## **REGIONAL AND URBAN SCIENCE IN FRANCE: RANKINGS OF AUTHORS AND INSTITUTIONS AND PUBLICATION PATTERNS DURING THE NINETIES**

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**Abstract** – This article analyses the evolution experienced by research in urban and regional science in France between 1991 and 2000, comparing these changes with wider international trends. Nine of the leading international journals of regional and urban studies were used in drawing up rankings of countries, authors and institutions and in exploring publication patterns. We examine the strategy adopted by the French in establishing themselves within the world's top five in regional and urban research and report a number of interesting findings when comparisons are drawn internationally.

## *Keywords:* REGIONAL AND URBAN SCIENCE, BIBLIOMETRICS, RANKINGS

### JEL classification: R10, A10, A11, A14

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### **1. INTRODUCTION AND OBJECTIVES**

What purpose is served by rankings in academia and the study of publication patterns of university departments? Ranking departments in terms of their publications would seem to serve three purposes: first, job seekers may evaluate the quality of the research environment at each institution; second, students can gain an idea of the skills and specialist fields of faculty members; and, third, institutions can evaluate their own performance and attract potential sources of funding. Understanding of publication patterns is also important since all authors wish to know what work is being undertaken by their peers. Furthermore, such patterns enable us to identify the publication strategies that allow one country to perform better than others.

This study represents an extension of previous research reported in Suriñach *et al.* (2003) and (2004), conducted at the international level. In this second stage, France – one of the most productive nations in the regional sciences – is analysed with the aim of determining what underlies its excellence in this field.

Unsurprisingly, this is not the first study of rankings in France. In fact, several recent studies examining French research in the field of economics have been published, focusing chiefly on the ranking of economic departments and authors through the application of various methodologies: "Delphy-method combined with citation data" (Lubrano *et al.* 2003), "indicators of publication activity" (Combes and Linnemer 2001) or "weighting articles by an index reflecting journal quality" in order to count the number of articles by a given author (Lubrano 2001). Such analyses have rarely been applied to the Regional Sciences internationally, and to the best of our knowledge, France has never been the focus of such a study. Given these circumstances, we believe this present study contains a number of features that complement the previous research:

- France is examined within a wider international setting: our results report not only on French contributions to the Regional Sciences but also on those from all over the world.
- An in-depth analysis of French publication patterns is undertaken: an identification of the aims, main subjects examined, techniques, types of data provide additional knowledge about the French (vs. international) publication strategy.
- A dynamic analysis is provided: the 1991-2000 aggregate analysis is complemented by a sub-period analysis (1991 to 1995 and 1996 to 2000) so as to identify publication trends and the most significant changes over the last ten years.

The rest of the paper is organised as follows: first, the methodological approach in the paper is described; then, in sections three and four, the empirical results are presented; finally, we conclude with an analysis of these results.

### **2. METHODOLOGY**

Conroy and Dusansky (1995) and more recently Neary (2003) tackle the conceptual problems in evaluating research performance. The most important methodological issues to take into account are the following: first, selecting the journals to be analysed; and, second, deciding on the unit of analysis, which implies taking two main decisions: how to correct for coautorships and multiple affiliations, on the one hand, and how to deal with differences between journals in order to ensure fair comparisons and aggregations, on the other.

In the next two sections, we explain our choices on these two points.

### 2.1. Selection of journals

The criteria adopted here in selecting our sample can be summarised as follows: first, we chose journals included within the Econlit database (for at least part of the time period under consideration). We then reduced this sample of journals further to those included in the Social Science Citation Index database in one or more of the following categories: Demography, Economics, Environmental Studies, Geography, Planning and Development, Transportation and Urban Studies. Next, we revised the "aim and scopes" section of all these journals to select only those that deal with urban, local, and/or regional problems. The final result of this process was the list of nine journals shown in Table 1.

## Table 1: Leading international journals in regional and urban studiesincluded in the analysis

Annals of Regional Science (ARS)
International Journal of Urban and Regional Research (IJURR)
International Regional Science Review (IRSR)
Journal of Regional Science (JRS)
Journal of Urban Economics (JUE)
Papers in Regional Science (PRS)
Regional Science and Urban Economics (RSUE)
Regional Studies (RS)
Urban Studies (US)

The next step was to obtain detailed information about all refereed articles published in the selected journals over the ten-year period. The standard source for this kind of information is the Econlit database. However, not every journal on our list was recorded within Econlit for the entire period. Thus, we compiled these data directly from the journals' contents pages.

The final number of articles, pages and standardized pages included in the analysis are shown in Table 2<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> The definition of standardized pages is dealt with in section 2.4.

	Articles				Pages		Standardized pages			
Journal	1991- 2000	1991- 1995	1996- 2000	1991- 2000	1991- 1995	1996- 2000	1991- 2000	1991- 1995	1996- 2000	
ARS	248	108	140	4307	1734 2573		3184.4	1278.2	1906.2	
IJURR	310	147	163	5483	2534	2949	5318.5	2457.9	2860.5	
IRSR	162	94	68	8 2659 1354		1305	1745.7	853.0	892.7	
JRS	288	138	150	5463	2350	3113	4131.6	1786.0	2345.6	
JUE	438	217	221	8574	3868	4706	5487.3	2475.5	3011.8	
PRS	228	121	107	4196	2076	2120	3161.4	1557.0	1604.4	
RSUE	348	187	161	7085	3564	3521	4676.1	2352.2	2323.8	
RS	420	184	236	5456	2453	3003	6965.6	3139.8	3825.8	
US	914	387	527	16202	6467	9735	14905.8	5949.6	8956.2	
TOTAL	3356	1583	1773	59425	26400	33025	49576.8 21849.5		27727.3	

 Table 2: Description of the sample of regional and/

 or urban articles considered

### 2.2. Unit of analysis

As a measure of the individual output of an author, we could select either the number of articles or the number of pages per article. Using the former as our criterion would give equal weight to long and short papers. However, during the refereeing of articles, journal editors are likely to allocate more pages to papers of higher quality and to shorten those of lower quality. Thus, the number of published pages may be a better indicator of research quality.

A further source of potential distortion here is the variation in characters and page size from one journal to another. To avoid this, we express all journal pages in terms of American Economic Review equivalents, as has become the practice in the literature,<sup>2</sup> and because this format has remained unchanged throughout the time period. In the standardization process we took into account any changes in the format of the journals. For this reason, the weights differ over time for four of the journals analysed.

A further issue concerns the treatment given to multi-authored papers. The standard procedure is to assign to each author the number of pages of the articles multiplied by 1/n, where n is the total number of authors accredited to each paper. Coupé (2000) chose this criterion following Sauer's (1988) economic justification based on the monetary value of papers. However, Cribari-Neto *et al.* (1999) calculated the page count in a different way. They see professional collaboration and co-authorship as a major pillar of academic research and claim that dividing an article's page count by the number of authors imposes an excessive penalty on authors who publish with colleagues and current or former graduate students. For this reason, they divided the number of published pages by the square root of the number of joint authors. The problem with this method of weighting is that the sum of pages assigned to

<sup>&</sup>lt;sup>2</sup> See for example, Conroy and Dusansky (1995), Scott and Mitias (1996), Kalaitzidakis *et al.* (1999) or Lubrano *et al.* (2003) and Tombazos (2004).

each individual author in a paper does not correspond to the total number of pages of the article. In this study we used the first criterion in order to assign not only the number of pages but also the number of articles and standardized pages.

