

Regional Science trends through the analysis of the main facts of the 51st ERSA Conference

Vicente Royuela *

ABSTRACT: The 51st ERSA Conference held in Barcelona in 2011 was one of the largest ever. By examining the characteristics of the conference, this paper identifies the main trends in Regional Science and draws on a broad array of sources of information: the delegates' demographic details, the conference program itself, a satisfaction survey conducted among delegates, a quality survey addressed to those chairing the sessions and, finally, a bibliometric database including each author signing a paper presented at the conference. We finally run a regression analysis from which we show that for ERSA delegates what matters most is quality, and this must be the direction that future conferences should move toward. Ultimately, ERSA conferences are comprehensive, all-embracing occasions, representing an ideal opportunity for regional scientists to present their work to each other and to network.

JEL Classification: N00, R00, R11.

Keywords: Regional science, bibliometrics, ERSA.

Tendencias en ciencia regional a través del análisis de las principales cifras de la 51.^a Conferencia de la Asociación Europea de Ciencia Regional

RESUMEN: El 51.º congreso de la ERSA en 2011 en Barcelona fue uno de los más grandes que se recuerdan. Mediante el análisis de las principales característi-

* AQR-IREA. University of Barcelona. Dept. of Econometrics, Statistics and Spanish Economy, Av. Diagonal 690, 08034 Barcelona (Spain). Phone: +(34) 934035732 Fax +(34) 934021821. vroyuela@ub.edu.

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cas del congreso, en este trabajo obtenemos las principales tendencias en Ciencia Regional, basándose en un amplio abanico de fuentes de información: el programa del congreso, el detalle de las características de los delegados, la encuesta de satisfacción, una encuesta a los ponentes que presidían las sesiones y una base de datos bibliométrica con información de los autores de los trabajos presentados en el congreso. Finalmente, mediante un análisis de regresión concluimos que los delegados están interesados en la calidad y la excelencia científica, hacia donde debe dirigirse el futuro de las conferencias de la asociación. Las conferencias de la ERSA son ocasiones únicas para presentar trabajos académicos en un entorno amable e inclusivo donde el *networking* es un aspecto a destacar.

Clasificación JEL: N00, R00, R11.

Palabras clave: Ciencia regional, bibliometría, ERSA.

1. Introduction

The year 2010 marked the 50th anniversary of the European Regional Science Association (ERSA) and saw the passing away of the founder of the discipline of Regional Science, Walter Isard. In the twelve months that followed, a series of papers was devoted to analysing 50 years of the Western Regional Science Association (WRSA) (Franklin *et al.*, 2011; Gibson *et al.*, 2011, Kohlhase, 2011; Plane, 2011) and what it is that makes WRSA meetings so exceptional. It is perhaps, therefore, an opportune moment to take stock and to reflect on what Regional Science is about today and what constitute the main concerns of regional scientists. This interest is not new, and has been addressed several times before. Years ago, Torsten Hägerstrand posed (1970) and reposed (1989) the question: «What about people in regional science?» in examining the differences between the regional science meetings held in Europe and North America, and in seeking to determine whether there might be a difference in «emphasis or tone» between what scientists were doing on either side of the Atlantic. What's more he wondered if Regional Science was concerned at all about people. Several years later, various authors, when examining the state of Regional Science, presented pessimistic points of view (Jensen, 1991; Isserman, 1993 and 1995; Bailly and Coffey, 1994) that were subsequently called into question by Quigley (2001) who described something of a «renaissance» in the discipline. As Plane (2012) has recently argued, «the field emerged from its mid-life crisis of the 1990s renewed and strengthened» (p. 3).

Several papers have inspected the state of the art, or what is «hot», in Regional Science at various moments in time (Stratham, 1992; Taylor and Jones, 1992; O'Kelly, 1999; Rey and Anselin, 2000; Suriñach *et al.*, 2003) while others have examined «who» has taken the leading roles in the field (Allen and Kau, 1991, Rey and Anselin, 2000, Isserman, 2003). Typically, such analyses have been undertaken by examining publication patterns across regional science and urban journals, although others have looked specifically at the publication patterns of just one journal (Dear and Thrift, 1992; Duranton, 2010; Florax and Plane, 2004; Puga and Wrigley, 2006; Pike *et al.*,

2007; Van Dijk, 2010; Wrigley and Overman, 2010; Rogríguez-Pose *et al.*, 2011), region or country (Suriñach *et al.*, 2002, 2004, Ramos *et al.*, 2005, Royuela *et al.*, 2005, 2006 and 2008).

However, regional science is not just an academic discipline, it also involves practitioners and policy makers as is apparent at the annual meetings of the science's associations. Indeed, conferences represent an essential element in the work of researchers and policy makers alike. As Borghans *et al.* (2010) point out, conferences «provide the possibility to acquire feedback on a paper, to get informed about the work of others, and to talk to colleagues to exchange ideas. A relaxed atmosphere and being away from the office can promote creativity» (p 868).

It is these arguments that have led me to present the following report in which I summarise the main characteristics of the 51st ERSA conference held in Barcelona in 2011. It is my belief that by examining the activities undertaken at the conference we can obtain an accurate picture of the current state of Regional Science, in general, and of European Regional Science, in particular. Together with the 50th ERSA conference (Jönköping, 2010), the Barcelona conference was the largest ever organised in Regional Science, with more than 1,000 participants. While I make no claims to the effect that bigger is necessarily better, the Barcelona conference captures a good cross-section of academic and non-academic regional science public.

This paper is divided into six sections. Following on from this introduction, I describe the main features of Barcelona's ERSA conference. Next, in section 3, I present the main demographic characteristics of delegates and provide an initial insight into the distribution of bibliometric indices for Regional Science authors. Section 4 is devoted to an analysis of the main thematic trends in Regional Science based on the characteristics of the authors signing and presenting each paper, which should provide an up-to-date picture of the agenda of regional scientists today. In section 5, I run a simple model in order to obtain additional insights into what attracts people to sessions; again on the understanding that it might serve as a proxy of the concerns of regional scientists today. I finish by summarising the main findings of the analysis and drawing a number of conclusions.

