Digital resources and indicators for databases assessment

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5th IMCW, November 24-26, 2014, Antalya, Turkey

„Development of new informational services for economics high education in Moldavia”, financed by EURASIA foundation, in partnership between the Economic Studies Academy (ASEM) and University of Bergen libraries.


0 600 km
0 nautical miles 400
Iceland
Sweden
Finland
Norway
Atlantic Ocean
Gulf of Bothnia
Estonia
Russia
Latvia
North Sea
Baltic Sea
Lithuania
Denmark
Russia
United Kingdom
Ireland
Belarus
Poland
Neth.
Germany
English Channel
Belgium
Lux.
Czech Rep.
Slovakia
Ukrai
Moldova
Liech.
Austria
Hungary
Bay of Biscay
France
Switz.
Slovenia
Romania
Croatia
Bos. & Herz.
Serbia
Black Sea
Italy
Mont.
Portugal
Spain
Alb.
Greece
Turkey
Tyrrhenian Sea
Ionian Sea
Aegean Sea
Mediterranean Sea
Strait of Gibraltar
Algeria
Tunisia
Malta

IMPORTANCE OF ELECTRONIC RESOURCES AND THEIR ASSESSMENT

1

STUDY OF COMMUNICATION PROCESSES IN SCIENCE

2

MEASURING EXCELLENCE IN RESEARCH, AS WELL AS RESEARCH QUALITY IS A PROBLEM CONCERNING MORE AND MORE GOVERNMENT

3

RESEARCH INSTITUTIONS, UNIVERSITIES AND FINANCING ORGANIZATIONS AS A MANNER OF RESPONSIBILITY AND SCIENTIFIC RESEARCH QUALITY

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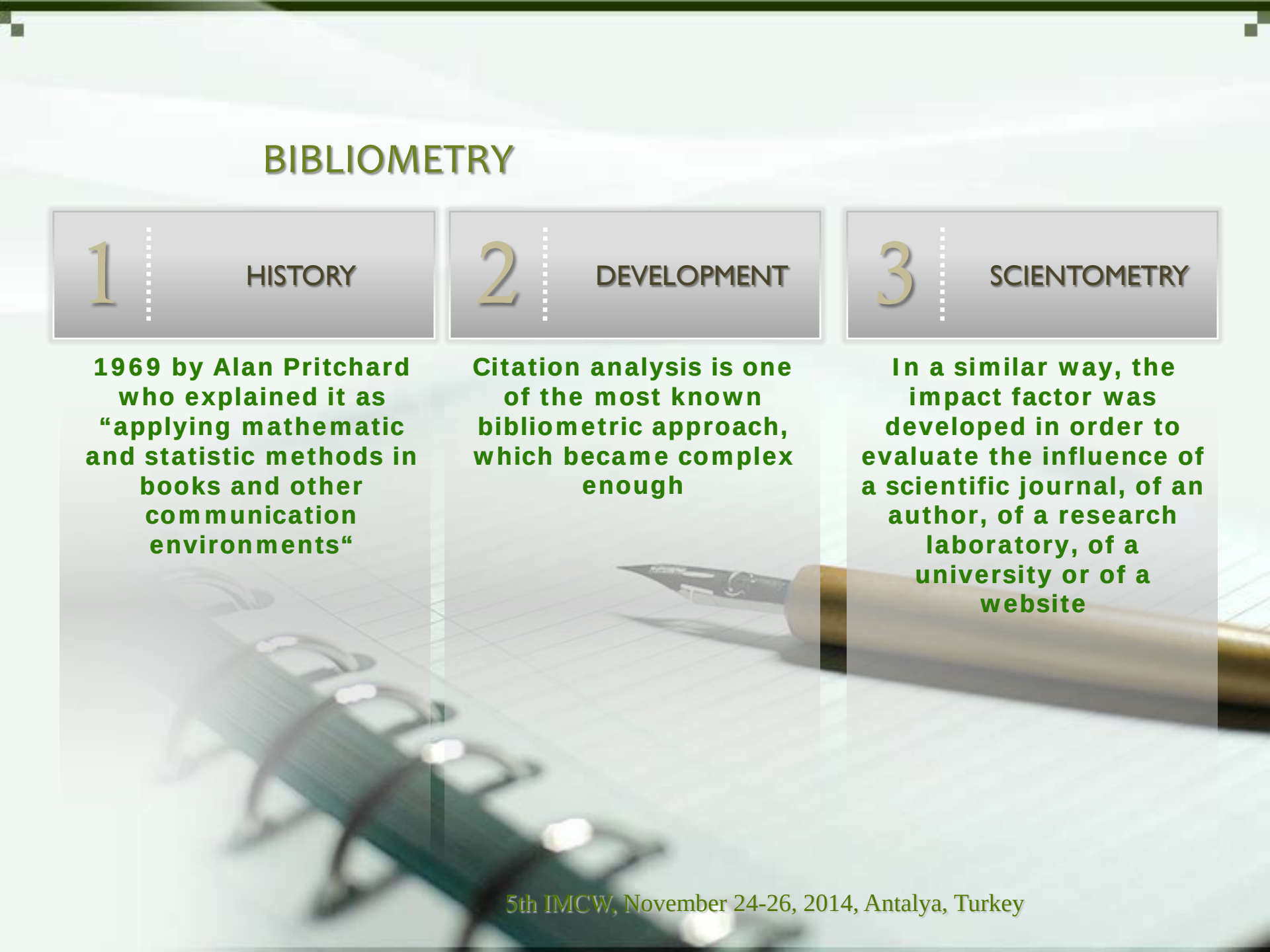
BIBLIOMETRY

