ROI ELICO

Final Results

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ELSEVIER

couperin.org

Consortium Unifié des Etablissements Universitaires et de Recherche pour L'Accès aux Publications Numériques

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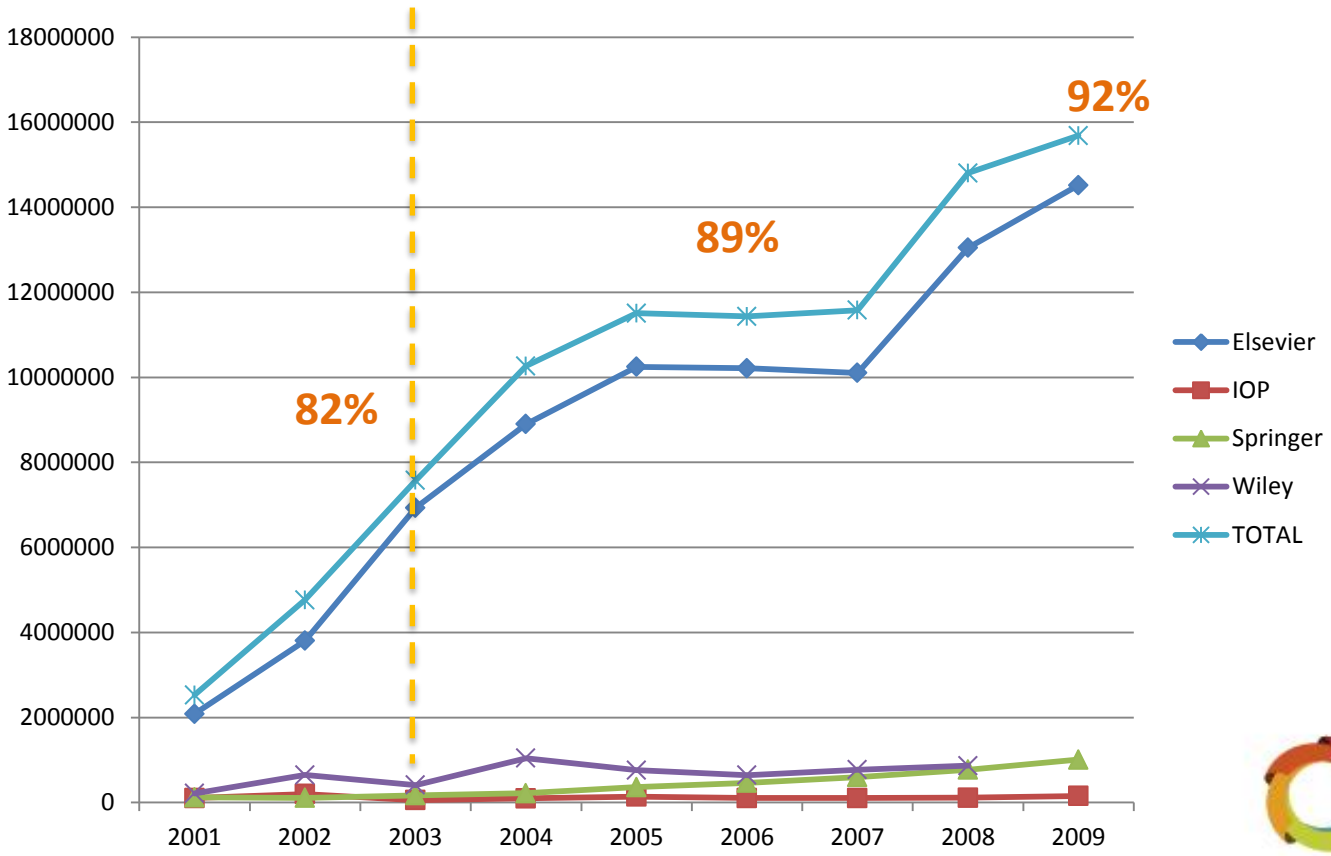
From EPEF to ELICO ROI
Value perspective

- **EPEF: 2010**
  - Evidence about usage of big deals in France
  - Evidence about french journal usage specificities



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From EPEF to ELICO ROI
Value perspective

- **ROI ElICO : 2012**
  - **New research question**
    - How e-journals usage impacts researchers publication activity?
  - A french contribution to ROI studies
    - Lib-Value ; Ciber

- **Agenda**
  - Submitted in June 2012
  - Started in September 2012
  - Final report : December 2013

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Study objectives

- Any evidence of relationship between journal usage and impact (publication, citations) ?
  - Variation by subject? By institution type?

- Any evidence of causality phenomena?
  - Evolution in time?

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Shaping the study

- **ROI defined as**
  - Publication and impact
    - Articles and citation
- **Sample longitudinal perspective**
  - 2003 – 2005 – 2007 - 2009 …
- **Combine 2 complementary approaches**
  - Descriptive: Bibliometry
  - Explicative: Econometry

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The partners and the data

- **Couperin**
  - The national consortium
  - JR1 reports (Elsevier, Springer, Wiley, IOP)
    - Big Deals costs: no comprehensive and reliable data on expenditures

- **Elsevier**
  - Scopus for bibliometric data
  - Coverage: more exhaustif for french academic institutions
    - HSS fields
    - Language
    - Affiliations issue
      - Scopus Index reliability
        - » *((AF-ID("Universite Claude Bernard Lyon 1" 60023578) OR AF-ID("Universite de Lyon 1 Faculte de Medecine Alexis Carrel" 60029483))) OR ((AFFIL(«lyon AND 1») OR AFFIL(«lyon1») OR AFFIL(«lyon AND i») OR AFFIL(«lyoni») OR AFFIL(ucbl)) OR ((AFFIL(ucb) OR AFFIL(«claude AND bernard»)) AND AFFIL(lyon))) AND (LIMIT-TO(PUBYEAR, 2007))*