2. The 51st ERSA conference in Barcelona

As Borghans *et al.* (2010) show, Barcelona is a popular location for a conference and this was perhaps an instrumental factor in attracting over 1,000 participants from 44 different countries. The conference, chaired by Jordi Suriñach, was held over four days, and there were eight time slots time devoted to 200 parallel sessions plus five plenary sessions at which the following keynote speakers addressed the conference: David Audretsch, Maryanne Feldman, Richard Florida, Diego Puga and Piet Rietveld (the latter being the recipient of the 2011 EIB-ERSA prize). A plenary lecture was also given by the European Commissioner of Regional Policy, Dr Johannes Hahn, who was accompanied by Joaquim Oliveira-Martins (OECD) and Luis Espadas

(Spanish Ministry of Economy and Finance). The conference was attended by the Major of Barcelona the Catalonia's Regional Minister of Economy and Knowledge, the Vice-President of Spain, and the President of the European Investment Bank. In the conference program he highlighted a number of «*very* Special Sessions», with a panel of leading academics. The conference was also host to the first European Meeting of the Urban Economics Association.

3. Conference description

In conducting the empirical analysis, I draw on information from a range of sources.

- The conference program: the full list of papers delivered, the thematic area to which they belong, the session type and the time of presentation, and the number of authors that signed and/or presented the papers.
- Authors' registration details: age, sex, country of origin, the type of institution they represent and their position. Not all authors supplied this information, but a significant number (93%) did.
- ERSA satisfaction survey: comprising 396 completed responses (representing 40% of total participants).
- Bibliometric indices for each author signing a paper presented at the conference from the *Publish or Perish* software (Harzing, 2010). This information was compiled before the conference (June 2011) and completed following last minute changes to papers in September 2011.
- A survey conducted among those chairing the conference's parallel sessions that includes attendance numbers at each session, the quality of the papers presented, and the homogeneity of topics presented at the sessions. Complete information was collected for 62% of the sessions.

Using this information, I now proceed to characterize various aspects of the conference and, as such, of Regional Science in Europe.

3.1. Overall figures

The conference was attended by 952 registered delegates, 891 of whom presented papers. As each author could present up to two papers, and as each paper could be presented by two different authors, the number of authors did not coincide with the number of papers presented (914 papers). These were delivered in a total of 224 sessions: 5 Plenary Lectures, 80 Ordinary Sessions, 36 Refereed Sessions, 7 Young Scientists Sessions and 96 Special Sessions. The sessions were organised around 25 themes and 44 different special sessions¹. A total of eight time slots were dedicated

¹ Initially 51 special sessions were planned, but seven did not receive a sufficient number of papers and so were included within the conference's general themes.

to parallel sessions and, consequently, at some points during the conference 32 simultaneous parallel sessions were taking place.

3.2. Authors and delegates demographic characteristics

The modal delegate was a Spanish male academic, aged between 31 and 40 (see table 1). It should be noted that the proportion of women at Barcelona's ERSA conference (35%) was significantly higher than figures reported by Faggian (2009) at previous ERSA conferences (30% at the 2008 Liverpool conference) and at other Regional Science conferences (19% at NASRSC, New York 2008; 23% at WRSA, Napa 2009; 30% at RSAIBIS, Limerick 2009; and, 23% at PRSCO, Gold Coast 2009).

As for age, Franklin *et al.* (2011) reported a modal cohort at 60-69 at WRSA conferences², which tell us that ERSA conferences are, by comparison, meetings of relatively young people. Women participants are on average 3.5 years younger than men, and account for 42% of people aged 30 and below.

The Spanish represented by far the largest nationality group (15%) at the conference. However, this figure was much lower than the one recorded at the 2000 ERSA conference in Barcelona when Spanish delegates accounted for just over a third (34%). As van Dijk and Maier (2006) report, it is usual that a substantial number of participants are from the country hosting the conference. In common with previous ERSA conferences, there were sizeable representations of the following nationalities: Italians, Germans, Dutch, British and French, but in Barcelona there was a significant number of Portuguese and Turkish representatives too. Americans and Asians were also highly represented (7.3% and 6.8% respectively).

The bulk of registered delegates listed themselves as Academics (91%). Significantly, 25% of them reported themselves as being Full Professors, but these figures differed markedly between men (30%) and women (14%). The opposite, however, was true for PhD Students, Junior Researchers and Post-Doc Researchers, where there were relatively more women.

Most delegates reported (ERSA satisfaction survey) that they had first learned about the conference via the ERSA website (33%) or other RSAI channels of communication, including the RSAI (7%), ERSA (16%) or local (13%) newsletters, although 48% of them actually reported themselves as being non ERSA/RSAI members.

² Franklin *et al.* (2011) in fact report data collected from a survey among WRSA members rather than a specific group of registered delegates. Thus, should their survey, as they discuss, not be fully representative, any comparisons here would be misleading.

Table 1. Conference Demographics

<i>Country</i>	<i>Total</i>	<i>Men</i>	<i>Women</i>	
Austria	23	2.4%	87%	13%
Belgium	11	1.2%	82%	18%
Croatia	3	0.3%	33%	67%
Czech Republic	7	0.7%	71%	29%
Denmark	4	0.4%	50%	50%
Finland	13	1.4%	85%	15%
France	45	4.7%	62%	38%
Georgia	1	0.1%	100%	0%
Germany	72	7.6%	74%	26%
Greece	28	2.9%	43%	57%
Hungary	6	0.6%	50%	50%
Israel	11	1.2%	73%	27%
Italy	88	9.2%	53%	47%
Latvia	1	0.1%	0%	100%
Norway	10	1.1%	70%	30%
Poland	32	3.4%	56%	44%
Portugal	47	4.9%	47%	53%
Romania	17	1.8%	24%	76%
Russia	7	0.7%	71%	29%
Slovakia	5	0.5%	80%	20%
Spain	141	14.8%	66%	34%
Sweden	30	3.2%	63%	37%
Switzerland	17	1.8%	88%	12%
The Netherlands	64	6.7%	67%	33%
Turkey	44	4.6%	41%	59%
Ukraine	1	0.1%	0%	100%
United Kingdom	46	4.8%	72%	28%
Total Europe	774	81.3%	62%	38%

