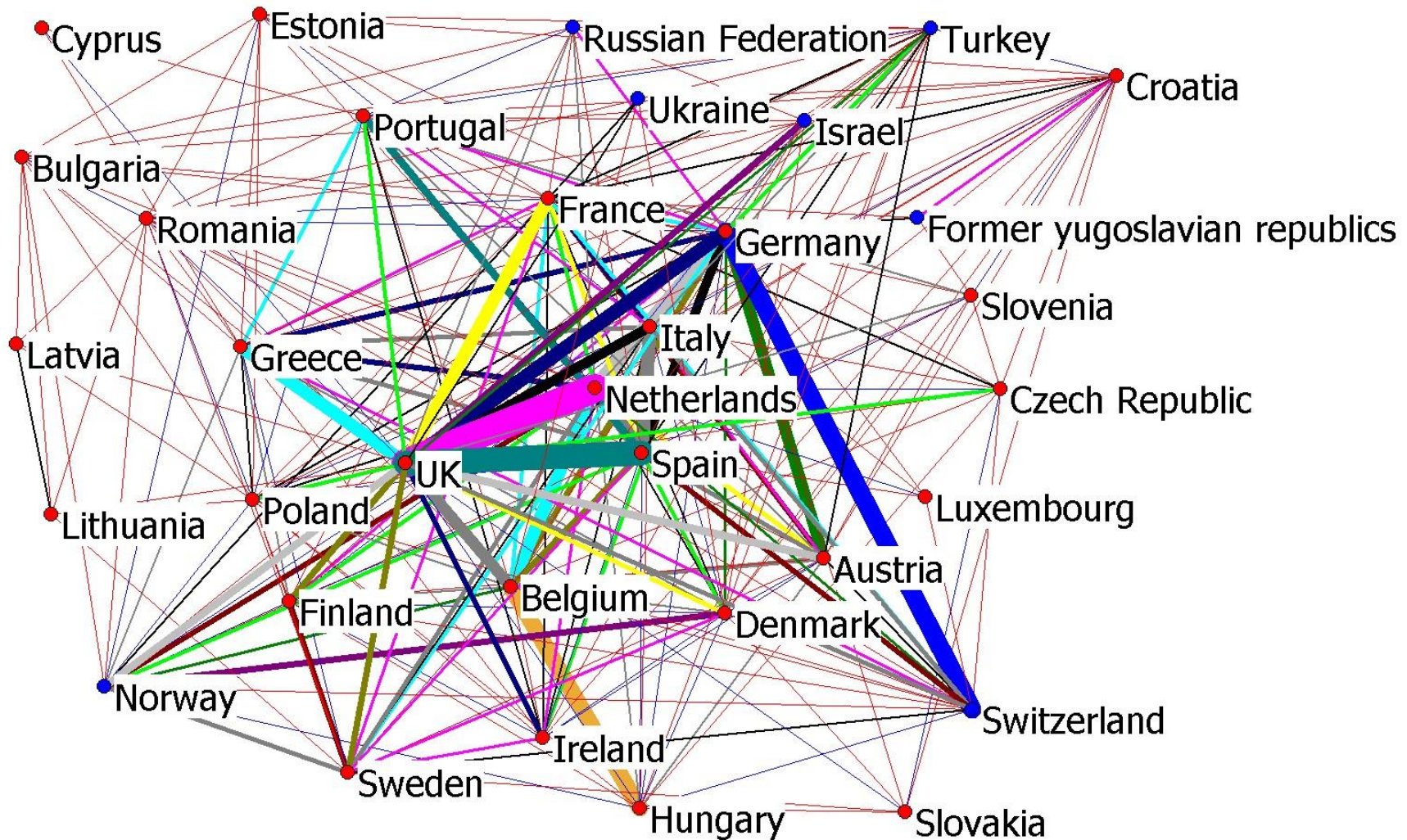
II. Collaboration

Intra-EU network (2010-2014)