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Exploratory approach

- **Two level analysis**
  - Macro Analysis: national level, 68 institutions
  - Micro Analysis: sample level, 13 institutions
- **Different variables, “Proxys”**
  - Usage, production, citation, scientific domain, ESGBU library statistics
- **Develop indicators to understand the mechanisms of ROI**
  - Based on h-Index method

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BIBLIOMETRIC ANALYSIS AND RESULTS

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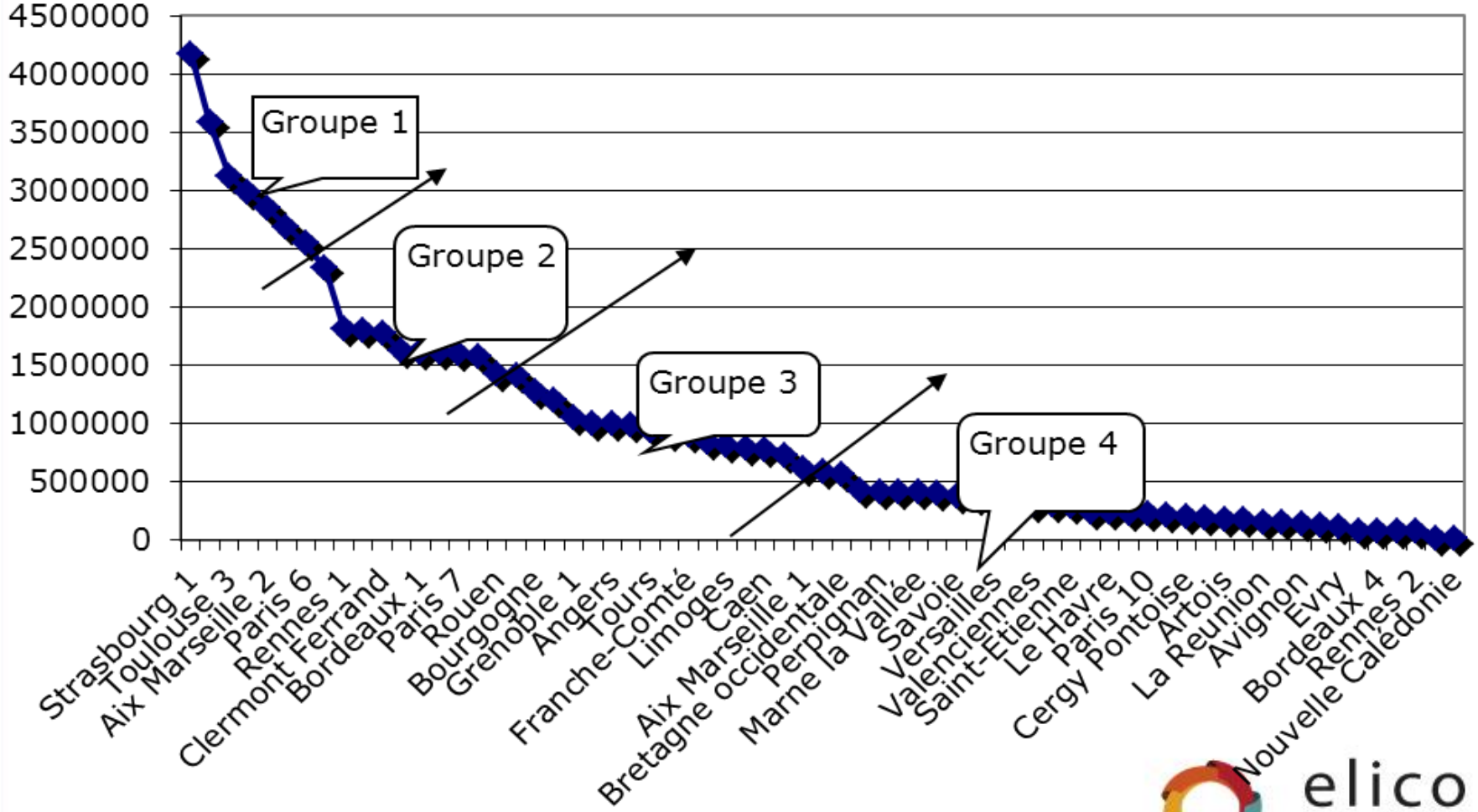
Universities by usage



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Cross the variables

	LP	SMM	STM	HSS	LEM
Groupe 1			*Paris 5* *Paris 6* *Lyon 1*		
Groupe 2	*Nantes*	*Poitiers*			
Groupe 3	*Metz*	*Angers*			
Groupe 4		*La Rochelle* *Perpignan* *Savoie* *Le Havre*		*Paris 10*	*Toulouse 1*
Total	**13**				

Thematic indexation

12 Thematics	Journals	%	Cumulated
Medecine	2321	31.61	31.61
Biomedical and Life Sciences	1290	17.57	49.18
Engineering	742	10.11	59.29
Earth and Environmental Sciences	463	6.31	65.60
Chemistry and Material Sciences	402	5.48	71.07
Mathematics and Statistics	398	5.42	76.49
Social Sciences and Law	387	5.27	81.76
Physics and Astronomy	375	5.11	86.87
Politics Business and Economics	339	4.62	91.49
Computer Science, pro &applied comp.	296	4.03	95.52
Behavioral Sciences	193	2.63	98.15
Humanities Architecture and Design	136	1.85	100.00
	7342		

