

Bibliometric 'revolution' and internationalization of science

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Bibliometrics

- quantitative analysis of scientific communication via publications (articles in scientific journals, proceeding's papers, reviews, research notes, etc.)

Citation indexes

(Web of Science & Scopus)

- author(s)'s affiliation
- address
- abstract
- keywords
- list of references

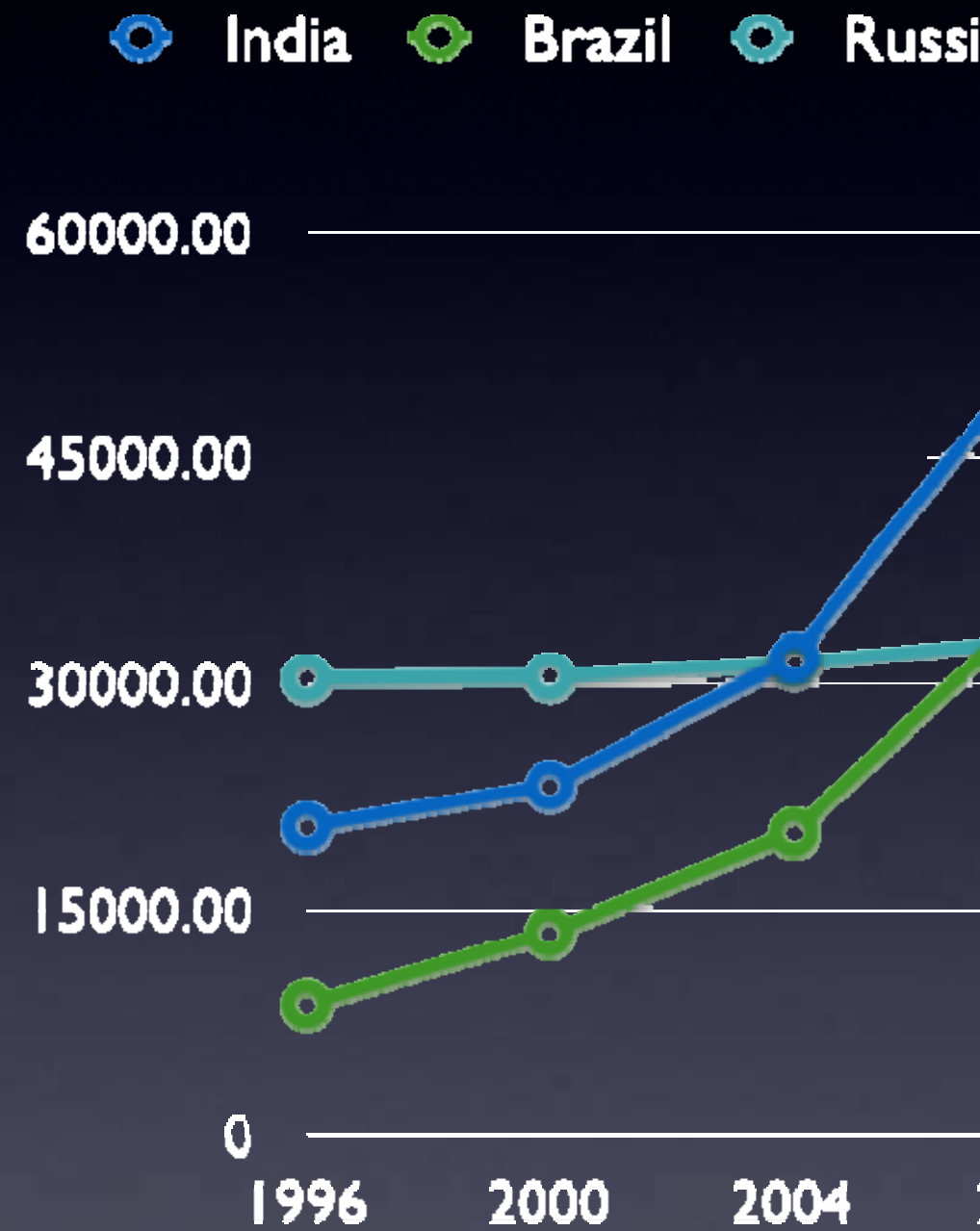
indicators

- **Publications** (number of publications, index of specialization, co-authorships, etc.)
- **Citations** (number of citations, average citations by field, highly cited papers, co-citations, etc.)
- **Citations and publications** (Hirsch-index, number of citations per paper, etc.)