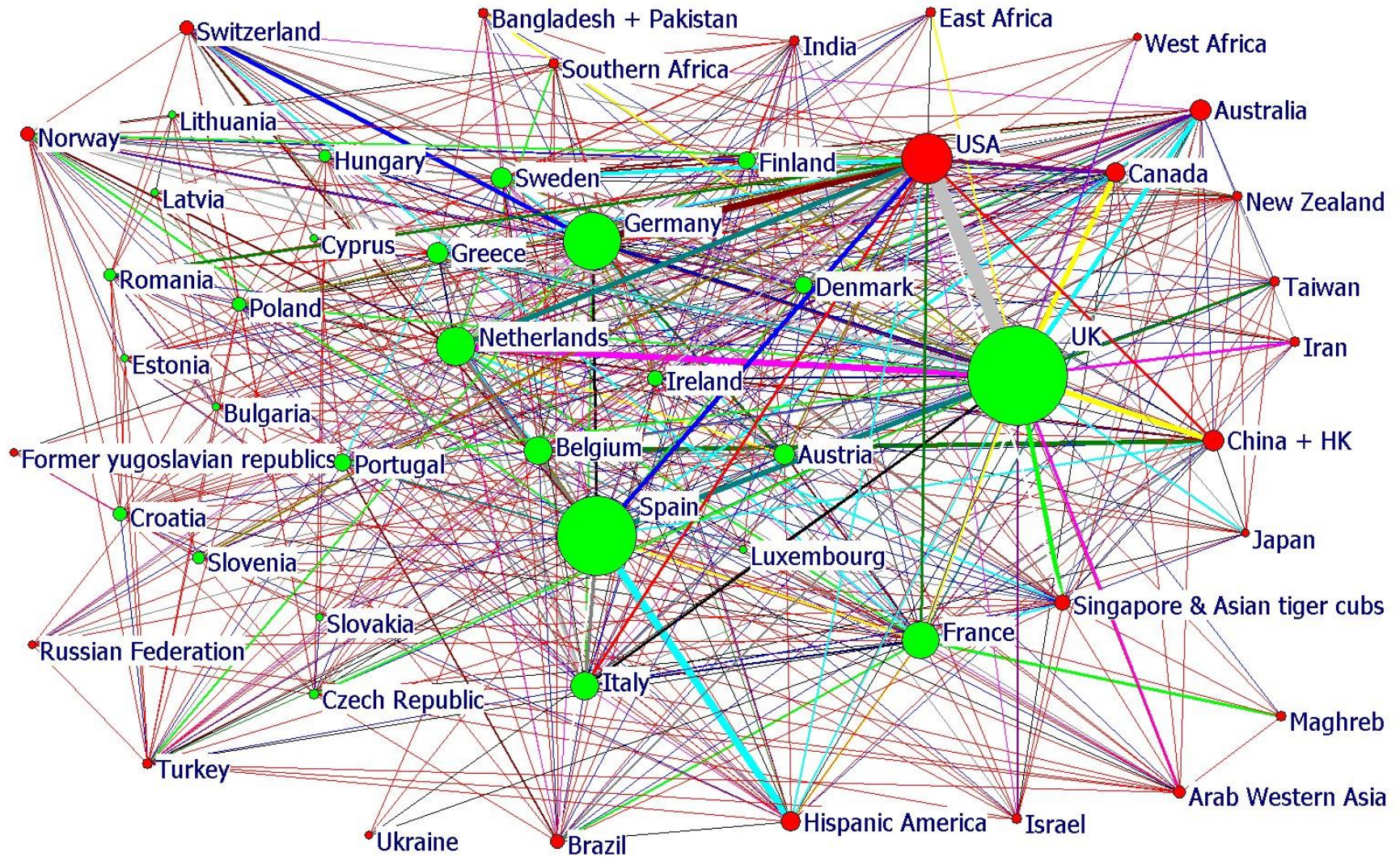
II. Collaboration

Europe (EU & non-EU) network (2010-2014)