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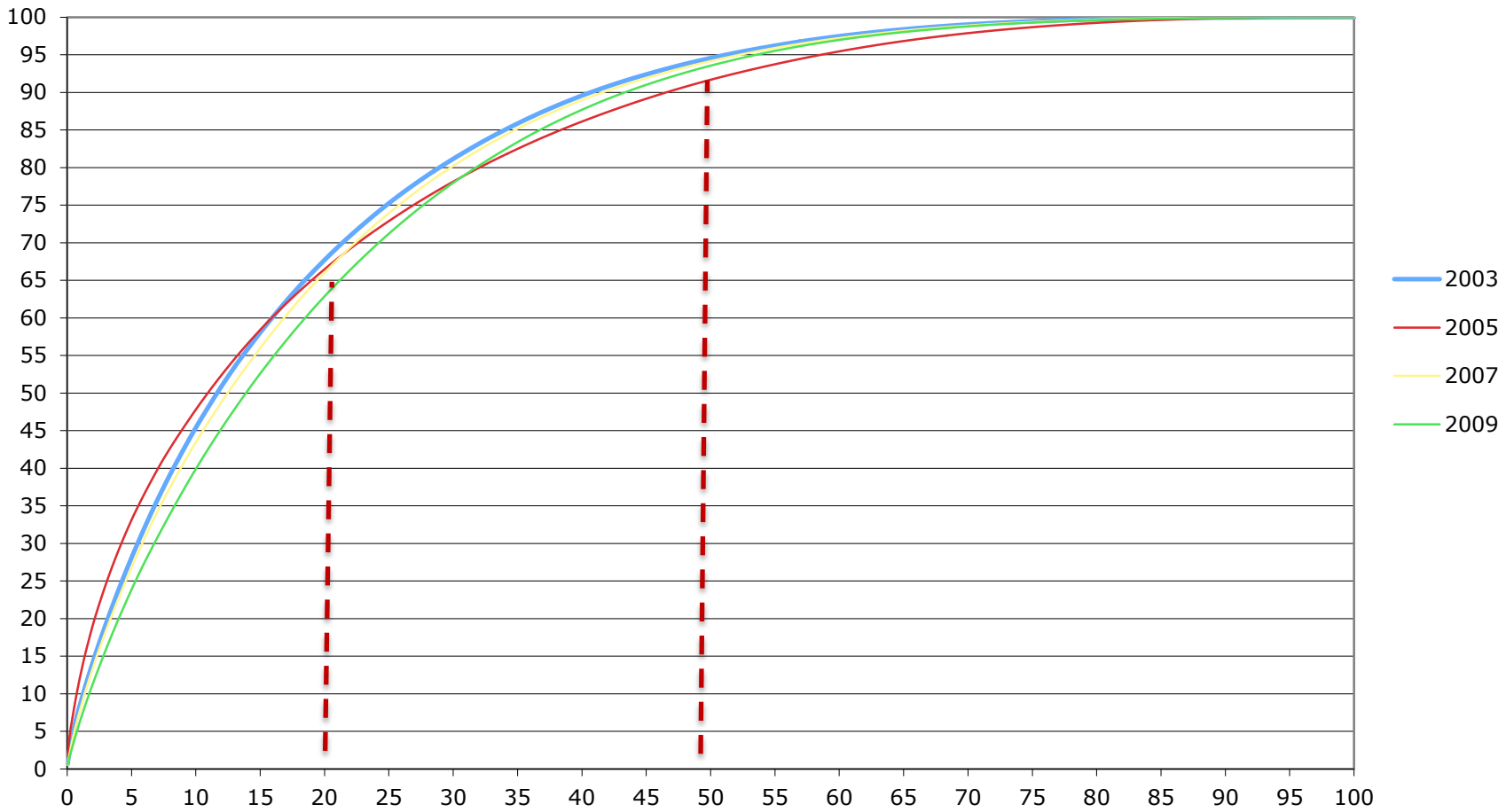
Usage Concentration