<i>Age</i>	<i>Total</i>	<i>Men</i>	<i>Women</i>	
24-30	149	24%	58%	42%
31-40	215	35%	62%	38%
41-50	135	22%	59%	41%
51-60	76	12%	75%	25%
over 60	34	6%	91%	9%
Not available	279		67%	33%
Total	888		574	314
			65%	35%

<i>Country</i>	<i>Total</i>	<i>Men</i>	<i>Women</i>	
Angola	2	0.2%	50%	50%
South Africa	3	0.3%	100%	0%
Total Africa	5	0.5%	80%	20%
Brazil	16	1.7%	63%	38%
Canada	6	0.6%	83%	17%
Chile	1	0.1%	100%	0%
Colombia	1	0.1%	100%	0%
Mexico	1	0.1%	0%	100%
United States	27	2.8%	89%	11%
Uruguay	2	0.2%	50%	50%
Total America	54	5.7%	78%	22%
China	1	0.1%	0%	100%
Japan	41	4.3%	83%	17%
Korea, Republic of	1	0.1%	100%	0%
Singapore	2	0.2%	100%	0%
South Korea	1	0.1%	100%	0%
Taiwan	1	0.1%	100%	0%
Total Asia	47	4.9%	83%	17%
Australia	6	0.6%	100%	0%
New Zealand	2	0.2%	100%	0%
Total Oceania	8	0.8%	100%	0%
Total	952	100%	65%	35%

<i>Position</i>	<i>Total</i>	<i>Men</i>	<i>Women</i>	
Academic: PhD Student	148	22%	58%	42%
Academic: Junior Researcher	32	5%	44%	56%
Academic: Assistant Professor	111	16%	61%	39%
Academic: Post-Doc Researcher	51	7%	51%	49%
Academic: Associate Professor	118	17%	66%	34%
Academic: Senior Researcher	40	6%	55%	45%
Academic; Full Professor	168	25%	79%	21%
Academic: Other	16	2%	50%	50%
Total Academic	684	91%	63%	37%
Professional: Assistant Researcher	4	6%	50%	50%
Professional: Researcher	49	77%	67%	33%
Professional: Manager/Director	5	8%	60%	40%
Professional: Other	6	9%	83%	17%
Total Professional	64	9%	67%	33%

Source: Conference registration details.

Note: Israel is included in Europe as it belongs to the European Regional Science Association.

3.3. Authors' bibliometric information

As reported above, bibliometric information for the conference authors was collected. As my aim is to characterise the topics in Regional Science, the unit of analysis adopted here is the author, not the delegate, since 61 registered delegates (6.4% of the total) did not in fact present a paper at the conference. Thus, 891 delegates presented either one or two of the 914 papers delivered at the conference, which were signed by a total of 1,533 authors. Peter Nijkamp (14) Piet Rietveld (10) signed the highest number of papers. A total of 75 authors signed three or more papers, 200 authors signed two papers and 1,258 authors signed one paper³.

An examination of the co-authorship details of the papers showed that 34% had just the sole author, while 33% had three or more (see table 2). This statistic contrasts with findings in Suriñach *et al.* (2002): in the decade 1991 to 2000, 52% of articles published in nine leading regional science and urban economics journals were single-authored. From this it might be deduced that either co-authorship is increasing (as Duque *et al.*, 2011, have reported for Spanish articles in the fields of Economics and Business) or that academic papers that are eventually published are more frequently singled authored than those presented at conference.

Table 2. Co-authorship pattern

<i>Authors per paper</i>	<i>Papers</i>		<i>Total authors</i>	
1	312	34%	312	16%
2	303	33%	606	31%
3	211	23%	633	33%
4	66	7%	264	14%
5	16	2%	80	4%
6	6	1%	36	2%
	914	100%	1.931	100%

The bibliometric indices of the authors signing papers at the conference, h , g and hc ⁴, are highly skewed to the right, since several authors present particularly high values. Table 3 and figure 1 show the main distribution patterns⁵. 25% of authors have publications with no citations. This is perhaps unsurprising if we note that there was a significant proportion of PhD students (22%) and Junior Researchers (5%) among delegates. By contrast, to be included in the fourth quartile authors need an

³ Of course, not all authors signing a paper attended the conference.

⁴ The h -index is defined as follows: A scientist has index h if h of his/her N_p papers have at least h citations each, and the other (N_p-h) papers have no more than h citations each. It aims to measure the cumulative impact of a researcher's output by looking at the amount of citation his/her work has received. The g and hc indices give more weight to highly cited and more recent articles respectively.

⁵ For reasons of clarity, figure 1 only displays the indices up to a value of 25.

h-index of 6 or over. Finally, as the lowest correlation between the indices is 0.95, in all further analyses I use just the h-index.

Table 3. Statistical characteristics of the bibliometric indices

	<i>h</i>	<i>g</i>	<i>hc</i>
Average	4.48	8.31	3.39
Standard Deviation	7.07	14.56	4.88
Asymmetry index	2.25	2.23	1.84
Kurtosis	21.21	32.42	21.52
Min	0	0	0
Q1	0	0	0
Q2	2	3	2
Q3	6	10	5
Max	74	168	60

Figure 1. Distribution of the bibliometric indices

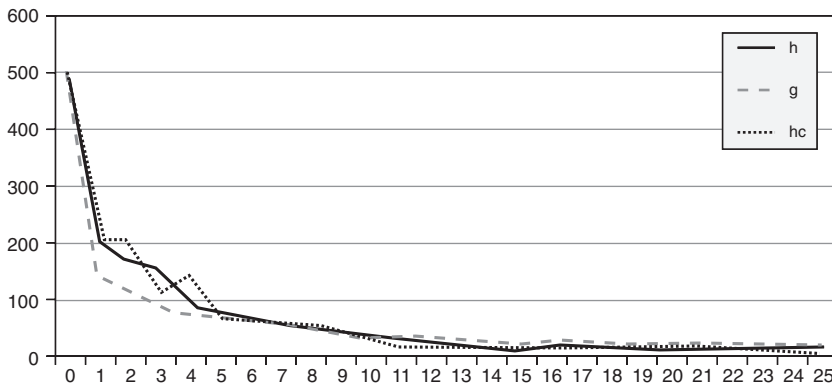


Table 4. Bibliometric information by conference session type: average h-index

	<i>Presenting Authors</i>	<i>Non- Presenting Authors</i>	<i>All Authors</i>
Ordinary Session	3.17	4.47	3.78
Refereed Session	4.21	6.49	5.43
Special Sessions	6.65	7.18	6.93
Young Scientist Sessions	1.08	1.25	1.12
All Sessions	5.18	5.90	5.54

Note: these figures are based on papers signatures, and consequently every author can appear more than once. As a result, these averages differ from the ones in table 6.