The same approach was adopted to assign pages in those cases where an author belonged to more than one institution according to the information published in the article. Kalaitzidakis *et al.* (2001) used the same procedure to solve both n co-author (1/n) and m affiliation (1/m) cases.<sup>3</sup> We took the affiliation of the authors recorded in the published articles, normally reported by the authors themselves. This approach assigns faculty affiliation based on department residence at the date of assessment.

An additional problem in the case of French rankings concerns the way of dealing with research networks, such as *Centre National de la Recherche Scientifique* (CNRS), and with research laboratories. Most studies in bibliometrics tend to exclude such institutions so as to avoid unfair comparisons. Nevertheless, in this study we chose to include the affiliations recorded by every author in every article. Consequently, besides universities, we consider both networks and research labs as institutions *per-se*. This decision was taken for the following reasons:

- a) In order to know how these networks have performed over the last decade, since simply excluding them would deprive us of any information in this respect.
- b) These institutions play an important role in the scientific production of a country. CNRS, for example, employs about 11,600 full-time researchers.
- c) If some research (which is subsequently published) was sponsored by such an institution, then the portion of article, pages or standardized pages, corresponding to this institution could not be assigned to the other institutions declared by the author.
- d) There is a number of academics who do their research in one lab that is linked to one university, and at the same time they teach in another university.

### 2.3. Purpose, topic, techniques, data and co-authorships

In line with Anselin *et al.* (2000), following a detailed verification process, we classified each published article in different categories depending on its purpose, topic, techniques and data used. Table 3 shows the variables belonging to each category.

Four categories were considered in describing the purpose of a paper: the three classical objectives of econometric analysis: "policy analysis", "structural

<sup>&</sup>lt;sup>3</sup> The Econlit database only provides information about the first three authors named for each paper. If there are four or more authors, it appears as <first author's name>+"et al". For these articles, we assumed that there were four authors, and we could only identify the first one.

analysis", "prediction", and a fourth category named "others", which included other possibilities including methodological analyses.

Purpose	Topics	Techniques	Type of Data 1
Policy analysis	Methodological articles	Non quantitative	Time Series
Structural analysis	Natural resources management & environment	Descriptive analysis	Cross Section
Prediction	Human resources: Demography	Multivariate analysis	Panel Data
Other	Human resources: Labour market	Univariate econometric analysis	Simulated data
	Economic growth and development	Uniequational Regression models: quantitative variable	
	Housing analysis	Uniequational Regression models: qualitative variable	
	Land use patterns and planning	Multiequational Regression models	
	Transportation	Spatial econometrics	Type of Data 2
	Sectoral analysis	Optimisation methods	Micro data
	Firm location	Geographical Information systems	Macro data
	Social and political issues	Cost-benefit analysis, valuation, project evaluation	Simulated data
	Monetary and financial issues	Demographic analysis	
	Trade	Computable General	
	Other topics	accounting matrix	
		Input output analysis	
		Other methods	

Table 3: List of categories for each of the variables considered

Fourteen categories involving regional and urban themes of analysis were considered in describing a paper's topic. These are listed in the second column of Table 3. Although a paper may have focused on more than one topic on this list, we only considered one possibility, and tried to identify the emphasis of the author (for example, by looking at the keywords or the Econlit subject classification codes in the paper).

The classification of papers according to the techniques applied was rather more complex, since most papers used more than one of the techniques considered. We therefore classified each paper on the basis of the most complex of the techniques applied, the one most frequently used, or the one that had most bearing on the final conclusions.

Two different criteria were applied in classifying the type of data used: first, we took into account the time dimension of the data (i.e. "time series", "cross section" and "panel data") and second, the nature of the data (i.e. "macro data" or "micro data"). In both instances, there exists a further possibility: the use of "simulated data". As above, we chose only one option applying the same three criteria.

### **3. FRENCH REGIONAL AND URBAN RESEARCH IN** AN INTERNATIONAL CONTEXT

### 3.1. France's contribution to international research in regional and urban studies

In order to analyze the relative position of French regional and urban research internationally, we drew up country rankings for the period 1991-2000 and for two sub-periods 1991-1995 and 1996-2000. The results in terms of articles, pages and standardized pages are shown in Table 4.

Articles	Articles			-2000	1991-	-1995	1996-2000		
United State	S		1,378.5	41.5%	744.5	47.3%	634.0	36.3%	
United King	dom		749.8	22.6%	307.1	19.5%	442.7	25.3%	
Continental	Europe		638.6	19.2%	265.4	16.9%	373.2	21.4%	
1991-2000	1991-1995	1996-2000							
Netherlands	Netherlands	Netherlands	124.2	3.7%	52.8	3.4%	71.3	4.1%	
Germany	Germany	Germany	99.2	3.0%	45.3	2.9%	53.9	3.1%	
France	Sweden	France	64.5 1.9%		29.7	1.9%	43.4	2.5%	
Sweden	Israel	Spain	54.5	1.6%	21.3	1.4%	35.2	2.0%	
Israel	France	Israel	49.3	1.5%	21.1	1.3%	28.1	1.6%	
Other(25)			246.9	7.4%	95.1	6.0%	141.4	8.1%	
Other (36)			553.6	16.7%	255.7	16.3%	297.9	17.0%	
Total			3,320.5	100.0%	1,572.7	100.0%	1,747.8	100.0%	
Et-al			35.5		10.3		25.2		
Total			3356.0		1583.0		1773.0		
Pages			1991-2000 1991-1995			-1995	1996-2000		
United States	5		25.185.7	42.9%	12.681.5	48.4%	12.504.2	38.4%	
United King	dom		12.684.0	21.6%	5.038.0	19.2%	7.646.0	23.5%	
Continental	Europe		11,070.9	18.8%	4,279.5	16.3%	6,791.3	20.9%	
1991-2000	1991-1995	1996-2000	,		,		,		
Netherlands	Netherlands	Netherlands	2,227.0	3.8%	911.7	3.5%	1,315.3	4.0%	
Germany	Germany	Germany	1,734.0	3.0%	745.2	2.8%	988.8	3.0%	
France	Sweden	France	1,226.9	2.1%	455.8	1.7%	894.6	2.8%	
Sweden	France	Spain	921.5	1.6%	332.3	1.3%	607.0	1.9%	
Israel	Italy	Israel	824.3	1.4%	317.0	1.2%	515.8	1.6%	
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Table 4: Country ranking	s (articles,	pages and	standardized	pages)

Pages			1991-	2000	1991-	1995	1996-2000		
United State	United States			42.9%	12,681.5	48.4%	12,504.2	38.4%	
United Kingdom			12,684.0	21.6%	5,038.0	19.2%	7,646.0	23.5%	
Continental Europe			11,070.9	18.8%	4,279.5	16.3%	6,791.3	20.9%	
1991-2000	1991-1995	1996-2000							
Netherlands	Netherlands	Netherlands	2,227.0	3.8%	911.7	3.5%	1,315.3	4.0%	
Germany	Germany	Germany	1,734.0	3.0%	745.2	2.8%	988.8	3.0%	
France	Sweden	France	1,226.9	2.1%	455.8	1.7%	894.6	2.8%	
Sweden	France	Spain	921.5	1.6%	332.3	1.3%	607.0	1.9%	
Israel	Italy	Israel	824.3	1.4%	317.0	1.2%	515.8	1.6%	
Other (25)			4,137.2	7.0%	1,517.5	5.8%	2,469.9	7.6%	
Other (36)			9,798.6	16.7%	4,216.1	16.1%	5,582.5	17.2%	
Total			58,739.2	100.0%	26,215.2	100.0%	32,524.0	100.0%	
Et-al			685.8		184.8		501.0		
Total			59425.0		26400.0		33025.0		