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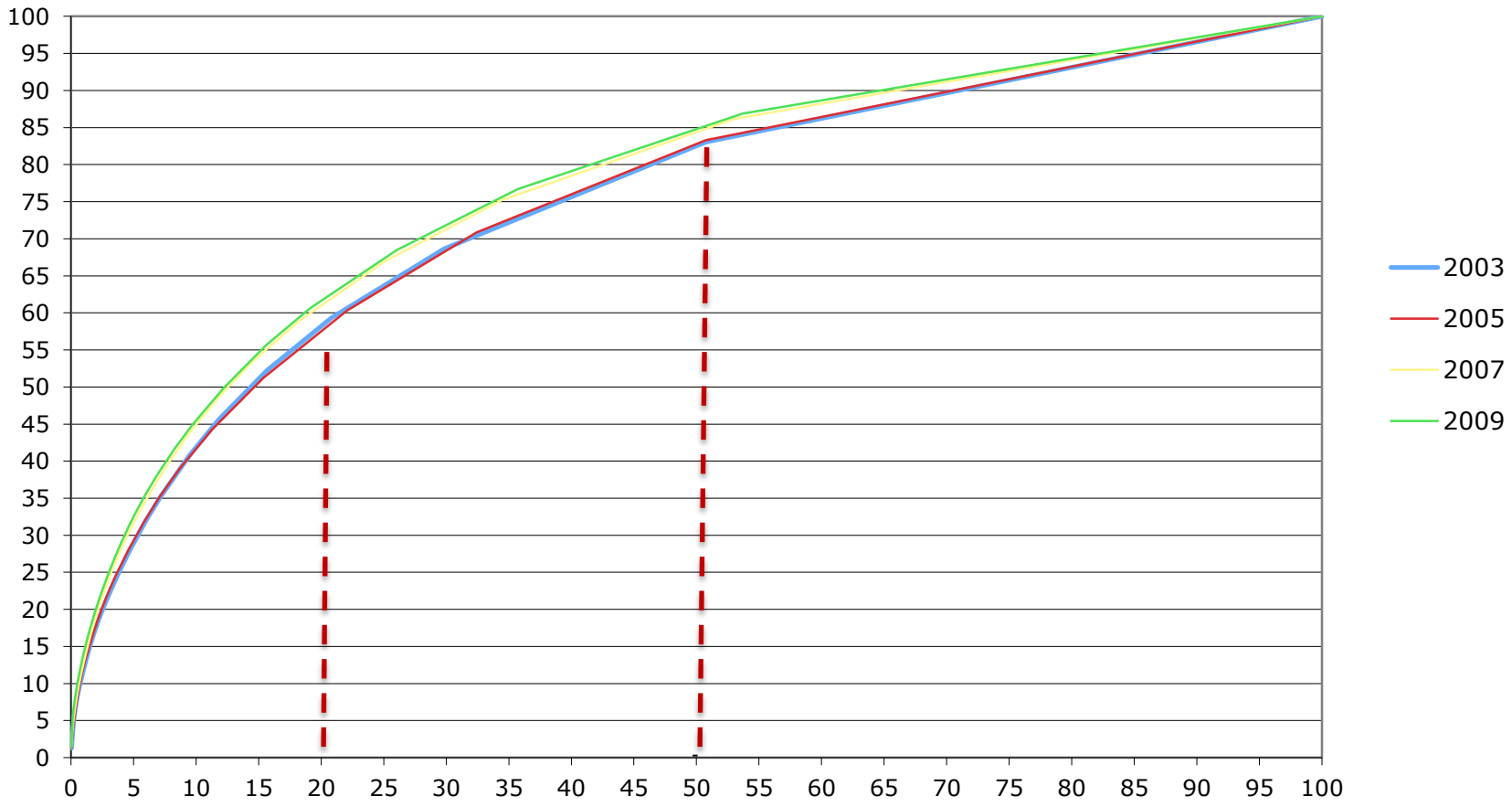
Publication Concentration



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The Indicators

- **Based on the mathematic calculation principle of the h-Index**
  - **=>** Publication: Notoriety Impact Factor (RIn)
  - **=>** Usage: Usage Impact Factor (RIc)

- **For every institution, two indicators are calculated**

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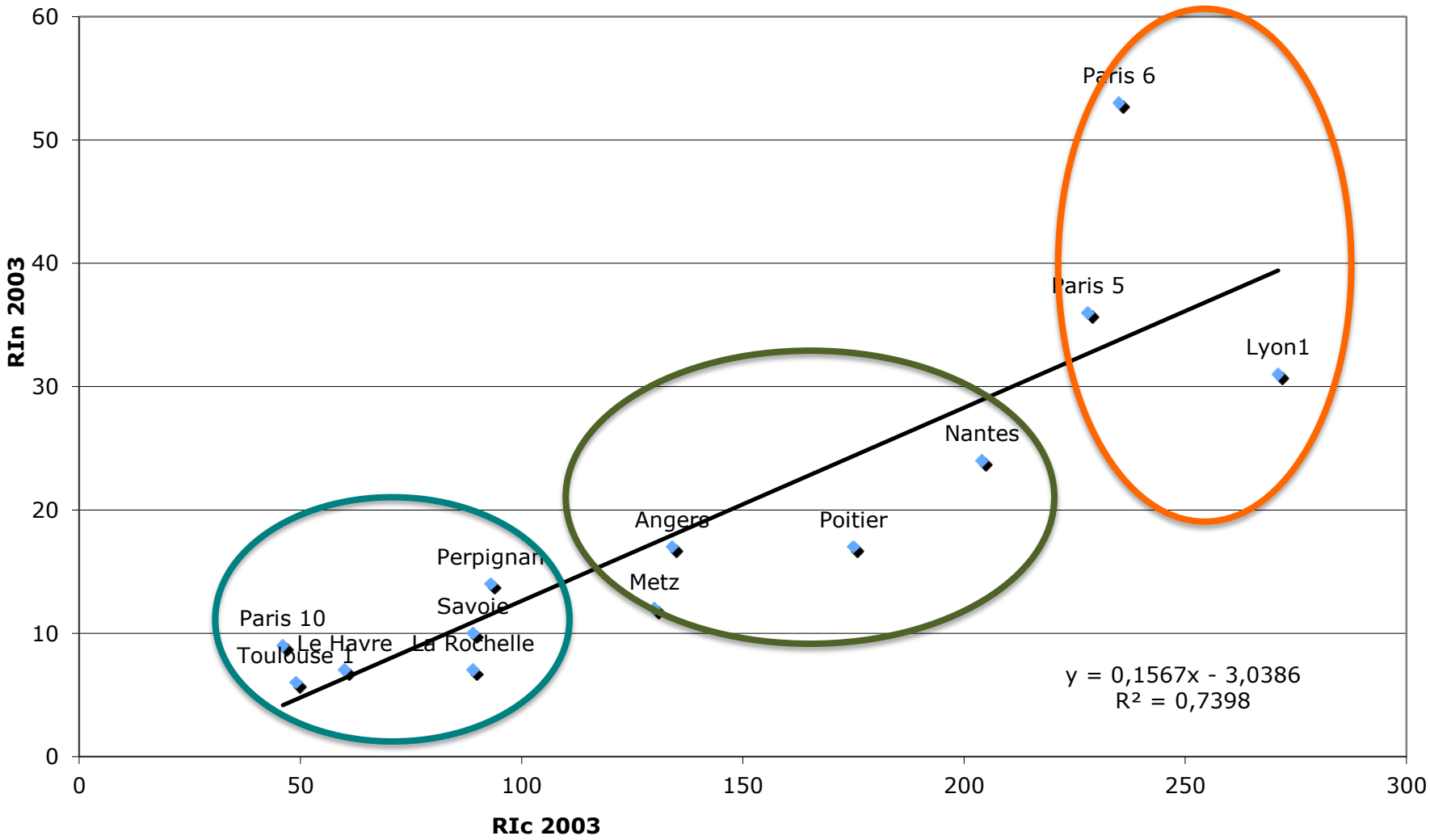
Correlation in 2003