1 HISTORY	2 DEVELOPMENT	3 SCIENTOMETRY
1969 by Alan Pritchard who explained it as “applying mathematic and statistic methods in books and other communication environments“	Citation analysis is one of the most known bibliometric approach, which became complex enough	In a similar way, the impact factor was developed in order to evaluate the influence of a scientific journal, of an author, of a research laboratory, of a university or of a website



PERFORMANCE INDICATORS

1 The International Coalition of Library Consortia (ICOLC)

An international organization organizing library consortia from all over the world.
From its creation in 1996 it has designed its own directory regarding the assessment of informational resources use "available on Web".
The document is called *Guidelines for Statistical Measures of Usage of Web-based Information Resources* [6], and aims at providing those who manage the consortia with the information required for their activity development, and also at offering to those in information industry the main indicators.

2 EQUINOX (Library Performance Measurement and Quality Management System)

Financed by European Commission through the "Telematics for Libraries" program, took place between 1998 and 2000. It resulted in the definition of 14 performance indicators related to electronic services provided by the library

3 E-metrics project

Data Collection Manual for Academic and Research Library Network Statistics and Performance Measures (2001) was developed. Here four categories of statistics are recommended: available electronic resources; use of electronic resources and services; digitization expenses and digitization activities [9].

PERFORMANCE INDICATORS

4 *COUNTER (Counting Online Usage of Networked Electronic Resources).*

5 *ISO 11620 standard concerning the performance indicators from libraries*

COUNTER project where librarians, editors and suppliers are provided with a common framework to facilitate recording and reporting statistics regarding the use of online electronic resources[4].
Within the project COUNTER two codes of best practice were developed, one of them dedicated to electronic journals and databases; the latest edition of it was published in 2008 [4].

Included indicators regarding electronic resources: the number of content units downloaded per capita, the cost per consulting session, the cost per downloaded content unit, expenses percentage of the electronic resources acquisition and percentage of library staff that provides electronic services [7].