The h-index allows us to compare the different session types held during the conference. Table 4 shows the average h-index for authors presenting and signing papers at four different session types. From here it can be seen that authors delivering papers at Special and Refereed Sessions present higher bibliometric indices than those presenting at Ordinary and, as expected, Young Scientist sessions. Interestingly, for all session types, non-presenting authors displayed slightly higher indices than presenting authors. This might in part reflect the two-paper per author maximum imposed at the ERSA conference, which restricts authors with many papers and probably with higher h- indices from presenting. As such, these results are neither good nor bad per se. Alternatively, these results might be indicative of the fact that younger or less experienced academics consider ERSA a good occasion on which to present their work.

3.4. Attendance

The conference organised a wide range of activities, which can be assumed as being a positive feature since diversity can help accommodate the variety of perspectives adopted in a multidisciplinary field such as that of Regional Science. In order to identify which activities attracted the interest of the delegates, we can draw on two information sources: the conference satisfaction survey, which asked the delegates how many sessions they had attended and enquired about how satisfied they were with different aspects of the conference; and a survey addressed to the person chairing each session, which provides details about attendance at each session, the average quality of the papers presented, the homogeneity of quality and topics presented at the sessions, and the adequacy of the facilities and services provided (full details were collected for 62% of the sessions).

The average delegate attended seven sessions, while the average (non-ple-nary) session attracted a mean of 18 delegates; although, there was considerable variance as two of the Special Sessions had audiences of 100 and 180, while several ordinary sessions were attended by just two or three delegates⁶. Attendances were higher at Special Sessions, which also tended to be of a higher average quality and homogeneity than Ordinary and Refereed sessions. Based on the delegates' responses, the majority attended between five and nine sessions (19% attending more than ten), while 25% of delegates attended four sessions or less. This translates as an average attendance of between 550 and 600 delegates for each time slot, well below the overall registration figure of 952 delegates. This would seem to confirm that in addition to obtaining international feedback on their research, delegates have other motives for attending conferences: networking, fun, etc. (Borghans *et al.*, 2010). However, the ERSA satisfaction survey reports that the main reason given by delegates for attending the conference was to share

⁶ As below we will use attendance as the endogenous variable in a regression analysis, next we describe its main descriptive statistics: Min = 2; Q1 = 10; Q2 = 15; Q3 = 20; Max = 180; Average = 18.2; Std. Dev. = 17.8; Skewness = 6.3; Kurtosis = 53.9.

their academic results with peers (83% of respondents), while a large number also attached importance to networking opportunities (67%). Special Sessions reported a higher attendance than Ordinary, Refereed and Young Scientists Sessions.

Delegates and chairpersons alike reported highly positive opinions about the quality of the conference and individual sessions. Among the former, 64% reported being extremely or very satisfied compared to 9% that were slightly or not at all satisfied with the overall level of the congress sessions. Among the chairpersons, 71% reported that the quality of papers was high or very high compared to just 1% who claimed they had been low or very low. In both surveys, higher marks were awarded to Refereed and Special Sessions than to Young Scientist Sessions. Interestingly, a small yet significant number of sessions were reported by the chairs as presenting low or very low levels of homogeneity, both in terms of the quality of the papers and of their topic. The chairs were more concerned about the homogeneity of their sessions than about the average quality of papers presented. Finally, the satisfaction survey asked delegates to evaluate the return on the money and time they had invested in order to participate at the conference: 56% of respondents reported a high return, 39% a medium return, and 6% a low return.

4. Themes in Regional Science. What is on the agenda of regional scientists?

The 51st ERSAs conference included 25 thematic areas and 44 special sessions. Below, drawing on information from the conference program, the delegates and the authors' characteristics, I describe the main features of each topic area. Remember that a registered delegate could present up to two different papers, yet sign many more, while each paper had to be assigned to a different thematic area. Consequently, as we turn now to look at these themes, it should be borne in mind that the analysis is based on the authors that signed the papers, not just the delegates.

4.1. Demographics by topic

Tables 5 and 6 describe the quantitative significance plus the bibliometric indices of the authors presenting in each thematic area. The thematic area that attracted most attention was *A. Regional economic growth and development*: 14 sessions [9 Ordinary (O), 4 Refereed (R) and 1 for Young Scientists], 67 papers and 71 presenting authors. It was followed by *O. Innovation, knowledge, economy and regional development*: 10 sessions, and by *S. Infrastructure, transports and communication*.

The theme attracting most attention in the Special Sessions was *ZZV. 1st European Meeting of the Urban Economics Association*, which had 11 sessions (10 Special sessions and 1 for Young Scientists) and included 44 papers and registered

authors. It was followed by ZE. SS-Territorial governance, rural areas and local agro food systems, and by ZZB. SS-Industrial districts and clusters facing globalization.

Several differences were noted between thematic areas in terms of the number of authors signing each paper. For instance, T. *Land use real estate and housing markets* had an average of 2.6 authors per paper, while C. *Social capital and regional development* had just 1.7 authors per paper.

Several Special Sessions display very high average and median h-indices (ZZY. SS- *Global Grand Challenges to Regional Science*; ZA. SS-*The determinants of regional migration*; ZB. SS-*Do we need place-based policies*). Several topics display central values higher than the rest (C. *Social capital and regional development* and I. *Regional population change, migration, diasporas and development*), while others have lower values (M. *Climate change and its implications for urban and regional development*). These differences can be explained in terms of authors' age, academic and professional position, and the different publication culture in each line of research. An analysis of the main drivers of bibliometric indices lies beyond the scope of this paper, but it is a subject that requires further attention.