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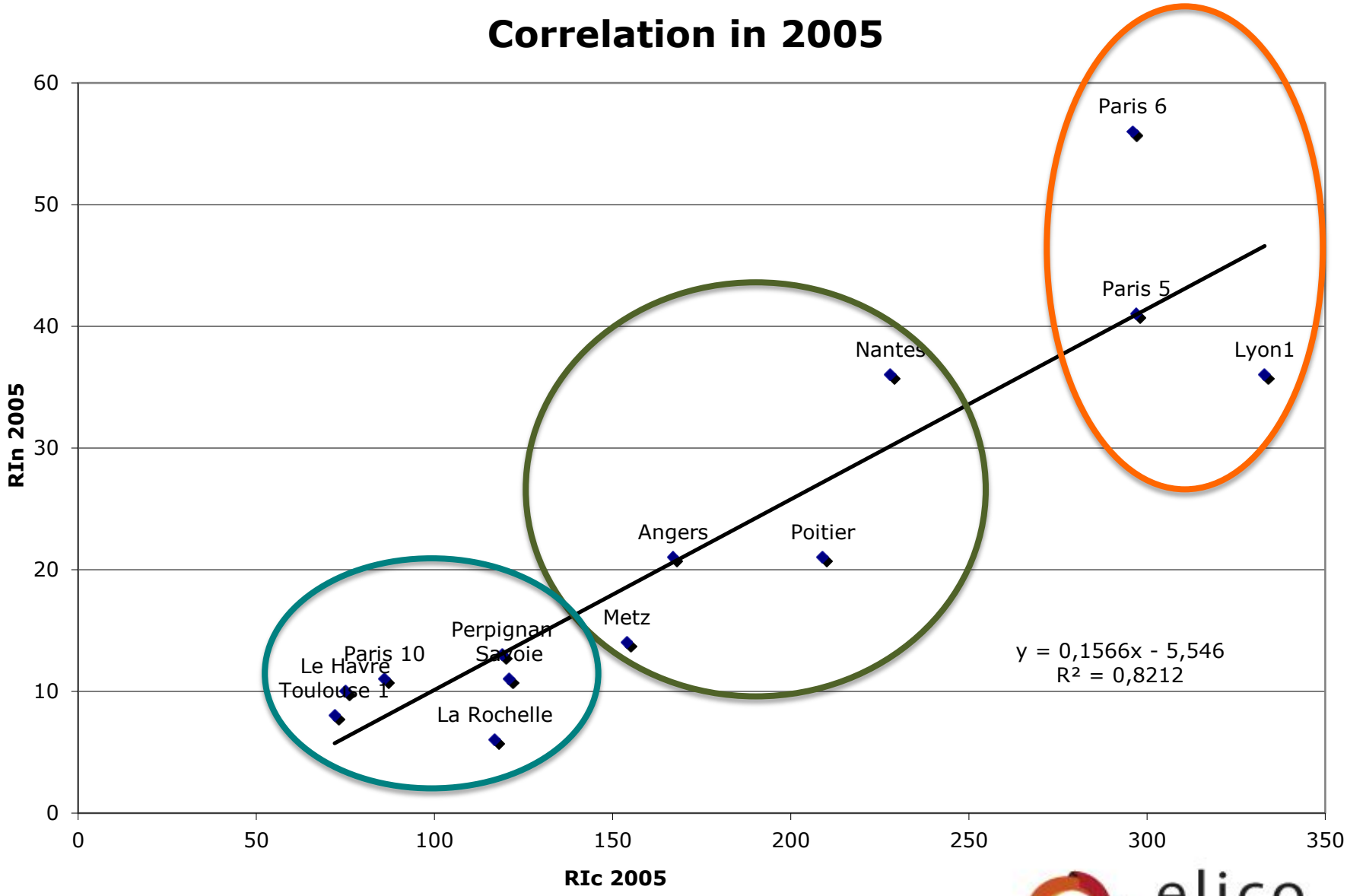
Correlation in 2005