Standardized	l pages		1991-	2000	1991-	1995	1996-2000		
United States	5		18988.4	38.7%	9519.3	43.9%	9469.1	34.7%	
United Kingdom			12422.8	25.4%	4997.3	23.0%	7425.5	27.2%	
Continental Europe			9363.9	19.1%	3648.3	16.8%	5715.6	20.6%	
1991-2000	1991-1995	1996-2000							
Netherlands	Netherlands	Netherlands	1872.1	3.8%	779.3	3.6%	1092.9	4.0%	
Germany	Germany	Germany	1423.1	2.9%	619.0	2.9%	804.1	2.9%	
France	Sweden	France	1055.0	2.2%	389.3	1.8%	757.2	2.7%	
Sweden	France	Spain	774.0	1.6%	297.8	1.4%	514.0	1.9%	
Israel	Italy	Israel	701.8	1.4%	290.2	1.3%	441.6	1.6%	
Other (25)			3537.9	7.2%	1272.7	5.9%	2105.8	7.7%	
Other (36)			8235.6	16.8%	3527.1	16.3%	4708.4	17.2%	
Total			49010.6	100.0%	21692.0	100.0%	27318.6	100.0%	
Et-al			566.3		157.5		408.8		
Total			49576.9		21849.5		27727.3		

As can be seen, authors affiliated to American institutions are ranked first with just over 40% of total publications. The United Kingdom was placed second with around 23% and the rest of the European countries was third with 19%. During the first sub-period France was ranked fifth in terms of articles (fourth in terms of std. pages) within continental Europe. During the second half of the decade, France doubled its production, climbing to third position within continental Europe. We have to stress the importance of that increase, as there are a significant number of French publications to be considered by the French authors. One of the consequences of that is the fact that the representativeness of our sample of journals is limited to the international context. Consequently, further research comparing publication patterns in national and international journals is highly advisable.

Table 5 describes the sample of regional and/or urban articles published by authors affiliated to French Institutions in the total sample. As can be seen from this table, between 1991 and 2000, authors affiliated to French institutions published 64.5 articles, 1226.9 pages and 1055 standardized pages. If we compare these figures with the total figures in Table 2, French contributions to these top nine international journals account for about 2%. But even more interesting are the results by sub-period; France increased its production by 154% compared to 27% when the entire sample is considered. It is worth mentioning that French articles only began to appear in the International Regional Science Review and Papers in Regional Science after 1995. And finally, considering the classification established by the CNRS in 2004,<sup>4</sup> it is noteworthy that the higher increase of articles were made in the higher quality

<sup>&</sup>lt;sup>4</sup> This classification is developed by the French National Committee for Scientific Research "Economics and Management", 37th section. It classifies the journals in five different categories, from the highest quality (five stars) to the lower (one star). In the last revision of 2004, the four stars journals were JUE and RSUE; three stars were ARS, IRSR, JRS, PRS and US; two stars RS; and one star IJURR.

journals (Journal of Urban Economics and Regional Science and Urban Economics, from 33.9 to 187 standardized pages), and also in the lower quality one (International Journal of Urban and Regional Research, from 44 to 308.9 standardized pages).

	Articles				Pages		Standardized pages			
Journal	1991- 2000	1991- 1995	1996- 2000	1991- 2000	1991- 1995	1996- 2000	1991- 2000	1991- 1995	1996- 2000	
ARS	3.0	1.3	1.7	66.9	22.0	44.9	52.9	16.9	36.0	
IJURR	18.3	3.0	15.3	364.5	46.0	318.5	353.6	44.6	308.9	
IRSR	1.0	-	1.0	15.0	-	15.0	10.7	-	10.7	
JRS	5.2	2.0	3.2	106.7	39.0	67.7	80.4	29.6	50.7	
JUE	4.9	0.3	4.5	113.9	8.0	105.9	72.9	5.1	67.7	
PRS	1.5	-	1.5	25.0	-	25.0	18.8	-	18.8	
RSUE	9.2	2.1	7.1	224.4	43.6	180.8	148.1	28.8	119.3	
RS	7.5	3.0	4.5	90.8	36.0	54.8	115.7	46.1	69.6	
US	13.8	9.3	4.5	219.7	137.7	82.0	202.1	126.7	75.4	
TOTAL	64.5	21.1	43.4	1226.9	332.3	894.6	1055.0	297.8	757.2	

 

 Table 5: Description of the sample of regional and/or urban articles published by authors affiliated to French institutions

#### 3.2. Recognized French institutions in regional and urban research

In this section, academic institutions are listed according to the publication performance of their researchers in the regional and urban journals under consideration and the relative position of French institutions is examined.

Authors from a total of 1,113 institutions published in the selected journals during the decade.<sup>5</sup> 55 of them were French (more than Spain with 26, Italy with 28 and Germany with 51). The three leading French institutions according to the different criteria are, in the considered period, the *Centre National de la Recherche Scientifique* (CNRS), *Université Panthéon-Sorbonne* (Paris I), and the *Ecole Nationale des Ponts et Chaussees* (ENPC). In the international rankings, CNRS was 118th in terms of articles, 102nd in terms of pages and 90th in terms of standardized pages.

Dividing the total sample into sub-periods, members of 679 institutions published articles in the set of journals from 1991 to 1995 while 822 institutions were represented between 1996 and 2000. 388 institutions appeared in both databases. The rankings for French institutions by sub-period are shown in Tables 7 and 8.

<sup>&</sup>lt;sup>5</sup> We examined every record in order to standardize names of institutions. Before these corrections, the database had 2,037 different author affiliations. After correction, this figure fell by more than 45% to 1,113.