For registered authors, it was possible to identify the main demographic characteristics per thematic area. Thus, the themes attracting the largest proportion of women were J. *Social segregation poverty and social policy* and C. *Social capital and regional development*. The topics attracting the youngest authors were Y. *Barcelona as a case study*, R. *New frontiers in regional science: theory and methodology* and F. *Public finance and regional development*.

Many thematic areas attracted solely academic authors, while the largest proportion of non-academics was observed in M. *Climate change and its implications for urban and regional development*, which also attracted the largest proportion of non-European authors.

At the Special Sessions, ZF. SS- *Tourism externalities* and ZZQ. SS-*The impact of the Global Financial Crisis on the Banking Sector at local-national-international levels* attracted high proportions of women; ZZN. SS-*Processes of urbanisation along European coastal areas* attracted the youngest authors; 100% of papers delivered at ZG. SS- *JSRSAI 50th Anniversary Session* were by Asian authors; ZZX. SS-*The territorial impact of the electric car* attracted many professionals; while all the authors in thematic areas ZB. SS- *Do we need place-based policies?* and ZZY. SS-*Global Grand Challenges to Regional Science* were full professors.

Table 5. Sessions by thematic area. Bibliometric and demographic information

Topic	Sessions			Papers		Presenting authors (all signing authors)							Demographic Information						
	Ordinary	Referred	Youngs	Papers	Average Papers per session	Total	Authors per paper	Average h-index	Min h-index	Median h-index	Max h-index	Registered	Average Age	% Women	% European	% American	% Asian	% Professional	% Full Professors & Manager-Director
A. Regional economic growth and development	9	4	1	67	4.8	71 (134)	1.1 (2)	4.1 (4.6)	0 (0)	2 (3)	20 (25)	83	39.3	39	87	7.2	6.0	14	29
B. Rural and local development	4	3	0	29	4.1	29 (60)	1 (2.1)	4.3 (4.5)	0 (0)	2 (2)	28 (28)	37	41.6	41	81	10.8	8.1	13	31
C. Social capital and regional development	2	0	0	11	5.5	13 (18)	1.2 (1.6)	2.9 (6)	0 (0)	2 (2.5)	13 (30)	13	38	62	77	23.1	0.0	0	27
D. Agglomeration, clusters and policy	4	3	0	30	4.3	31 (50)	1 (1.7)	3.1 (4.5)	0 (0)	2 (3)	13 (42)	35	40.7	29	91	2.9	5.7	4	18
E. Regional policy in Europe	3	1	0	17	4.3	18 (34)	1.1 (2)	3.8 (5.9)	0 (0)	1.5 (3)	25 (28)	23	42.4	22	100	0.0	0.0	5	10
F. Public finance and regional development	2	0	0	10	5	10 (17)	1 (1.7)	1.6 (2.3)	0 (0)	1 (1)	6 (8)	10	34.6	20	80	10.0	10.0	20	10
G. Globalisation and regional competitiveness	3	2	1	22	3.7	23 (46)	1 (2.1)	4.2 (4.3)	0 (0)	1 (2)	25 (25)	26	35	42	88	7.7	3.8	0	13
H. Cross-border cooperation and development	1	0	0	5	5	5 (10)	1 (2)	3 (3.3)	2 (2)	3 (3)	5 (7)	6	34.8	17	100	0.0	0.0	0	0
I. Regional population change, migration, diasporas and development	4	1	0	24	4.8	25 (48)	1 (2)	4.1 (6)	0 (0)	3 (3)	20 (52)	29	38.6	45	93	3.4	0.0	12	36
J. Social segregation poverty and social policy	2	0	0	8	4	8 (17)	1 (2.1)	3.6 (4.5)	0 (0)	2 (3)	10 (11)	11	41.7	91	100	0.0	0.0	0	0
K. Spatial issues of the labour market	3	3	0	27	4.5	27 (58)	1 (2.1)	3.6 (4.1)	0 (0)	1 (1)	29 (29)	33	39.4	24	97	3.0	0.0	7	32

L. Sustainability issues	5	1	0	30	5	33 (68)	1.1 (2.3)	2.5 (2.6)	0 (0)	1 (1)	25 (25)	40	37.5	45	83	7.5	7.5	18	15
M. Climate change and its implications for urban and reg dev	1	1	0	5	2.5	5 (12)	1 (2.4)	1.8 (1.8)	0 (0)	0 (1.5)	5 (5)	6	47	33	33	0.0	66.7	33	33
N. Entrepreneurship, networks and innovation	4	2	1	27	3.9	28 (55)	1 (2)	3.8 (3.6)	0 (0)	2 (2)	18 (26)	37	38.8	35	95	5.4	0.0	10	19
O. Innovation, knowledge, economy and regional development	6	4	0	52	5.2	64 (113)	1.2 (2.2)	3.3 (3.8)	0 (0)	1 (1)	25 (25)	78	37.2	41	97	1.3	1.3	10	19
P. Geographical information systems and spatial analysis	3	1	0	19	4.8	20 (41)	1.1 (2.2)	1.9 (2.7)	0 (0)	1 (2)	7 (13)	23	37.9	43	91	4.3	4.3	10	15
Q. Spatial econometrics	2	1	1	15	3.8	15 (29)	1 (1.9)	3.3 (4)	0 (0)	3 (3)	16 (19)	17	37.8	35	100	0.0	0.0	13	7
R. New frontiers in regional science: theory and methodology	2	0	0	12	6	14 (33)	1.2 (2.8)	3.7 (4.9)	0 (0)	3 (2)	12 (52)	18	32.7	33	74	0.0	26.3	0	14
S. Infrastructure, transports and communications	5	3	0	39	4.9	39 (81)	1 (2.1)	3.9 (5.3)	0 (0)	2 (2)	42 (52)	51	40.1	27	84	0.0	15.7	20	20
T. Land use real estate and housing markets	4	3	0	29	4.1	33 (76)	1.1 (2.6)	3.4 (4.7)	0 (0)	1 (2)	25 (42)	45	42.2	31	98	2.2	0.0	15	21
U. Location studies	2	1	0	14	4.7	17 (27)	1.2 (1.9)	3 (4.9)	0 (0)	1 (1)	18 (25)	21	39.9	24	95	0.0	4.8	13	19
V. Tourism, cultural industries and regional development	4	1	1	24	4	25 (46)	1 (1.9)	1.6 (2)	0 (0)	1 (1)	12 (22)	28	40	46	89	7.1	3.6	4	17
W. Urban governance and cities regeneration	3	1	1	22	4.4	24 (43)	1.1 (2)	1.3 (2.1)	0 (0)	0 (1)	6 (24)	29	37.9	52	93	3.4	0.0	4	28
Y. Barcelona as a case study	1	0	0	3	3	4 (8)	1.3 (2.7)	2.5 (1.8)	0 (0)	2.5 (0.5)	5 (5)	5	30	60	100	0.0	0.0	0	50
Z. Territorial Marketing	1	0	0	2	2	2 (2)	1 (1)	1 (1)	0 (0)	1 (1)	2 (2)	2	44	0	100	0.0	0.0	0	0
TOTAL	80	36	6	543	4.5							706	39	38	90	4.2	5.1	11	21