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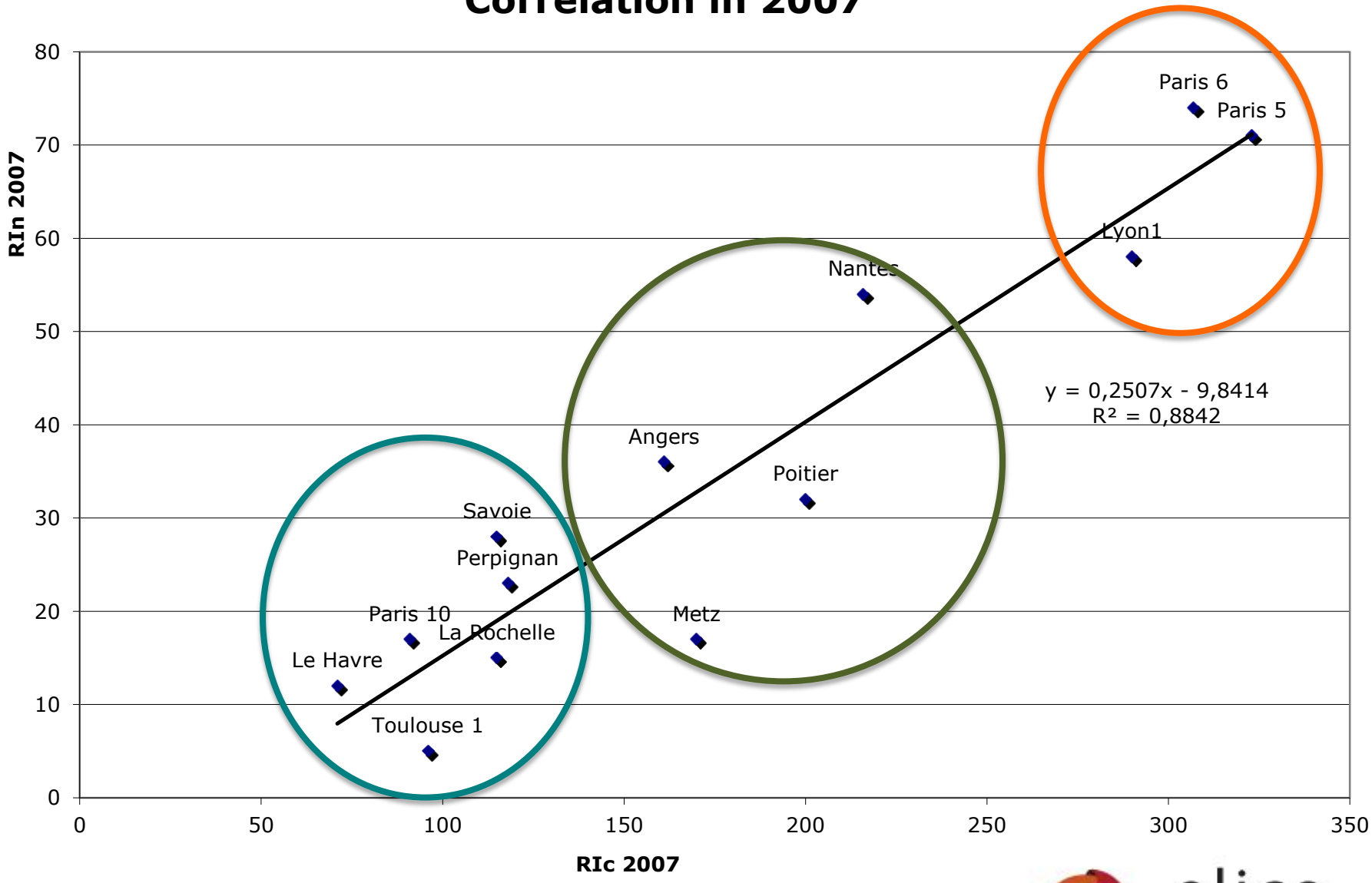
Correlation in 2007