<b>Ranking of institutions 1991-2000</b>	Articles		Pages		Std.	Pages
	Pos.	Ν	Pos.	Ν	Pos.	Ν
CNRS*	1	7.84	1	156.41	1	141.23
Université Panthéon-Sorbonne (Paris I)	2	5.4	2	108.83	2	89.65
ENPC	3	2.93	3	67.8	3	44.95
INSEE	6	2	4	53	4	40.96
Université des Sciences et Technologies de Lille (Lille I)	5	2.5	6	41	5	39.32
Institute National d'Etudes Demographiques	4	2.53	7	40.47	6	37.23
University of Burgundy	8	1.83	5	42.5	7	33.75
OECD	10	1.5	9	38	8	32.75
Université Denis Diderot (Paris VII)	6	2	8	40	9	28.8
Institute for Advanced Studies in the Social Sciences	10	1.5	10	29	10	28.13
laboratoire Techniques. Territoires et Sociétés	10	1.5	12	26.5	11	25.71
CEVIPOF	17	1	13	25	12	24.25
EHESS	28	0.83	14	24.83	13	24.09
Université des Sciences Sociales (Toulouse I)	10	1.5	11	27.5	14	23.21
Institut Fédératif de Recherche sur les Economies et les Sociétés	10	1.5	17	22	15	20.89
Institut National de la Recherche Agronomique	16	1.17	16	22.5	16	18.65
Observatoire Sociologique du Changement	17	1	20	18	17	17.46
Université Paris-Dauphine (Paris IX)	30	0.5	21	17	18	16.49
Université Montesquieu (Bordeaux IV)	17	1	29	13	19	16.25
Université de Cergy-Pontoise	17	1	18	21.5	20	15.92
CEPREMAP	46	0.33	23	16.33	21	15.84
Université de la Mediterranée (Aix-Marseille II)	9	1.58	15	23.83	22	15.64
L'Université de Caen Basse-Normandie	17	1	21	17	22	15.64
ENS	17	1	26	14	24	15.6
Université de Poitiers	17	1	31	12	25	15.36
Université de Montpellier I	15	1.27	25	15.57	26	14.92
Université Panthéon-Assas (Paris II)	27	0.9	19	21.1	27	13.75
ENESAD	28	0.83	31	12	28	12.84
Université Pierre Mendes-France (Grenoble II)	17	1	34	10	29	12.8
CERAS	17	1	24	16	30	12.32
CREST	49	0.25	27	13.5	31	8.91
Université du Droit et de la Sante (Lille II)	49	0.25	27	13.5	31	8.91
Université du Maine	30	0.5	29	13	33	8.32
Centre Scientifique et Technique du Batiment	17	1	35	9	34	8.28
Institut d'Urbanisme de Paris	30	0.5	37	8.5	35	8.25
CEMS	30	0.5	37	8.5	35	8.25
CUCES	30	0.5	37	8.5	35	8.25
CERAT	30	0.5	40	8	38	7.76
The Goldman Sachs Group. Inc.	30	0.5	33	11.5	39	7.36
Laboratoire STRATES	30	0.5	41	7.5	40	7.28
Laboratoire d'Economie des Transports-ENTPE	30	0.5	35	9	41	6.75

# Table 6: Ranking of French institutions whose authors have publishedregional and/or urban articles 1991-2000

Institute of International Affairs	46	0.33	45	5.33	42	6.67
Université de Versailles Saint-Quentin-en-Yvelines	30	0.5	41	7.5	43	5.33
Université de Bretagne Occidentale	30	0.5	41	7.5	43	5.33
Université de Bretagne Sud	30	0.5	44	7	45	5.25
LASMAS-IRESCO	46	0.33	47	5	46	4.85
Université Val-de-Marne (Paris XII)	30	0.5	47	5	47	4.6
College of France	30	0.5	49	4.5	48	4.14
Université d'Avignon	30	0.5	53	4	49	3.68
RECLUS	30	0.5	53	4	49	3.68
Université Paul Valéry (Montpellier III)	52	0.2	55	3.8	51	3.5
Institut d'Economie Industrielle	49	0.25	46	5.25	52	3.36
Université Louis Pasteur (Strasbourg I)	52	0.2	51	4.4	53	3.17
Facultés Universitaires Notre-Dame de la Paix	55	0.17	49	4.5	54	2.88
Université Catholique de Lille	52	0.2	51	4.4	55	2.82

\* Position in the international ranking: 118<sup>th</sup> for articles. 102<sup>nd</sup> for pages and 90<sup>th</sup> for standardised pages.

Table 7: Ranking of French institutions whose authors have publishedregional and/or urban articles 1991-1995

Banking of institutions 1991-1995	Arti	cles	Pa	ges	Std. Pages		
	Pos.	Ν	Pos.	Ν	Pos.	Ν	
Université Panthéon-Sorbonne (Paris I)*	1	2.73	1	47.67	1	37.45	
Institute National d'Etudes Demographiques	2	2.53	2	40.47	2	37.23	
CNRS	2	2.53	3	32.13	3	35.46	
Université des Sciences et Technologies de Lille (Lille I)	4	1.5	4	28	4	26.71	
INSEE	5	1	6	23	5	21.16	
Université Denis Diderot (Paris VII)	5	1	5	24	6	18.24	
Université des Sciences Sociales (Toulouse I)	5	1	7	17	7	16.49	
Université de Poitiers	5	1	10	12	8	15.36	
CERAS	5	1	8	16	9	12.32	
ENPC	11	0.83	9	15.83	10	10.45	
Centre Scientifique et Technique du Batiment	5	1	11	9	11	8.28	
Institut Fédératif de Recherche sur les Économies et les Sociétés	13	0.5	11	9	11	8.28	
CNRS and U Montpellier	12	0.53	14	7.13	13	6.56	
OECD	13	0.5	13	8.5	14	5.61	
Université Panthéon-Assas (Paris II)	19	0.25	15	6.75	15	4.46	
University of Burgundy	13	0.5	16	5.5	16	4.18	
Université d'Avignon	13	0.5	17	4	17	3.68	
RECLUS	13	0.5	17	4	17	3.68	
Université de Montpellier I	20	0.2	19	3.8	19	3.5	
Université Paul Valéry (Montpellier III)	18	0.27	20	3.57	20	3.28	

\* Position in the international ranking: 164<sup>th</sup> for articles. 160<sup>th</sup> for pages and 168<sup>th</sup> for standardised pages.

Ranking of institutions 1996-2000	Art	icles	Pages		Std.	Pages
	Pos.	Ν	Pos.	Ν	Pos.	N
CNRS*	1	5.04	1	120.71	1	102.49
Université Panthéon-Sorbonne (Paris I)	2	2.67	2	61.17	2	52.2
ENPC	3	2.1	3	51.97	3	34.5
University of Burgundy	7	1.33	4	37	4	29.57
Institute for Advanced Studies in the Social Sciences	5	1.5	7	29	5	28.13
OECD	9	1	6	29.5	6	27.14
laboratoire Techniques. Territoires et Sociétés	5	1.5	8	26.5	7	25.71
CEVIPOF	9	1	9	25	8	24.25
EHESS	22	0.83	10	24.83	9	24.09
INSEE	9	1	5	30	10	19.8
Institut National de la Recherche Agronomique	8	1.17	12	22.5	11	18.65
Observatoire Sociologique du Changement	9	1	14	18	12	17.46
Université Paris-Dauphine (Paris IX)	25	0.5	15	17	13	16.49
Université Montesquieu (Bordeaux IV)	9	1	23	13	14	16.25
Université de Cergy-Pontoise	9	1	13	21.5	15	15.92
CEPREMAP	40	0.33	17	16.33	16	15.84
Université de la Méditerranée (Aix-Marseille II)	4	1.58	11	23.83	17	15.64
Université de Caen Basse-Normandie	9	1	15	17	17	15.64
ENS	9	1	20	14	19	15.6
ENESAD	22	0.83	27	12	20	12.84
Université Pierre Mendes-France (Grenoble II)	9	1	31	10	21	12.8
Institut Fédératif de Recherche sur les Économies et les Sociétés	9	1	23	13	22	12.61
Université des Sciences et Technologies de Lille (Lille I)	9	1	23	13	22	12.61
Université de Montpellier I	9	1	27	12	24	11.64
Université Denis Diderot (Paris VII)	9	1	18	16	25	10.56
Université Panthéon-Assas (Paris II)	24	0.65	19	14.35	26	9.3
Université du Droit et de la Santé (Lille II)	43	0.25	21	13.5	27	8.91
CREST	43	0.25	21	13.5	27	8.91
Université du Maine	25	0.5	23	13	29	8.32
Institut d'Urbanisme de Paris	25	0.5	33	8.5	30	8.25
CEMS	25	0.5	33	8.5	30	8.25
CUCES	25	0.5	33	8.5	30	8.25
CERAT	25	0.5	36	8	33	7.76
The Goldman Sachs Group. Inc.	25	0.5	29	11.5	34	7.36
Laboratoire STRATES	25	0.5	37	7.5	35	7.28
Laboratoire d'Economie des Transports-ENTPE	25	0.5	32	9	36	6.75
Université des Sciences Sociales (Toulouse I)	25	0.5	30	10.5	37	6 72