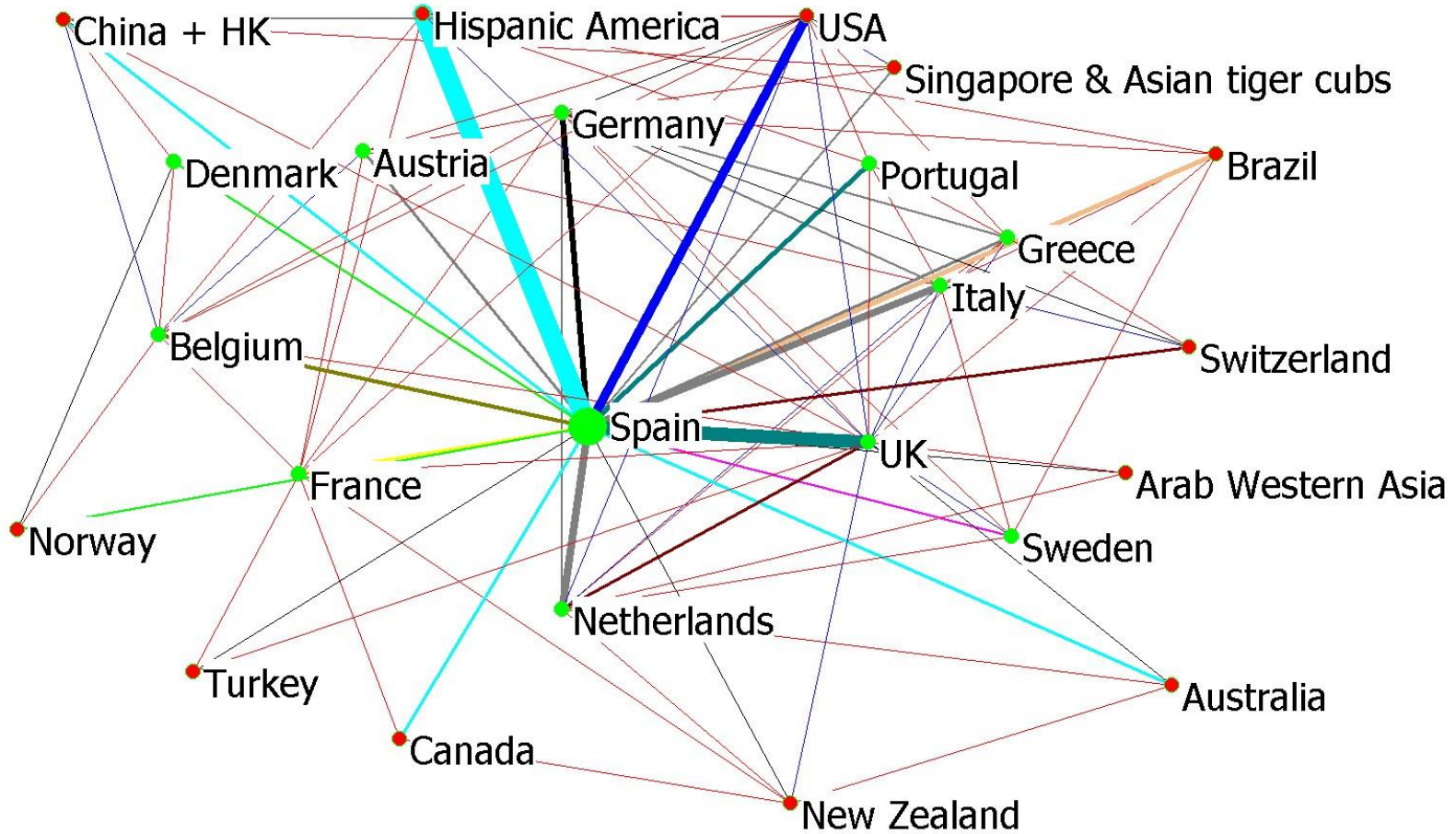
II. Collaboration

Global network for EU coauthorships (2010-2014)



II. Collaboration

Global network for Spain (2010-2014)



3. Questions to frame the overview

- a) How to delimit the LIS field of research?
- b) How to define research?
- c) How to assess the research agendas?

a) How to delimit the LIS field of research?

LIS research subjects >

> LIS publications >

> LIS departments/institutions

Spink, A., & Heinström, J. (2012)



The field of LIS is currently developing and redefining its core worldwide. Information is an intrinsic part of the human condition where information behaviour is embedded within everyday social and life processes. Information management and techniques are likewise critical to development however, the LIS field has a declining hold on the research and teaching area related to the phenomenon of information.

b) How to define research?

Looking for a canonical definition

*Library
Trends*

Research Methods in Librarianship

GUY GARRISON
Guest Editor

July, 1964

Shera, J. (1964)

Described in terms of its sequential acts, research is an intellectual process whereby a problem is perceived, divided into its constituent elements, and analyzed in the light of certain basic assumptions; valid and relevant data are collected; hypotheses (if any) are through objective testing, rejected, amended, or proved. The generalizable results of this process qualify as principles, laws, or truths that contribute to man's understanding of himself, his works, or his environment. Stated another way, research is the systematic attempt to discover new facts or sets of facts, or new relationships among facts, through the formulation of a preliminary explanation or hypothesis which is subjected to an appropriate investigation for validation or disproof.

c) How to assess the research agendas?