among science administrators

- bibliometric indicators as an *objective* way to evaluate science
- world-wide competition in scientific and academic matters

papers race instead of arms race



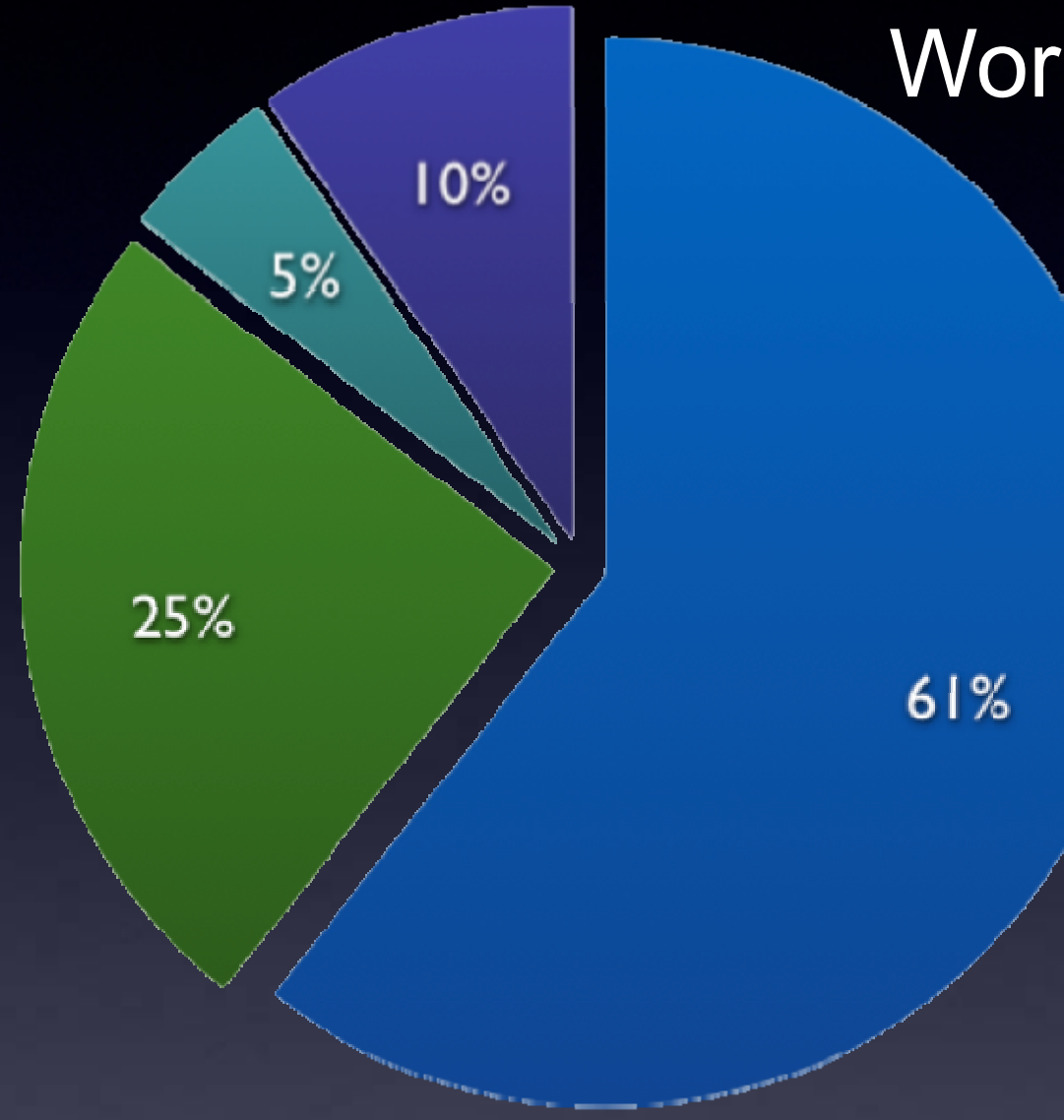
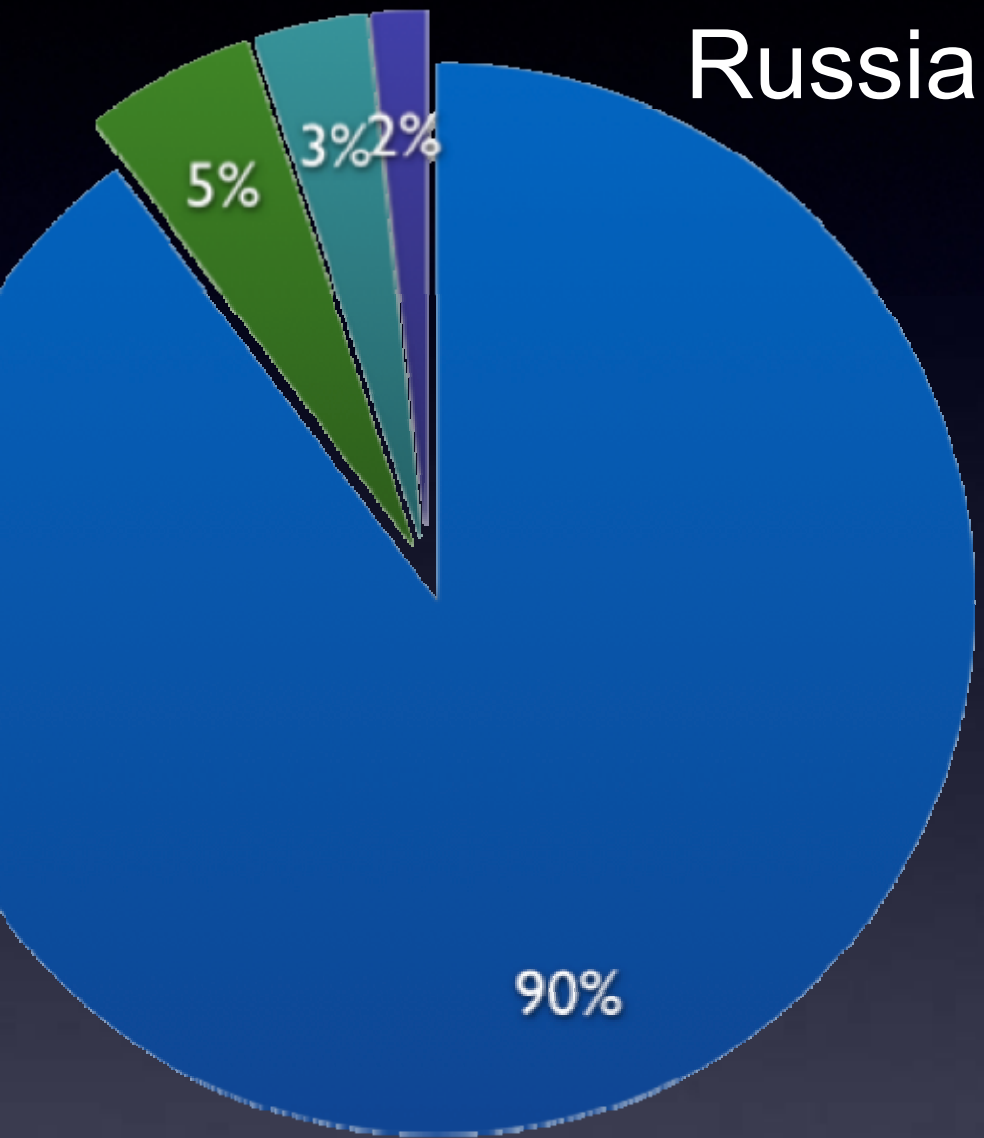
- English-speaking bias of international Citation indexes (Scopus and Web of Science)