# Table 8: Ranking of French institutions whose authors have publishedregional and/or urban articles 1996-2000

Institute of International Affairs	40	0.33	41	5.33	38	6.67
Université de Versailles Saint-Quentin-en-Yvelines	25	0.5	37	7.5	39	5.33
Université de Bretagne Occidentale	25	0.5	37	7.5	39	5.33
Université de Bretagne Sud	25	0.5	40	7	41	5.25
LASMAS-IRESCO	40	0.33	43	5	42	4.85
Université Val-de-Marne (Paris XII)	25	0.5	43	5	43	4.6
Collège de France	25	0.5	45	4.5	44	4.14
Institut d'Economie Industrielle	43	0.25	42	5.25	45	3.36
Université Louis Pasteur (Strasbourg I)	46	0.2	47	4.4	46	3.17
Facultés Universitaires Notre-Dame de la Paix	48	0.17	45	4.5	47	2.88
Université Catholique de Lille	46	0.2	47	4.4	48	2.82

\* Position in the international ranking:  $86^{th}$  for articles.  $61^{st}$  for pages and  $57^{th}$  for standardised pages.

During the first sub-period, 20 French institutions were included in the ranking, while 48 were included in the second (this increase is greater than 100%, higher than the increase internationally). Twelve of these institutions appeared in both rankings.

Between 1991 and 1995, the first three positions, according to the different criteria, were held in the various rankings by *Université Panthéon-Sorbonne* (Paris I), the *Institute National d'Etudes Démographiques* and the *Centre National de la Recherche Scientifique* (CNRS). These top institutions were responsible for publishing 37% of French international regional and urban publications. In the international rankings, *Université Panthéon-Sorbonne* (Paris I) was 164th in terms of articles, 160th in terms of pages and 168th in terms of standardized pages.

During the second sub-period, these positions were held by the *Centre National de la Recherche Scientifique* (CNRS), *Université Panthéon-Sorbonne* (Paris I) and the *Ecole Nationale des Ponts et Chaussées* (ENPC), representing 25% of French international regional and urban publications. This figure indicates a fall in the concentration of publications. In the international rankings, the *Centre National de la Recherche Scientifique* (CNRS) was 86th in terms of articles, 61st in terms of pages and 57th in terms of standardized pages.

## **3.3.** Contributions to regional and urban science by authors affiliated to French institutions

Between 1991 and 2000, a total of 3,160 authors published in the selected journals.<sup>6</sup> Seventy-nine of these were affiliated to French institutions (that is more than in Italy, with 31, and Spain, with 66). Table 9 (annex) shows the ranking of authors affiliated to French institutions in terms of their publication performance during the decade. Robert Boyer, Pierre Ph. Combes, Jacques F. Thisse, Louis de Mesnard and Bertrand M. Roehner occupy the first three

 $<sup>^{6}</sup>$  Before corrections, the database had 3,973 different names. After correction, this figure fell by more than 20%, to 3,160.

positions in terms of articles, pages and standardized pages. In the international rankings, Robert Boyer was 694th in terms of articles, 199th in terms of pages and 147th in terms of standardized pages.

If we divide the sample in two sub-periods (1991-1995 and 1996-2000), 1,685 authors appeared in the database for first sub-period, a figure that rose to 2,008 in the second sub-period. Of these, 527 published in both sub-periods. The rankings of authors affiliated to French institutions for the two sub-periods are shown in Tables 10 and 11 (annex).

Between 1991 and 1995, 27 authors affiliated to French institutions published in the selected journals. The first three positions were occupied by Philippe Julien, Jacques F. Thisse, and Bertrand M. Roehner. In the international rankings, Philippe Julien was 336th in terms of articles, 285th in terms of pages and 242nd in terms of standardized pages.

For the second sub-period (1996-2000), the number of authors affiliated to French institutions increased markedly up to 59. Only 5 authors were present in both rankings. The first three positions for the second sub-period according to the three criteria (articles, pages and standardized pages) were occupied by Robert Boyer (305th art., 70th pgs. and 37th std. pgs.), Pierre Ph. Combes, Louis de Mesnard and Claire Wallace.

Finally, the average number of standardized pages per author increased between sub-periods, rising from 10.69 to 12.60. At the international level these values were 13.80 and 15.64.

### 4. PUBLICATION PATTERNS OF FRENCH CONTRIBUTIONS

Anselin (1995) showed that the articles published in five different volumes of the Papers in Regional Science covered a wide range of disciplines and presented a non-concentrated geographic distribution, while Suriñach *et al.* (2003) showed that the number of articles published in regional and urban science journals has risen considerably, and that they apply more complex techniques, and are highly multi-disciplinary in nature.

In this section, we present our results from analysing the four characteristics (purpose, topic, techniques and data) of published regional and urban research, and so highlight the most relevant features of French research. In particular, we analyse the publication patterns of French contributions to the regional and urban sciences, and determine whether there have been any similarities with international patterns in terms of the purpose of this research, the most important topics studied, and the techniques and the kind of data used in these analyses. Finally, the relevance of co-authorship is also considered. We measured these patterns using the proportion of standardized pages devoted to each category.

We hoped that our results would enable us to identify any major differences between regional and urban research, and any changes in these patterns over time. In order to avoid nuisance distortions caused by irregular yearly observations, we also divided the time period into two sub-periods: from 1991 to 1995 and from 1996 to 2000.

### 4.1. Purpose of the analysis

As Hägerstrand (1970 and 1989) remarks, regional science is concerned with people and the solving of problems that involve policies, providing a basic understanding of reality or predicting the future. In order to determine whether the recent evolution of this science has followed this path, we established four categories for our classification of the purpose underlying regional and urban research: "policy analysis", "structural analysis", "prediction" and "others" (the last category including primarily methodological articles).

Table 12 shows that French contributions moved towards a purpose distribution similar to that recorded internationally. Thus, French contributions in "structural analysis" fell markedly from 84 to 53%, while "policy analysis" increased from 6 to 37%.

Purnose	Intern	ational contril	outions	Fre	ions	
i ui pose	1991-1995	1996-2000	1991-2000	1991-1995	1996-2000	1991-2000
Policy analysis	29.09%	33.99%	31.83%	6.29%	36.75%	28.15%
Structural analysis	60.95%	59.32%	60.04%	84.17%	53.02%	61.81%
Prediction	1.81%	1.29%	1.52%	2.42%	0.42%	0.98%
Other	8.16%	5.41%	6.62%	7.12%	9.82%	9.06%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Table 12: Percentage of standardized pages for each category of "purpose"

### 4.2. Topics considered

As Bailly and Coffey (1994) point out, interdisciplinarity is one of the most important features of regional science. Nevertheless, there are some topics that receive more attention from scientists than others. It is this specific point that we wish to analyse in this section: has research in the regional and urban sciences focused on a narrow range of topics? Are regional and urban scientists interested in fewer topics today than they were at the beginning of the decade? Table 13 shows the most important topics of interest in international and French contributions during the two sub-periods: 1991-1995 and 1996-2000.