Effective use of electronic resources

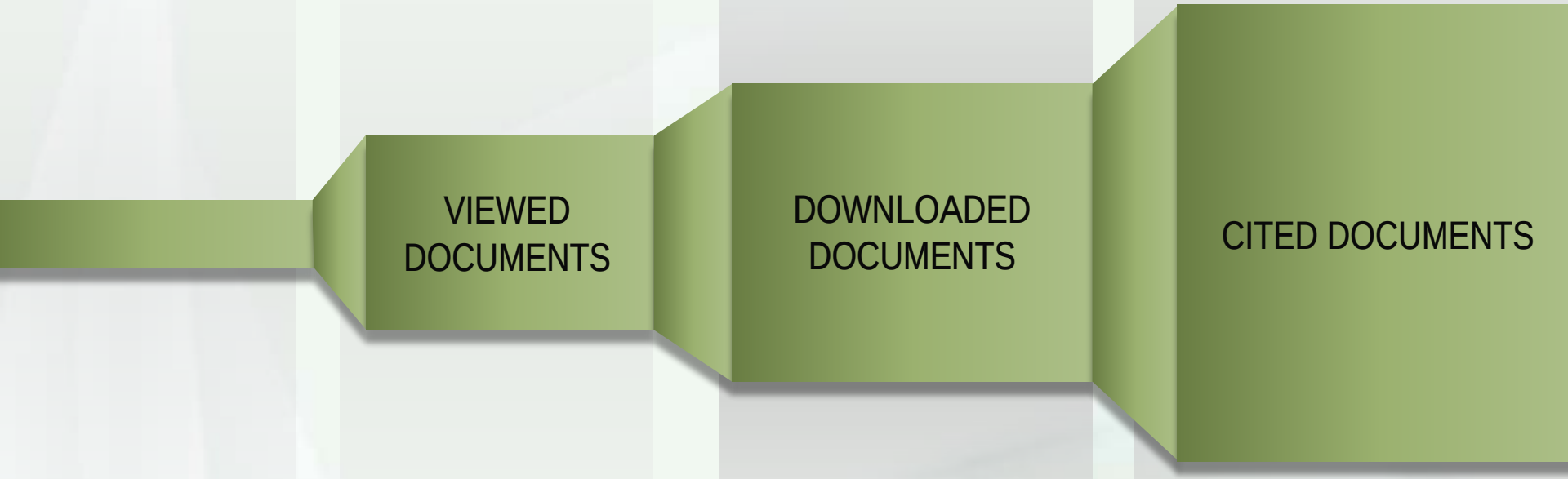
- Concerns and evaluation models of electronic resources are based upon typical usage indicators: number of visits, number of downloads.
- But these indicators only show us the researcher's interest in consulting the document.
- Instead, we suggest as a real use indicator that can be measured, namely the document used as reference.
- By real use we understand that the document has been transformed in reference within the published document.

Effective use of electronic resources

Using a database we are able to:

- identify the number of viewed document, meaning documents of interest,
- then downloaded documents, meaning documents that fall within the area of interest of the researcher,
- but the document used as a documentation source is becoming a document cited in the final published article.

EFFECTIVE FACTOR OF RESOURCE USE, Feu



- ✓ **Effective factor of resource use Feu:**
- ✓ **Number of cited documents/ Number of downloaded documents**

The scientific production of Transilvania University, Romania, Bergen University, Norway and Academy of Economic Science from Chisinau, Moldavia in 2013 published in Web of Science.

RESEARCH METHODOLOGY

- Number of published articles in 2013
- Number of downloads according to statistics
- Number of references used from databases.

RESEARCH METHODOLOGY

- ✓ In Web of Science (WOS) in 2013,
- ✓ Transilvania University published 353 articles, (fig.2);
- ✓ University of Bergen published 126 articles (fig 3);
- ✓ Academy of Economical Science from Chisinau published 9 articles (fig.4).