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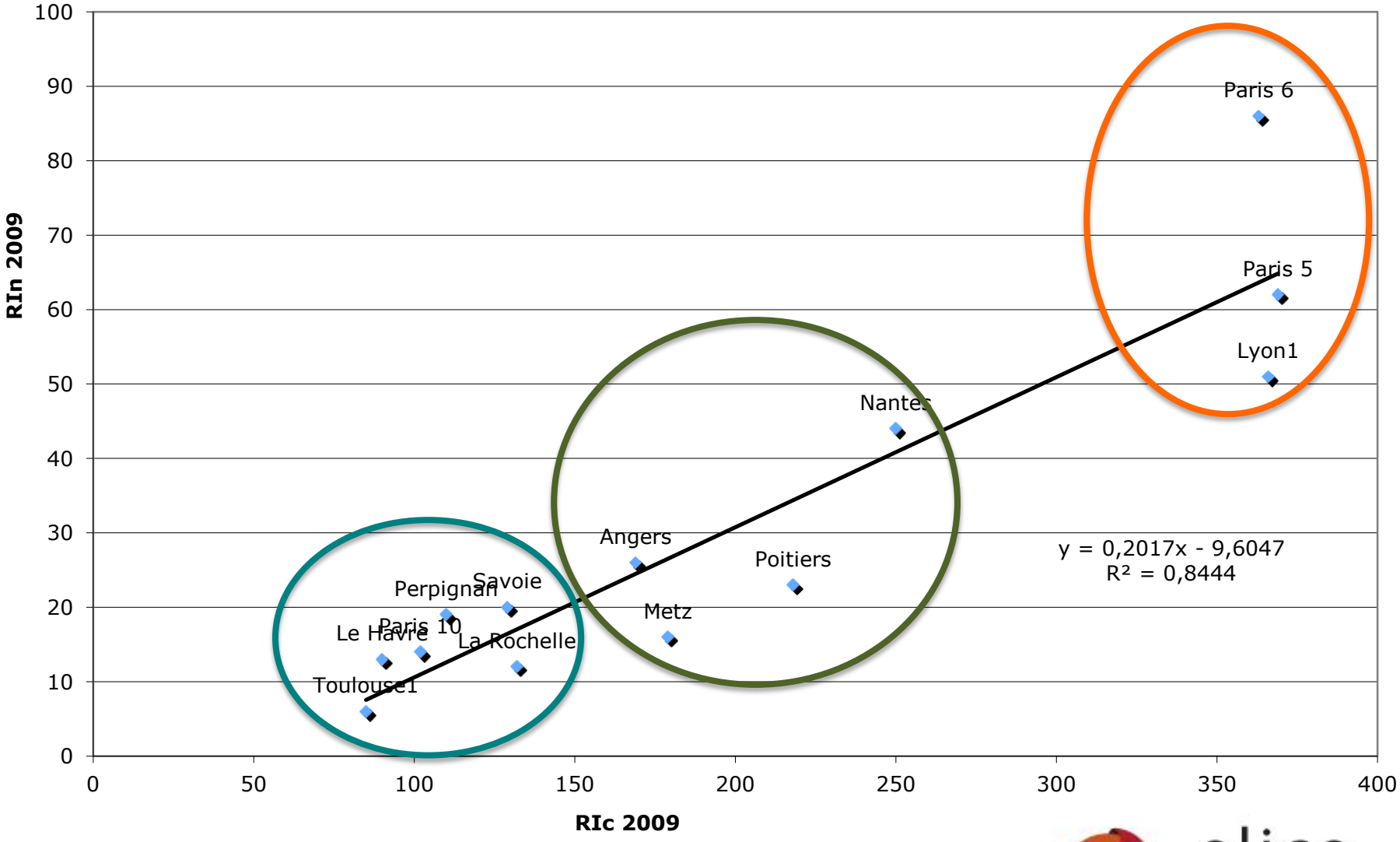
Correlation in 2009



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THEMATIC ANALYSIS

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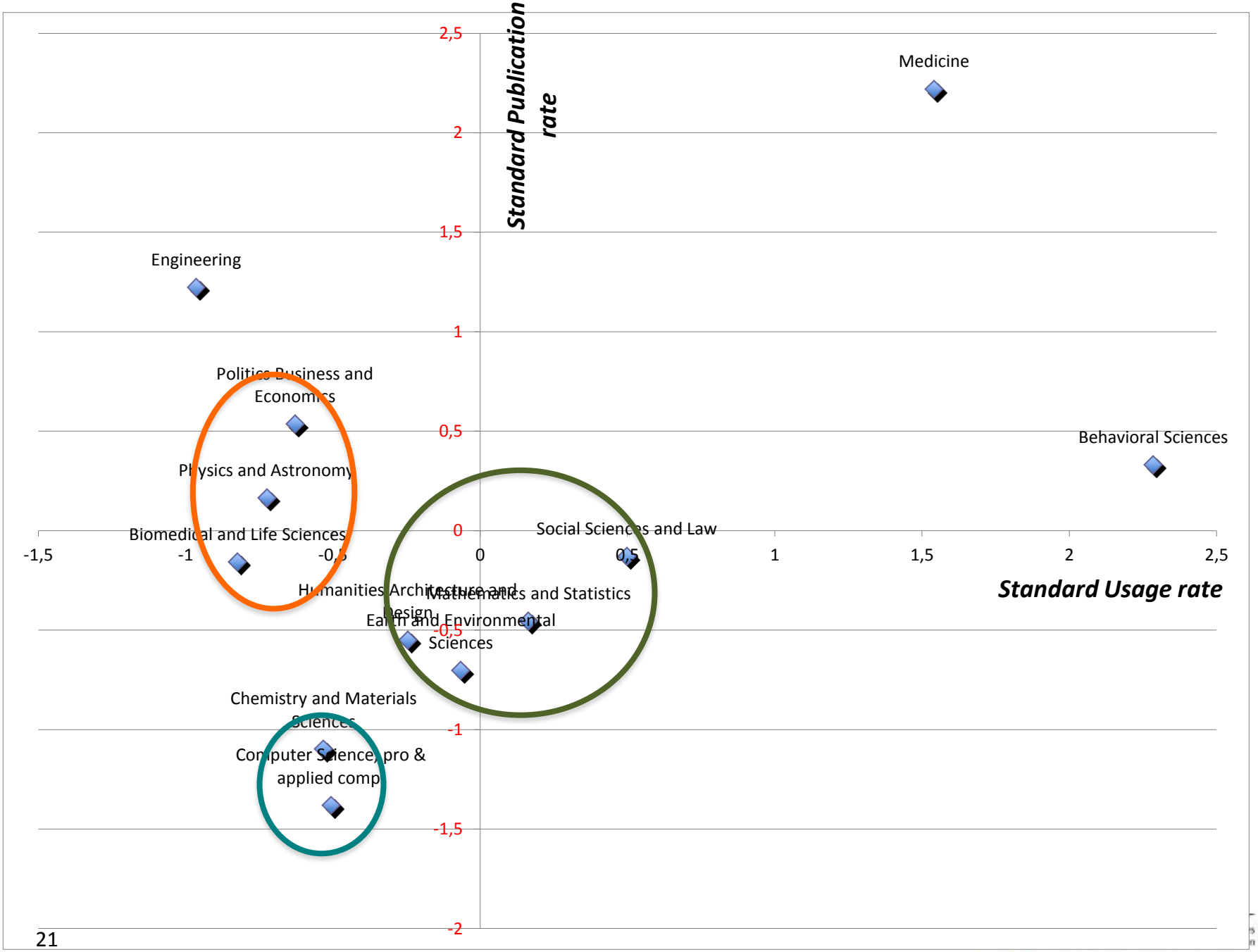
Standard Publication rate
Standard Usage rate
2,5
2
1,5
1
0,5
0
-0,5
-1
-1,5
-2
-1,5
-1
-0,5
0
0,5
1
1,5
2
2,5
Medicine
Engineering
Politics Business and Economics
Physics and Astronomy
Biomedical and Life Sciences
Behavioral Sciences
Social Sciences and Law
Humanities Architecture and Design
Mathematics and Statistics
Earth and Environmental Sciences
Chemistry and Materials Sciences
Computer Science, pro & applied comp