In the international articles, the most frequent topics were "economic growth and development", "housing analysis" and "social and political issues", while in the French articles, the most commonly analysed topics were "social and political issues" and "firm location". It is worth mentioning that the number of topics covered by authors affiliated to French institutions increased from 9 to 12, with "housing analysis" establishing itself as an important topic.

	Internat	ional conti	ributions	French contributions			
Topics	1991- 1995	1996- 2000	1991- 2000	1991- 1995	1996- 2000	1991- 2000	
Methodological articles	6.04%	4.17%	5.00%	1.40%	8.25%	6.31%	
Natural resources management and environment	2.65%	2.03%	2.30%	-	-	-	
Human resources: demography	7.97%	5.94%	6.84%	14.74%	3.82%	6.90%	
Human resources: labour market	7.60%	7.99%	7.82%	10.48%	4.43%	6.14%	
Economic growth and development	12.56%	14.99%	13.92%	7.84%	5.46%	6.13%	
Housing analysis	11.47%	13.21%	12.45%	-	9.39%	6.74%	
Land use patterns and planning	7.25%	5.14%	6.07%	10.05%	0.84%	3.44%	
Transportation	3.36%	4.81%	4.17%	5.45%	6.36%	6.10%	
Sectoral analysis	8.90%	7.26%	7.99%	11.65%	3.55%	5.84%	
Firm location	9.27%	9.20%	9.23%	28.52%	11.77%	16.50%	
Social and political issues	16.34%	19.06%	17.86%	9.86%	32.05%	25.79%	
Monetary and financial issues	1.04%	0.19%	0.56%	-	-	-	
Trade	2.83%	2.58%	2.69%	-	5.38%	3.86%	
Other topics	2.71%	3.42%	3.11%	-	8.70%	6.25%	
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	

Table 13: Most fr	equent topics	s in the sar	nple of ar	ticles (	(proporti	on of
stando	ırdized pages	where the	e topic is a	ınalyse	ed)	

#### 4.3. Techniques applied

A number of studies have considered whether scientists in general economics or other specialised fields of economic are using more complex quantitative techniques than in the past. For example, using a sample of ten top general-interest journals, Figlio (1994) reported that between 1960 and 1992 the proportion of articles presenting empirical research increased substantially, due probably to improvements in information technology. Some evidence seems to suggest that France is not following a similar path.

Table 14 shows the proportion of publications in the sets of articles considered that did not apply any quantitative techniques in their analysis. This figure is around 21% for international articles and around 25% for French articles. Opposite trends were recorded for the sub-periods: with a slight decrease in the international data set and a marked increase in the French case.

As regards the kind of quantitative technique applied, in both the French and international data set "descriptive analysis" was important, with a significant fall between sub-periods in France (from 44 to 28%). "Input output analysis" is becoming increasingly important in French contributions (from 9 to 17%), whereas internationally this technique accounts for no more than 2%.

	Internat	ional contr	ibutions	French contributions			
Technique	1991- 1995	1996- 2000	1991- 2000	1991- 1995	1996- 2000	1991- 2000	
Non quantitative	22.08%	19.83%	20.82%	13.17%	29.49%	24.88%	
Descriptive analysis	25.63%	25.83%	25.74%	43.69%	27.87%	32.34%	
Uniequational Regressions models: quantitative variable	17.00%	17.46%	17.26%	13.84%	7.34%	9.17%	
Computable General Equilibrium and Social accounting matrix	12.45%	12.09%	12.25%	-	-	-	
Uniequational Regression models: qualitative variable	3.59%	6.22%	5.06%	-	7.54%	5.41%	
Optimization methods	4.48%	4.96%	4.75%	2.42%	1.18%	1.53%	
Multivariate analysis	2.73%	3.33%	3.07%	7.10%	-	2.01%	
Multiequational Regression models	1.79%	2.21%	2.03%	-	0.69%	0.50%	
Spatial econometrics	1.40%	1.31%	1.35%	-	-	-	
Cost-benefit analysis, valuation, project evaluation	0.77%	0.81%	0.79%	4.14%	-	1.17%	
Geographic Information systems	0.61%	0.48%	0.53%	-	-	-	
Input Output analysis	2.19%	0.94%	1.49%	9.19%	16.52%	14.45%	
Univariate econometric analysis	0.87%	0.56%	0.70%	-	-	-	
Demographic analysis	0.15%	0.18%	0.16%	-	-	-	
Other methods	4.27%	3.81%	4.01%	6.45%	9.38%	8.55%	
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	

Table 14: Percentage of standardized pages according to technique

### 4.4. Kind of data used

Regarding the time dimension of the data, we inspected the use of "cross section" data, "time series" data and "panel" data. Considering the full set of articles, Table 15 shows an increasing trend in the use of "panel" data, and a relative decrease in the use of "time series" data in the international data set. However, an interesting pattern was observed in the case of French research, where "time series", "cross section" and "panel data" are being displaced by "other/non quantitative" data, which during the second sub-period accounted for 50% of standardized pages.

 Table 15: Percentage of standardized pages where different kinds
 of data are used (1)

Data	Interna	tional contri	butions	French contributions				
Data	1991-1995	1996-2000	1991-2000	1991-1995	1996-2000	1991-2000		
Time series	10.50	8.18	9.20	15.99	5.15	8.21		
Cross section	31.60	32.03	31.84	36.59	25.98	28.98		
Panel data	16.63	21.57	19.40	20.92	16.14	17.49		
Simulated data	6.74	7.80	7.34	2.33	2.33	2.33		
Other/Non Quantitative	34.52	30.41	32.22	24.17	50.40	43.00		
Total	100	100	100	100	100	100		

A similar pattern was found when classifying according to the nature of the data: "micro", "macro" or "simulated". For the international data set, the "micro" and "macro" categories were much more frequent than "simulated" (see Table 16). In the French case, "macro" (which actually lost ground between sub-periods) and "other/non quantitative" data were the most frequently used.

Kind of data	Interna	tional contri	butions	French contributions				
Kind of data	1991-1995	1996-2000	1991-2000	1991-1995	1996-2000	1991-2000		
Micro data	23.88	27.74	26.04	14.41	12.69	13.18		
Macro data	34.86	33.99	34.37	59.09	34.58	41.50		
Simulated data	6.74	7.80	7.34	2.33	2.33	2.33		
Other/Non Quantitative	34.52	30.46	32.25	24.17	50.40	43.00		
Total	100	100	100	100	100	100		

 Table 16: Percentage of standardized pages where different kinds
 of data are used (2)

#### **4.5.** The relevance of co-authorships

One final aspect of interest is the relevance of the number of coauthorships in French contributions compared to that found in the international data set. Table 17 shows the number of articles by one, two, three or more than three authors in the international and French data sets. Although the share of French contributions from 1991 to 2000 is quite similar to that of international co-authorships, the sub-period break-down reveals a marked tendency towards contributions by a single author in France. Thus, while international single author contributions fell from 54 (91-95) to 49% (96-00), French single author contributions rose from 50 (91-95) to 54% (96-00), without there being any contribution from more than 3 authors during the last sub-period.