Table 6. Special Sessions by thematic area. Bibliometric and demographic information. (1/2)

Topic	Sessions			Papers		Presenting authors (all signing authors)							Demographic Information						
	Special Session	Young	Papers	Average Papers per session	Total	Authors per paper	Average h-index	Min h-index	Median h-index	Max h-index	Registered	Average Age	% Women	% European	% American	% Asian	% Professional	% Full Professors & Managers-Director	
ZA. SS- The determinants of regional migration	1	5	5	5 (10)	1 (2)	12.4 (11.2)	1 (0)	9 (5.5)	25 (25)	7	35.2	29	100	0.00	0.00	14	57	29	
ZB. SS- Do we need place-based policies?	1	4	4	4 (4)	1 (1)	24.5 (24.5)	23 (23)	25 (25)	25 (25)	4	39.3	0	100	0.00	0.00	0	100		
ZC. SS- Innovation and regional growth in Europe	2	7	3.5	7 (16)	1 (2.3)	11.86 (15.2)	2 (1)	10 (9.5)	21 (52)	13	38.9	38	100	0.00	0.00	0	42		
ZD. SS- Retail and local and regional development	2	8	4	9 (16)	1.1 (2)	14.22 (13.9)	0 (0)	17 (12)	38 (38)	13	47.9	31	100	0.00	0.00	0	33		
ZE. SS- Territorial governance, rural areas and local agro food systems	8	23	2.9	28 (58)	1.2 (2.5)	2.43 (2.5)	0 (0)	1 (2)	19 (19)	34	42.7	41	94	0.00	5.90	4	21		
ZF. SS- Tourism externalities	2	6	3	6 (11)	1 (1.8)	2.33 (2.4)	0 (0)	2 (1)	5 (8)	7	37.6	71	100	0.00	0.00	0	0		
ZG. SS- JSRSAI 50th Anniversary Session	2	8	4	7 (26)	0.9 (3.3)	3.43 (2.2)	0 (0)	2 (2)	14 (14)	14	42.9	14	0	0.00	100.00	0	44		
ZI. SS- Productivity & financing reg transport infrastructure	2	8	4	8 (12)	1 (1.5)	8.63 (11.2)	0 (0)	4 (9)	30 (30)	11	41.3	0	73	0.00	18.20	0	56		
ZK. SS- History and institutions in regional development	1	4	4	4 (8)	1 (2)	3 (3.6)	0 (0)	1 (2.5)	10 (10)	5	35.5	40	100	0.00	0.00	40	0		
ZL. SS- Air transport and local development	2	9	4.5	9 (28)	1 (3.1)	1.56 (3.1)	0 (0)	2 (2)	3 (18)	16	34.6	63	100	0.00	0.00	0	6		
ZM. SS- Cross border regions and transport accessibility	1	4	4	4 (9)	1 (2.3)	1.5 (2.2)	0 (0)	2 (2)	2 (9)	6	31.3	67	100	0.00	0.00	20	20		

ZN. SS- Rethinking the Economic Region. New Challenges for the Regional Analysis with Data at Small Scale	2	11	5.5	14 (24)	1.3 (2.2)	5.79 (5.5)	0 (0)	3.5 (3)	28 (28)	17	34.1	18	94	5.90	0.00	0	33
ZO. SS- Estimating regional impacts of global climate changes	1	3	3	3 (6)	1 (2)	21.67 (20.3)	1 (1)	12 (11.5)	52 (52)	6	44	33	67	33.30	0.00	0	60
ZP. SS- Modelling 'spatio-temporal data'	1	4	4	4 (9)	1 (2.3)	6 (9.7)	0 (0)	4 (6)	16 (28)	6	36.3	0	83	16.70	0.00	0	60
ZQ. SS- Public finance and regional economy	1	5	5	7 (12)	1.4 (2.4)	9.29 (8.4)	3 (3)	8 (8.5)	17 (17)	8	39.4	13	100	0.00	0.00	0	29
ZR. SS- Wages and regional labour markets	2	9	4.5	11 (18)	1.2 (2)	5 (4.6)	0 (0)	6 (4)	10 (13)	12	38.1	25	92	8.30	0.00	9	18
ZS. SS- Main patterns and economic implications of migratory flows: a regional perspective	1	3	3	3 (9)	1 (3)	15.67 (6.6)	7 (0)	12 (2)	28 (28)	4	52.3	0	100	0.00	0.00	0	75
ZT. SS- Computable General Equilibrium in Reg Sc & Urban Ec	2	7	3.5	7 (15)	1 (2.1)	6.71 (5.9)	0 (0)	6 (4)	16 (24)	8	41.4	0	75	0.00	0.00	14	57
ZU. SS- The web of housing supply: markets, finance, development and infrastructures	3	10	3.3	10 (17)	1 (1.7)	10.4 (10)	0 (0)	8.5 (8)	27 (27)	10	31	10	50	0.00	0.00	0	88
ZV. SS- Creativity and regional development	2	7	3.5	7 (18)	1 (2.6)	2.57 (2.9)	0 (0)	2 (1)	8 (19)	9	37.3	44	100	0.00	0.00	13	25
ZW. SS- Turkish cases in contemporary issues/dimensions for regional development	2	8	4	10 (16)	1.3 (2)	1.1 (0.8)	0 (0)	0 (0)	5 (5)	12	46.1	50	100	0.00	0.00	18	45
ZX. SS- Regional science and development in Africa	1	4	4	4 (5)	1 (1.3)	0.5 (2)	0 (0)	0 (0)	2 (8)	4	41.7	25	25	0.00	0.00	25	0
ZY. SS- Science and Policy Integration for Sustainable Regional Development	1	4	4	4 (12)	1 (3)	1.5 (5.3)	0 (0)	1.5 (0)	3 (52)	7	36	57	100	0.00	0.00	0	0