If it's the case: few LIS agendas are public or well planned/funded

| Academic | Public | Special |
|--|--|--|
| 1.8 Scholarly communication | 1.4 Changing roles of libraries | 2.4 Digital resources management |
| 2.3 Digital media in research | 3.9 Children and libraries | 2.6 Preservation of information resources |
| 3.7 Impact of the library programmes on learning | 3.3 Marketing library and information services | 7.6 Impact of digitisation projects |
| 6.5 Librarian and education | 3.5 Impact of the reading promotion | 7.7 Business & industry information needs |
| 7.6 Impact of digitisation projects | 5.12 Evaluation of library work | 2.3 Digital media in research |
| 5.12 Evaluation of library work | 3.7 Impact of the library programmes on learning | 3.3 Marketing library and information services |
| 1.5 Economic significance of libraries | 3.1 Implication of user studies | 7.8 Impact of digital services |
| 2.4 Digital resources management | 7.1 Strategic development of new services | 5.2 Strategic planning in libraries |
| 3.8 Guidelines for information literacy progr. | 3.2 Library as a creative space | 4.1 Developing search/retrieval systems |
| 7.2 Libraries in education | 7.2 Libraries in education | 1.8 Scholarly communication |

Research areas of future significance (example of 3 sectors) in:
Maceviciute, E., Wilson, T., Lalloo, I., & Lindh, M. (2009).

c) How to assess the research agendas?

We should look beneath the surface of calls like the EU Horizon 2020

The screenshot displays the European Commission Research & Innovation Participant Portal. The main navigation bar includes 'HOME', 'FUNDING OPPORTUNITIES', 'HOW TO PARTICIPATE', 'EXPERTS', and 'SUPPORT'. A search bar and 'LOGIN'/'REGISTER' buttons are also present. The left sidebar lists 'EU Programmes 2014-2020' (H2020, Research Fund for Coal & Steel, COSME, 3rd Health Programme, Consumer Programme) and 'FP7 & CIP Programmes 2007-2013' (Calls).

The main content area features a funding opportunity titled "The young generation in an innovative, inclusive and sustainable Europe" (H2020-YOUNG-SOCIETY-2015). The opportunity details are as follows:

| | | | |
|-------------------------|--------------|--------------------------|---|
| Opening Date | 10-12-2014 | Deadline Date | 28-05-2015 17:00:00 (Brussels local time) |
| Publication date | 11-12-2013 | Total Call Budget | €9,450,000 |
| Programme | Horizon 2020 | Main Pillar | Societal Challenges |
| Status | Open | OJ reference | OJ C361 of 11 December 2013 |

Topic: Lifelong learning for young adults: better policies for growth and inclusion in Europe **YOUNG-3-2015**

Navigation tabs include 'Topic Description', 'Topic Conditions & Documents', and 'Submission Service'. The 'Scope' section begins with a 'Specific challenge' paragraph.

4. Looking ahead: will we keep living apart together?

How to overcome the isolation of LIS researchers?

The screenshot shows the European Research Area (ERA) website. At the top left is the European Commission logo. The main header reads "EUROPEAN RESEARCH AREA". Below this is a navigation bar with links: Home, ERA Partnership, Maximising results, Strengthening cross-border links, Open market for researchers, Gender equality, Accessing knowledge, Joint Programming, ERA Progress, and a final empty box. A large banner features a satellite-style map of Europe with glowing network lines, titled "European Research Area" and "An open space for knowledge and growth". Below the banner is a video player titled "The European Research Area (ERA)" with a YouTube logo. The video content shows a map of Europe with a network of icons representing researchers. Various research fields are listed around the map: Digital Humanities?, Cultural heritage?, LIS.se?, IMS/business?, LIS.uk?, Psico/Edu/Sociology?, LIS.ro?, GLAM services?, ICT/CS?, LIS.es?, LIS.it?, e-GOV, e-learning?, and Research policy?. To the right of the video player is a "LATEST NEWS" section with three entries: 4.5.2015 "A new start for Europe: Opening up to an ERA of Innovation" Conference, 22-23 June, Brussels; 18.12.2014 The third edition of the ERA Newsletter is now online; and 16.12.2014 RESAVER: Award of the contract to support the new pan-EU pension fund. Below the news is a green button for "ERA NEWSLETTER" and a "KEY DOCUMENTS" section.

References

- Maceviciute, E., Wilson, T., Lalloo, I., & Lindh, M. (2009). *A Delphi study of research needs for Swedish libraries*. Borås: Högskolan i Borås. <http://bada.hb.se/handle/2320/5069>.
- Shera, J. (1964). Darwin, Bacon, and research in librarianship. *Library Trends*, 13(1), 141–149.
- Spink, A., & Heinström, J. (2012). Introduction. In A. Spink & J. Heinström (Eds.), *Library and Information Science Trends and Research: Europe* (pp. 3–9). Bingley: Emerald Group Publishing.

Thank you!

Let's try to find the answers... or new challenges!

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