Perspectives

- **Extending the study by a qualitative approach**
  - Perceptions and representations
    - Individual Interviews and focus group
- **Extending impact definition to social impact**
  - Social media
    - STM domains
      - What did Mendeley to downloads on *ScienceDirect*

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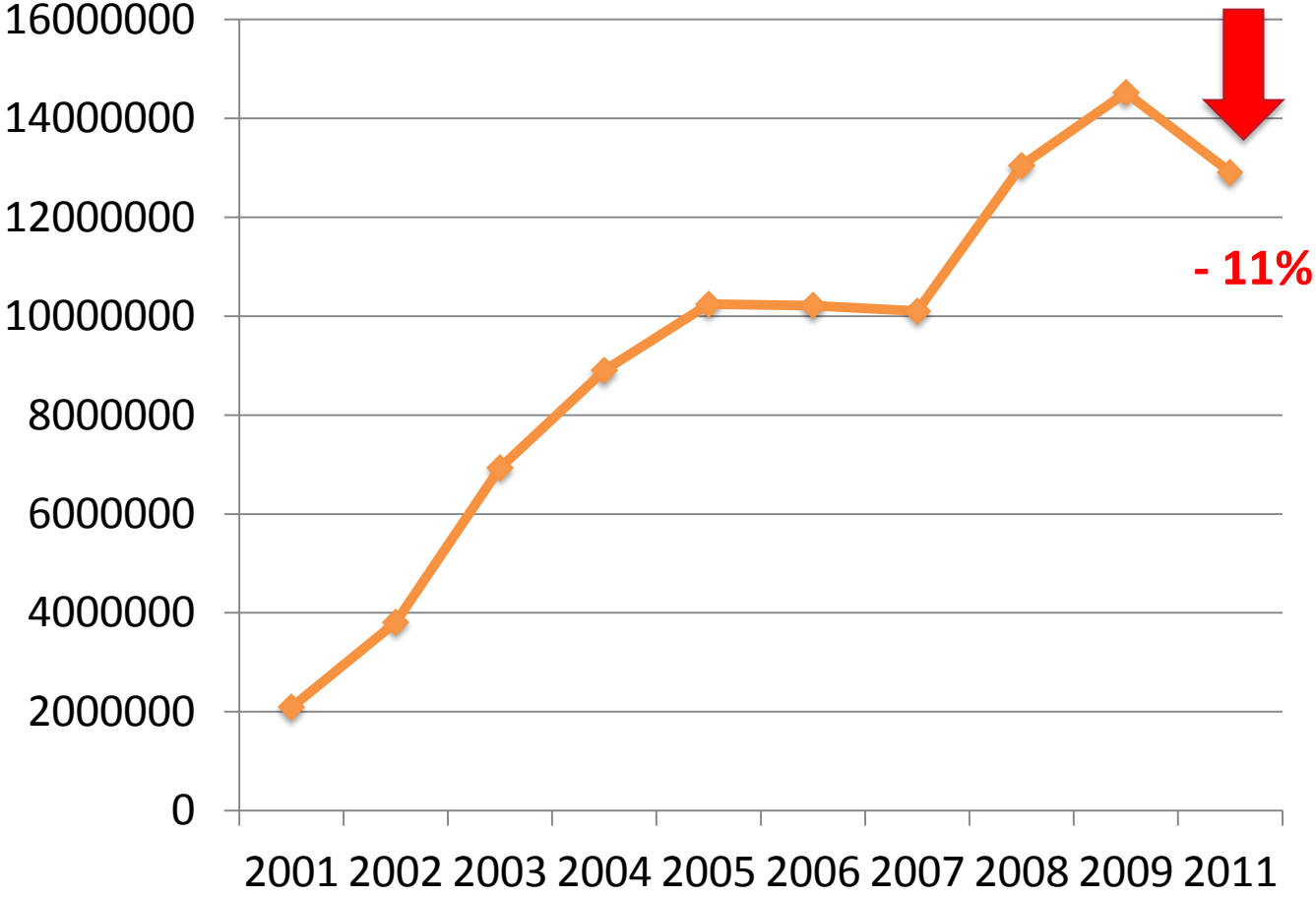
ScienceDirect JR1 decreasing



Diversification
(Larsen, 2010)
(Solomon, 2013)

MENDELEY RESEARCH NETWORKS

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