 Table 17: Relevance of co-authorship in French regional and urban publications (measured in terms of standardized pages) (%)

	Internatio scie	International regional and urban science publications publication				
Authors	1991-1995	1996-2000	1991-2000	1991-1995	1996-2000	1991-2000
1	53.84	48.69	50.96	49.56	54.10	52.82
2	36.65	38.24	37.54	39.03	39.96	39.70
3	8.03	10.09	9.18	9.53	5.93	6.95
>3	1.47	2.98	2.31	1.88	-	0.53
Total	100	100	100	100	100	100

### **5. FINAL REMARKS**

In this paper, we have identified the most productive French institutions, and the most productive authors affiliated to these institutions, in the field of the

regional and urban sciences between 1991 and 2000, by drawing information from articles published in a sample of prestigious international journals in this field, namely ARS, IJURR, IRSR, JUE, JRS, PRS, RSUE, RS and US (see Table 1). The publication patterns of authors affiliated to French institutions have also been compared to those observed internationally.

Our results have revealed how French scientific productivity has increased during the second half of the period under analysis. This increase is due not only to the number of researchers, with an increment of 119% between sub-periods, but also to the number of institutions, with an increment of 129% between sub-periods.

This increment in the number of researchers and institutions has been accompanied by an increase in the number of journals in which they publish - two more than during the first sub-period (1991-1995), and in the number of publications – an increase of 154% between sub-periods, compared to 27% when the entire sample is considered.

What underlies this improved performance? Excluding external factors that are beyond the scope of this study, our analysis of publication patterns provides a possible explanation. Our results provide some evidence that French researchers in Regional and Urban Science are shifting their focus towards topics that do not require sophisticated analytical tools. Additionally, we have shown how policy analysis constitutes an increasingly important purpose for the analyses being undertaken, while social and political issues are the frequently studied topic.

The fulfilment of these purposes and the examination of these topics are being undertaken by applying descriptive analysis (32%) and non quantitative (25%) techniques, which mostly require other/non quantitative kind of data (43%, with a marked upward trend).

These analytical tools present several advantages. They are typically not too complicated to apply (which might explain why 54% of French authors are able to work without co-authors), and they tend not to be particularly time consuming.

The strategies adopted prove to have been particularly productive for France. The maxim of "the more complicated the better" does not seem to have held true here. It would appear that the leading journals are concerned that the right analytical tool is adopted, regardless of whether this tool is a simple, descriptive technique.

## ANNEX

Popling of outbors 1001 2000	Arti	cles	Pa	ges	Std.	Pages
Kanking of authors 1991-2000	Pos.	Ν	Pos.	Ν	Pos.	N
Boyer Robert*	9	1	3	49	1	47.53
De Mesnard Louis	2	2.17	2	50.5	2	39.83
Combes Pierre-Philippe	5	1.5	1	54	3	35.1
Theret Bruno	9	1	6	34	4	32.98
Thisse Jacques-Francois	1	2.56	4	48.61	5	32.93
Roehner Bertrand-Marie	3	2	5	40	6	28.8
Wallace Claire	5	1.5	7	29	7	28.13
Moulaert Frank	4	1.83	9	27.33	8	26.06
Le Gales Patrick	9	1	12	25	9	24.25
Julien Philippe	9	1	13	23	10	21.16
Schmitt Bertrand	7	1.17	15	20.5	11	19.73
Mayer Thierry	9	1	8	28	12	18.48
Linnemer Laurent	37	0.5	11	27	13	17.82
Zenou Yves	8	1.11	9	27.33	14	17.66
Rhein Catherine	9	1	16	19	15	17.48
Oberti Marco	9	1	17	18	16	17.46
Offner Jean-Marc	9	1	17	18	16	17.46
Castel Robert	9	1	19	17	18	16.49
Lefevre Christian	9	1	19	17	18	16.49
Nevers Jean-Yves	9	1	19	17	18	16.49
De Palma Andre	9	1	14	21.5	21	15.92
Petsimeris Petros	9	1	19	17	22	15.64
Bafoil Francois	9	1	24	16	23	15.52
Guesnier Bernard	9	1	35	12	24	15.36
Potter Jonathan	37	0.5	23	16.5	25	15.18
Berger Martine	9	1	28	15	26	14.55
Djellal Faridah	34	0.83	26	15.33	27	14.42
Gaubert Patrice	37	0.5	31	14.5	28	14.07
Ibbou Smail	37	0.5	31	14.5	28	14.07
Bonvalet Catherine	34	0.83	27	15.17	30	13.95
Longhi Christian	9	1	41	10	31	12.8
De Bernardy Michel	9	1	41	10	31	12.8
Jehiel Philippe	9	1	24	16	33	12.32
Konvitz Josef-W.	37	0.5	33	13	34	11.96
Negrier Emmanuel	9	1	35	12	35	11.64

# Table 9: Ranking of authors affiliated to French institutions who havepublished regional and/or urban articles 1991-2000

					r	
Guerin Pace France	9	1	35	12	36	11.04
Detang Dessendre Cecile	36	0.75	34	12.25	37	10.43
Maurel Francoise	37	0.5	28	15	38	9.9
Sedillot Beatrice	37	0.5	28	15	38	9.9
Scovazzi Emma	9	1	41	10	40	9.7
Campisi Domenico	37	0.5	53	7.5	41	9.6
Nastasi Alberto	37	0.5	53	7.5	41	9.6
Cattan Nadine	9	1	41	10	43	9.2
Pumain Denise	37	0.5	45	9.5	44	8.74
Lelievre Eva	37	0.5	45	9.5	44	8.74

Ranking of authors 1991-2000	Arti	cles	Pag	ges	Std. Pages		
Kanking of authors 1991-2000	Pos.	Ν	Pos.	Ν	Pos.	Ν	
Rozenblat Celine	37	0.5	45	9.5	44	8.74	
Lorenz Edward	37	0.5	65	6.5	47	8.32	
Conan Michel	9	1	48	9	48	8.28	
Blanc Maurice	37	0.5	51	8.5	49	8.25	
Deo Stephane	37	0.5	38	11.5	50	7.36	
Grasland Loic	9	1	52	8	50	7.36	
Vervaeke Monique	37	0.5	53	7.5	52	7.28	
Lefebvre Benedicte	37	0.5	53	7.5	52	7.28	
Asami Yasushi	37	0.5	39	10.5	54	6.93	
Raux Charles	37	0.5	48	9	55	6.75	
Plat Didier	37	0.5	48	9	55	6.75	
Cremer Helmuth	37	0.5	39	10.5	57	6.72	
Brun Jacques	37	0.5	60	7	58	6.44	
Fagnani Jeanne	37	0.5	60	7	58	6.44	
Chikhaoui Youssef	68	0.33	66	6.33	60	6.14	
Bordenave Gerard	68	0.33	73	4.33	61	5.42	
Belis Bergouignan Marie-Claude	68	0.33	73	4.33	61	5.42	
Lung Yannick	68	0.33	73	4.33	61	5.42	
Serfati Claude	37	0.5	53	7.5	64	5.33	
De Penanros Roland	37	0.5	53	7.5	64	5.33	
Jelili Riadh Ben	37	0.5	60	7	66	5.25	
Iammarino Simona	73	0.25	77	4	67	5	
Waelbroeck Patrick	37	0.5	53	7.5	68	4.95	
Le Breton Michel	37	0.5	60	7	69	4.62	
Laussel Didier	37	0.5	60	7	69	4.62	
Prud'homme Remy	37	0.5	69	5	71	4.6	
Wacquant Loic J.D.	37	0.5	71	4.5	72	4.14	
Eeckhoudt Louis	73	0.25	67	5.5	73	3.52	
Soubevran Antoine	73	0.25	68	5.25	74	3.36	

Michel Philippe	68	0.33	69	5	75	3.3
Picard Pierre	78	0.17	71	4.5	76	2.88
Daly Michael	73	0.25	76	4.25	77	2.81
Gaudry Marc	78	0.17	78	3.67	78	2.64
Vidal JP.	77	0.22	79	3.33	79	2.20

\* Position in the international ranking: 694<sup>th</sup> for articles. 199<sup>th</sup> for pages and 147<sup>th</sup> for standardised pages.