Results found:	353
Sum of the Times Cited [?] :	117
Sum of Times Cited without self-citations [?] :	107
Citing Articles [?] :	115
Citing Articles without self-citations [?] :	105
Average Citations per Item [?] :	0.33
h-index [?] :	4

Fig.2 .:WOS statistics in 2013 for Transilvania University of Brasov, Romania

Results found:	126
Sum of the Times Cited [?] :	267
Sum of Times Cited without self-citations [?] :	249
Citing Articles [?] :	216
Citing Articles without self-citations [?] :	204
Average Citations per Item [?] :	2.12
h-index [?] :	8

Fig.3: WOS statistics in 2013 for Bergen University, Norway

Results found:	9
Sum of the Times Cited [?] :	3
Sum of Times Cited without self-citations [?] :	3
Citing Articles [?] :	3
Citing Articles without self-citations [?] :	3
Average Citations per Item [?] :	0.33
h-index [?] :	1

Fig.4: WOS statistics in 2013 for Chisinau Academy of Economical Science, Moldavia

CASE STUDY

	Feu	Downloaded documents 2012	Cited articles 2013	Number of articles 2013
Transilvania University	0,0056	18507	105	353
University of Bergen	0,0022	88963	204	126
Academy of Economical Science	0,0015	1980	3	9

SCImago Journal & Country Rank

www.scimagojr.com

SJR SCImago Journal & Country Rank

- Home
- Journal Rankings
- Journal Search
- Country Rankings
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- Compare
- Map Generator
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The Shape of Science

The **Shape of Science** is a new graphical interface designed to access the bibliometric indicators database of the SCImago Journal & Country Rank portal (based on 2012 data).

SJR SCImago Journal & Country Rank

EST MODUS IN REBU

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- Home
- Journal Rankings
- Journal Search
- Country Rankings
- Country Search
- Compare
- Map Generator
- Help

Compare

Countries | Journals

Select countries or regions to compare

Norway + Romania + Moldova +

Subject Area: Arts and Humanities

Subject Category: All categories of selected Area

Compare

	Norway	Romania	Moldova
1996	143	7	0
1997	142	13	0
1998	135	8	2
1999	162	12	0
2000	138	10	0
2001	153	20	1
2002	213	45	0
2003	216	64	2
2004	246	41	2
2005	303	51	1
2006	312	87	4
2007	355	73	4
2008	412	131	2
2009	519	351	10
2010	603	499	2
2011	706	660	5
2012	678	762	9
2013	733	664	17