Less than 10% of russian papers are covered by international citation indexes

- A natural sciences bias of international citation indexes

Social sciences and humanities are underrepresented in Wos and Scopus

(2009)



 Natural Sciences

 Medicine

 Agricultural Sciences

Russian Academy of Sciences

Total staff in 2009: 55402

	Number of researchers	Number of Papers*	Researchers / papers ratio
Physics and Astronomy	13013	5986	2.17
Mathematics	4480	1396	3.21
Social Sciences	1032	177	5.83
Economics	2244	13	172.62

- A «Matthew effect» in science, or accumulated advantage

Papers by authors from peripheral countries and institutions have less chances to be cited by colleagues

Distribution of world publications and citations (2008)

- Top 10 countries publish 68% of all papers indexed by Scopus (top 20 countries publish 85 % of papers)
- Top 10 countries receive 75% of world attention as measured by citations (top 20 countries receive 90% of all citations)

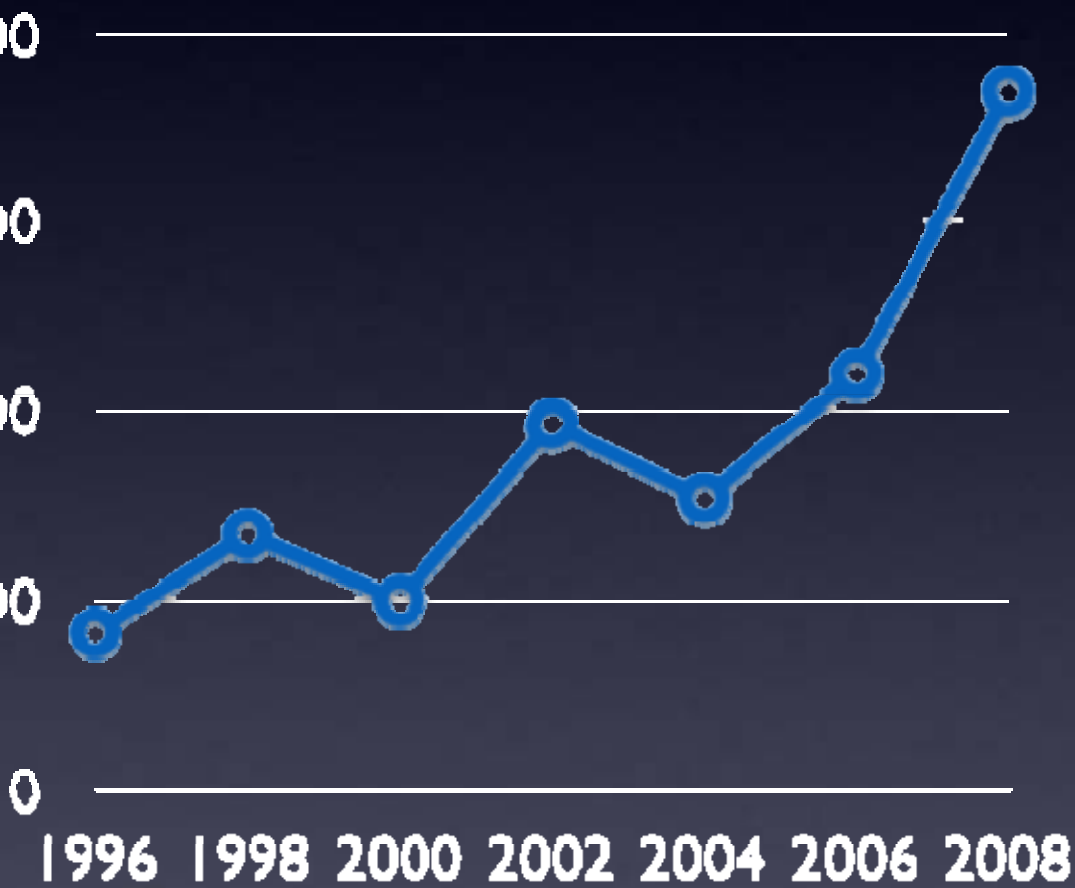
Average citation rates

USA: 15,02
England: 13,78
Germany:
12,28
France: 11,5

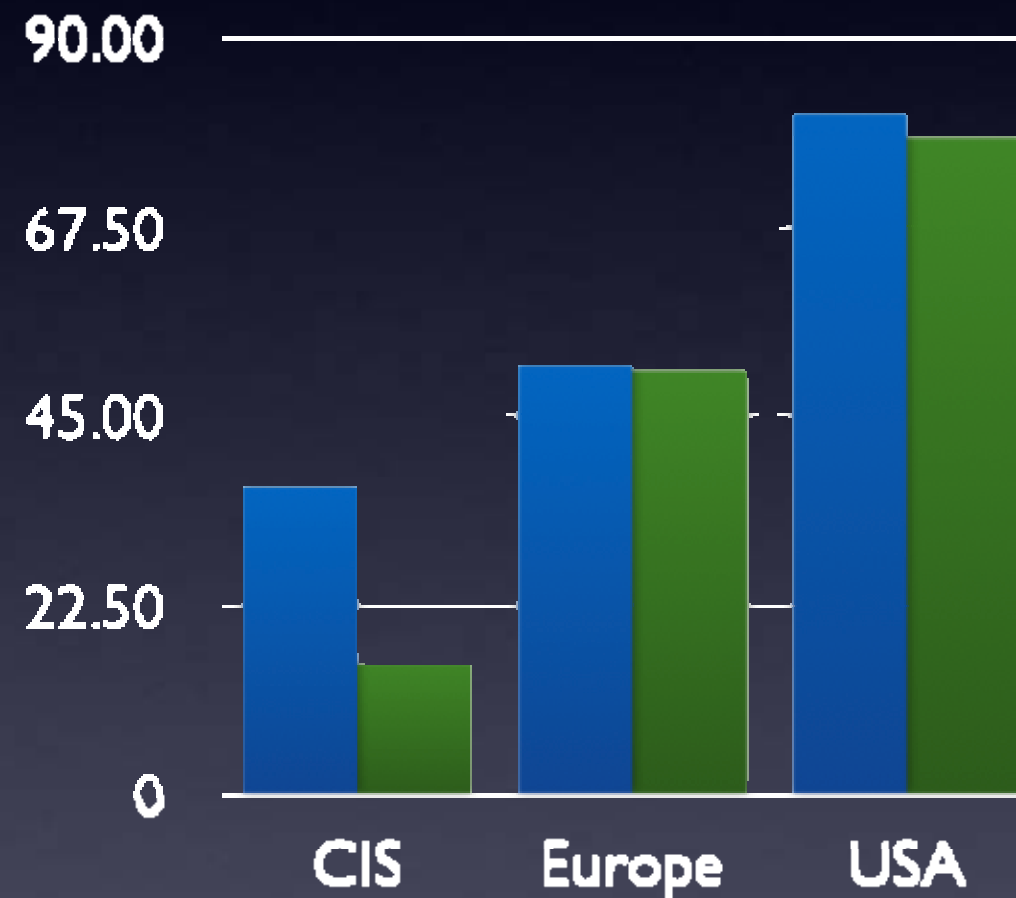
Brazil: 5,95
China: 5,24
India: 5,08
Russia: 4,39

russian social sciences

○ N of papers



■ 1993-1995 ■ 2003-2005



Спасибо
Merci