# Table 10: Ranking of authors affiliated to French institutions who have published regional and/or urban articles 1991-1995

Ranking of authors 1991-1995	Articles		Pages		Std. Pages	
Kanking of autility 1991-1995	Pos.	Ν	Pos.	Ν	Pos.	Ν
Julien Philippe*	2	1	3	23	1	21.16
Roehner Bertrand-Marie	2	1	2	24	2	18.24
Thisse Jacques-Francois	1	1.17	1	24.5	3	16.55
Nevers Jean-Yves	2	1	4	17	4	16.49
Guesnier Bernard	2	1	9	12	5	15.36
Djellal Faridah	12	0.83	6	15.33	6	14.42
Moulaert Frank	12	0.83	6	15.33	6	14.42
Bonvalet Catherine	12	0.83	8	15.17	8	13.95
Jehiel Philippe	2	1	5	16	9	12.32
Guerin-Pace France	2	1	9	12	10	11.04
Scovazzi Emma	2	1	12	10	11	9.7
Nastasi Alberto	15	0.5	19	7.5	12	9.6
Campisi Domenico	15	0.5	19	7.5	12	9.6
Cattan Nadine	2	1	12	10	14	9.2
Pumain Denise	15	0.5	14	9.5	15	8.74
Rozenblat Celine	15	0.5	14	9.5	15	8.74
Lelievre Eva	15	0.5	14	9.5	15	8.74
Conan Michel	2	1	17	9	18	8.28
Grasland Loic	2	1	18	8	19	7.36
Asami Yasushi	15	0.5	11	10.5	20	6.93
Brun Jacques	15	0.5	21	7	21	6.44
Fagnani Jeanne	15	0.5	21	7	21	6.44
Chikhaoui Youssef	24	0.33	23	6.33	23	6.14
De Mesnard Louis	15	0.5	24	5.5	24	4.18
Zenou Yves	26	0.17	25	4.5	25	2.97
Daly Michael	25	0.25	26	4.25	26	2.81

\* Position in the international ranking: 336<sup>th</sup> for articles. 285<sup>th</sup> for pages and 242<sup>nd</sup> for standardised pages.

Ranking of authors 1996-2000	Articles		Pages		Std. Pages	
	Pos.	Ν	Pos.	Ν	Pos.	Ν
Boyer Robert*	6	1	2	49	1	47.53
De Mesnard Louis	1	1.67	3	45	2	35.65
Combes Pierre-Philippe	2	1.5	1	54	3	35.1
Theret Bruno	6	1	4	34	4	32.98
Wallace Claire	2	1.5	5	29	5	28.13
Schmitt Bertrand	5	1.17	12	20.5	7	19.73
Mayer Thierry	6	1	6	28	8	18.48
Linnemer Laurent	26	0.5	7	27	9	17.82
Rhein Catherine	6	1	13	19	10	17.48
Oberti Marco	6	1	14	18	11	17.46
Offner Jean-Marc	6	1	14	18	11	17.46
Castel Robert	6	1	16	17	13	16.49
Lefevre Christian	6	1	16	17	13	16.49
Thisse Jacques-Francois	4	1.39	9	24.11	15	16.38
De Palma Andre	6	1	11	21.5	16	15.92
Petsimeris Petros	6	1	16	17	17	15.64
Bafoil Francois	6	1	20	16	18	15.52
Potter Jonathan	26	0.5	19	16.5	19	15.18
Zenou Yves	24	0.94	10	22.83	20	14.69
Berger Martine	6	1	22	15	21	14.55
Gaubert Patrice	26	0.5	25	14.5	22	14.07
Ibbou Smail	26	0.5	25	14.5	22	14.07
De Bernardy Michel	6	1	33	10	24	12.8
Longhi Christian	6	1	33	10	24	12.8
Konvitz Josef-W.	26	0.5	27	13	26	11.96
Moulaert Frank	6	1	29	12	27	11.64
Negrier Emmanuel	6	1	29	12	27	11.64
Roehner-Bertrand Marie	6	1	20	16	29	10.56
Detang-Dessendre Cecile	25	0.75	28	12.25	30	10.43
Maurel Francoise	26	0.5	22	15	31	9.9
Sedillot Beatrice	26	0.5	22	15	31	9.9
Lorenz Edward	26	0.5	46	6.5	33	8.32
Blanc Maurice	26	0.5	37	8.5	34	8.25
Deo Stephane	26	0.5	31	11.5	35	7.36
Vervaeke Monique	26	0.5	38	7.5	36	7.28
Lefebvre Benedicte	26	0.5	38	7.5	36	7.28
Raux Charles	26	0.5	35	9	38	6.75

# Table 11: Ranking of authors affiliated to French institutions who have published regional and/or urban articles 1996-2000

Plat Didier	26	0.5	35	9	38	6.75
Cremer Helmuth	26	0.5	32	10.5	40	6.72
Lung Yannick	49	0.33	53	4.33	41	5.42
Belis-Bergouignan Marie-Claude	49	0.33	53	4.33	41	5.42
Bordenave Gerard	49	0.33	53	4.33	41	5.42
Serfati Claude	26	0.5	38	7.5	44	5.33
De Penanros Roland	26	0.5	38	7.5	44	5.33

Ranking of authors 1996-2000	Arti	Articles		Pages		Std. Pages	
Ranking of authors 1550-2000	Pos.	Ν	Pos.	Ν	Pos.	Ν	
Jelili Riadh Ben	26	0.5	43	7	46	5.25	
Iammarino Simona	53	0.25	56	4	47	5	
Waelbroeck Patrick	26	0.5	38	7.5	48	4.95	
Laussel Didier	26	0.5	43	7	49	4.62	
Le Breton Michel	26	0.5	43	7	49	4.62	
Prud'homme Remy	26	0.5	49	5	51	4.6	
Wacquant Loic J.D.	26	0.5	51	4.5	52	4.14	
Eeckhoudt Louis	53	0.25	47	5.5	53	3.52	
Soubeyran Antoine	53	0.25	48	5.25	54	3.36	
Michel P.	49	0.33	49	5	55	3.3	
Picard Pierre	57	0.17	51	4.5	56	2.88	
Gaudry Marc	57	0.17	57	3.67	57	2.64	
Vidal I-P	56	0.22	58	3 33	58	2.2	

\* Position in the international ranking: 305<sup>th</sup> for articles, 70<sup>th</sup> for pages and 37<sup>th</sup> for standardised pages.

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### LA SCIENCE RÉGIONALE ET URBAINE EN FRANCE : CLASSEMENT DES AUTEURS ET DES ÉTABLISSEMENTS DANS LES PUBLICATIONS INTERNATIONALES AU COURS DES ANNÉES 1990

**Résumé** – Cet article analyse l'évolution de la recherche en science urbaine et régionale en France entre 1991 et 2000, comparée aux tendances internationales. Neuf des principales revues internationales en économie régionale et urbaine ont été retenues. Les rangs des auteurs, des pays et des établissements de recherche ont été calculés. Nous examinons la stratégie de publication internationale des français dans cette période en les situant dans le « top five » mondial dans le domaine.