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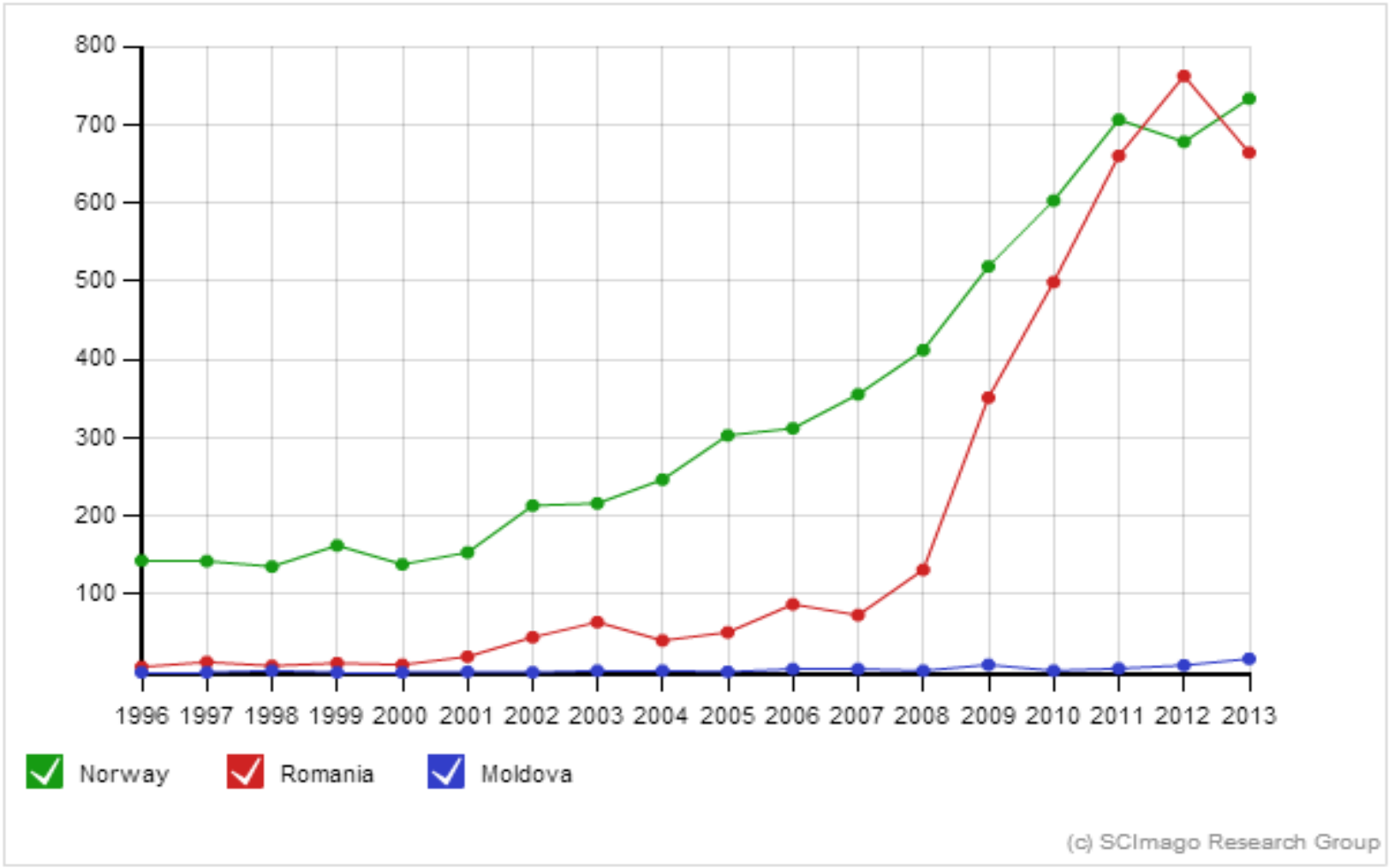
Documents | Citable Documents | Cites | Self Cites | Cites per Document | (Cites-Self cites) per Document

H Index | % cited documents | International collaboration



WoS - SCOPUS

Table 2: SCIMAGO position

	SCIMAGO position	Documents
Transilvania University	31	162.39
University of Bergen	47	92.264
Academy of Economical Science	98	4.553

Table 3: Correlation coefficient between documents and Feu

	Documents	*Feu*
Documents	1	
Feu	0.801933	1

CONCLUSIONS

- Financial resources must be efficiently and appropriately used in order to gain as much effectiveness of the investments as possible.
- Statistics have to be explored and be the start for strategic plans and provision.
- In academic libraries traditional usage indicators have covered printed resources, but as electronic resources take more and more of the budgets, the importance of assessing the usage of databases and other electronic resources grows.

CONCLUSIONS

- The new indicator may be called effective factor of resource use, Feu.
- WOS is a bibliometric database with very strong statistical instruments, and we could show that Feu is in correlation with different other scientometric data available.
- The case study of 3 different institutions with different cultural background and different access to new technology indicated that Feu is viable and can be taken in consideration.

CONCLUSIONS

- It can be used in evaluating the electronic resources and may thus be used in future acquisition strategies of these resources.
- The proposed model is original and may be extended and improved.

MULTUMESC PENTRU ATENTIE!

TAKK FOR OPPMERKSOMHETEN!

謝謝您的關注

СПАСИБО!

MERCI DE VOTRE ATTENTION!

GRACIAS POR SU ATENCIÓN!

TEŞEKKÜR EDERIM !

THANK YOU FOR YOUR ATTENTION !

OBRIGADO!

GRAZIE PER LA VOSTRA ATTENZIONE!

Ευχαριστώ για την προσοχή σας!

Vielen Dank für Ihre Aufmerksamkeit!

感谢您关注