Table 6. Special Sessions by thematic area. Bibliometric and demographic information. (2/2)

Topic	Sessions		Papers		Presenting authors (all signing authors)							Demographic information						
	Special Session	Young	Papers	Average Papers per session	Total	Authors per paper	Average h-index	Min h-index	Median h-index	Max h-index	Registered	Average Age	% Women	% European	% American	% Asian	% Professional	% Full Professors & Managers Director
ZZ. SS- Interregional migration	3		10	3.3	11 (23)	1.1 (2.3)	4.64 (8)	0 (0)	3 (6)	15 (48)	17	34.8	47	88	5.90	5.90	0	10
ZZA. SS- Territorial cohesion in the context of new EU member states - policy impact assessment	3		14	4.7	18 (22)	1.3 (1.6)	0.72 (0.7)	0 (0)	0 (0)	3 (3)	20	47.4	30	100	0.00	0.00	0	21
ZZB. SS- Industrial districts and clusters facing globalisation	5		19	3.8	21 (46)	1.1 (2.4)	2.76 (3.6)	0 (0)	2 (3)	11 (11)	27	42.2	26	100	0.00	0.00	14	38
ZZC. SS- Modelling the knowledge-based regional economy	1		4	4	4 (6)	1 (1.5)	6.25 (4.2)	1 (0)	5.5 (2.5)	13 (13)	4	40.7	25	100	0.00	0.00	33	33
ZZD. SS- Reg development, structural changes and services	3		14	4.7	14 (35)	1 (2.5)	6.29 (4.8)	0 (0)	3.5 (2)	20 (20)	22	42.6	36	100	0.00	0.00	5	40
ZZE. SS- Cultural Diversity, Skills and Productivity: The labour market impacts of immigrants	3		11	3.7	11 (24)	1 (2.2)	3.27 (11.2)	0 (0)	1 (3.5)	19 (52)	21	37.1	24	90	0.00	0.00	11	33
ZZF. SS- Understanding factors and processes underlying spatial dependence	1		4	4	5 (8)	1.3 (2)	14.2 (14.9)	1 (1)	9 (10)	33 (33)	4	42.3	25	100	0.00	0.00	0	25
ZZG. SS- Relocation of plants and firms: new insights	2		7	3.5	7 (17)	1 (2.4)	5.29 (4.8)	0 (0)	3 (3)	16 (16)	12	35.8	42	100	0.00	0.00	0	20
ZZH. SS- Transport investment and reg econ development	1		4	4	5 (10)	1.3 (2.5)	5.8 (6.2)	1 (1)	2 (4)	19 (19)	8	46.9	38	88	0.00	12.50	0	43
ZZM. SS- Spin-offs and the diffusion of innovation and routines: a micro perspective	1		4	4	4 (11)	1 (2.8)	6 (4.7)	3 (0)	5.5 (3)	10 (17)	6	42.6	33	100	0.00	0.00	0	0

ZZN. SS- Processes of urbanisation along Eur. coastal areas	2		9	4.5	9 (30)	1 (3:3)	1.22 (1.8)	0 (0)	0 (1)	5 (8)	14	28	29	100	0.00	0.00	0	0
ZZO. SS- Sustain City Conference on land-use and transport	3		9	3	11 (26)	1.2 (2:9)	7.73 (8.7)	0 (0)	8 (5:5)	21 (28)	16	37.4	19	100	0.00	0.00	0	27
ZZP. SS- Knowledge, Innovation and Economic Geography	3		9	3	10 (17)	1.1 (1:9)	19.9 (14.5)	4 (3)	17 (10)	55 (55)	11	37.7	36	91	9.10	0.00	0	33
ZZQ. SS- The impact of the Global Financial Crisis on the Banking Sector at local – national – international levels	1		2	2	2 (4)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	3	41	100	100	0.00	0.00	67	0
ZZR. SS- Putting social science into W	1		3	3	3 (9)	1 (3)	6 (9:1)	1 (0)	5 (4)	12 (52)	4	35.5	0	50	50.00	0.00	0	33
ZZT. SS- Transportation in cities: Historical perspectives	1		4	4	4 (5)	1 (1:3)	1.75 (2.8)	0 (0)	1.5 (3)	4 (7)	5	29.5	0	100	0.00	0.00	0	0
ZZU. SS- Knowledge Commercialization and Valorization in Regional Econ Dev: New Approaches and Concepts	3		10	3.3	11 (19)	1.1 (1:9)	9.64 (11.6)	1 (1)	6 (6)	47 (52)	16	46.1	25	100	0.00	0.00	0	58
ZZV. SS- 1st European Meeting of the UEA	10	1	44	4	44 (100)	1 (2:3)	8.86 (10:9)	0 (0)	7 (7)	56 (74)	63	38.6	14	95	0.00	4.80	9	22
ZZW. SS- The New Urban World	4		20	5	23 (23)	1.2 (1:2)	20.96 (21)	2 (2)	23 (23)	52 (52)	20	54.6	10	85	0.00	5.00	0	94
ZZY. SS- Global Grand Challenges to Regional Science	1		4	4	4 (4)	1 (1)	27.25 (27:3)	15 (1:15)	21 (21)	52 (52)	4	56	25	100	0.00	0.00	0	100
ZZX. SS- The territorial impact of the electric car	1		2	2	3 (4)	1.5 (2)	3 (2:3)	0 (0)	0 (0)	9 (9)	3	35	0	100	0.00	0.00	100	33
TOTAL	96	1	368		399 (802)	1.1 (2:2)	7.4 (7:3)	0 (0)	3 (3)	56 (74)	533	40	28	91	1.70	4.50	6	33

5. Modelling conference attendance

5.1. The empirical model

Having described the main characteristics of the conference, in this section I seek to determine what influences a delegate's attendance at a particular session. Thus, rather than identifying the most popular themes (given that we have already seen which topics attracted most contributions), what we are interested in examining is the extent to which quality (as we would expect) matters in attracting delegates to sessions, or whether, by contrast, other *circumstances* matter more. To do so, I regress attendance against a list of variables that capture the following aspects (see table 7):

- Conference program: the day on which the paper was delivered, time slot, type of session, and the size of thematic area (the larger the theme, the larger

Table 7. Variables included in the regression analysis

<i>Variable</i>	<i>Description</i>
Att	Attendance at the session (total, including presenters)
Day	Day on which the session took place: 1st (base) to 3rd
Time	Time slot in which the session took place: 1st (base) to 4th
Session_type	Ordinary (base), Refereed, Special or Young Scientist
Papers_per_session	Number of papers presented in particular parallel session
Auth_session_1	Number of authors presenting in that session
Auth_session_2	Number of authors signing the papers in that session
Sessions_theme	Number of sessions programmed in the conference on session theme
Papers_theme	Number of papers programmed in the conference on session theme
Age	Average age of delegates attending session's thematic area (over total registered)
Women	Proportion of women attending session's thematic area (over total registered)
Europe	Proportion of Europeans attending session's thematic area (over total registered)
Profesional	Proportion of Professionals attending session's thematic area (over total registered)
Full_professors	Proportion of Full Professors attending session's thematic area (over total registered)
h_av_presen	Average h-index of the presenting authors
h_max_presen	Maximum h-index of the presenting authors
h_av_sign	Average h-index of the signing authors
h_max_sign	Maximum h-index of the signing authors
h_chair	h-index of session's chairperson

the potential audience, but at the same time the greater the competition between parallel sessions).

- Demographic characteristics of each session's thematic area: we control for age, gender, geographical origin, professional activity and the proportion of full professors and or directors or managers. We identify which characteristics of a thematic area matter most, for instance, if themes that attract high proportions of women or professionals are popular topics across the board.
- Bibliometric information: we control for quality using the bibliometric h-index, whereby an author with a high h-index can be expected to be producing good new material for presentation at the conference. We use the average h-index of the session (either of the authors presenting or signing the paper), its square, and the maximum. We also use the h-index of the person chairing the session to see if this serves as a signal to the potential audience.

Finally, our empirical model is as follows:

$Attendance = f(Day, Time, Sess. Type, Topic Size, Demog. Charac, Bibliometric Indices)$.

5.2. Estimation results

The regressions were run considering two data sets: one including the full sample and the other a restricted sample in which two outliers with extremely high attendance figures (100 and 180 delegates) were excluded. Table 8 display the results for both data sets. In order to show the power of each aspect under consideration, we introduce the variables sequentially, and list the results in columns. Below, the main findings are described.

Conference program: the day on which the session was held is never significant; however, the third time slot (just after lunch) is positive and significant in several models. The session type obviously mattered at the conference with Special Sessions attracting a higher attendance than Ordinary Sessions (base category). Offering more papers in a session did not guarantee a higher attendance, but if the session was dedicated to a popular theme (one for which more sessions were organised), it attracted a larger audience, although *diminishing returns* existed.

Demographic characteristics: themes presented by authors with a low average age attracted fewer delegates. This might be evidence of three features: one, young scientist sessions in general attract smaller audiences than the other sessions (albeit that the descriptive statistics show this not to be the case); two, younger authors are not likely to be so well known to the delegates and so it is not so easy for them to attract large audiences; and three, young people tend to be interested in topics that do not attract such large audiences. Gender and the proportion of professionals were found not to matter at all, which tells us that those thematic areas in which women and professionals are over or under represented attract the same relative audiences as the rest. The geographical origin of the delegates attending each thematic area only

Table 8. Regression results.

	All parallel sessions (N=136)					Restricted sample of parallel sessions (N=134)				
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 1	Model 2	Model 3	Model 4	Model 5
2 nd Day	3.162 4.41	1.05 3.78	2.83 3.44	3.593 3.02	2.169 2.95	0.296 1.95	-0.224 1.91	0.626 1.85	1.037 1.83	0.545 1.84
3 rd Day	-4.873 5.61	-7.371 4.85	-3.2 4.53	-3.655 3.97	-4.454 3.85	-0.997 2.48	-2.74 2.47	-0.921 2.44	-0.803 2.41	-0.593 2.42
Time slot #2	-0.287 5.37	-0.495 4.6	1.81 4.22	0.192 3.75	1.324 3.58	2.44 2.4	1.771 2.34	2.186 2.26	1.28 2.26	2.758 2.26
Time slot #3	-1.28 7.62	-1.668 6.49	2.01 5.96	1.079 5.27	2.145 5.06	5.575 3.39	4.14 3.29	5.462* 3.19	4.327 3.18	6.103* 3.18
Time slot #4	-6.72 6.97	-6.968 6.01	-5.12 5.46	-6.435 4.83	-4.577 4.65	1.867 3.11	0.085 3.06	-0.023 2.94	-1.184 2.93	0.664 2.94
Refereed Sessions	1.738 5.69	-2.542 4.91	-3.95 4.45	-5.823 3.93	-2.479 3.8	-1.199 2.52	-1.971 2.48	-2.269 2.38	-2.018 2.38	-2.5 2.37
Special Sessions	13.526*** 4.15	2.914 3.85	-0.01 3.52	-1.478 3.1	2.046 3.02	7.237*** 1.86	5.194*** 1.95	4.009*** 1.9	4.073*** 1.91	4.139*** 1.89
Young Sessions	7.765 10.73	-1.681 9.26	2.74 8.52	4.907 7.49	-2.094 7.28	1.765 4.74	-0.182 4.67	0.628 4.56	1.655 4.51	1.88 4.55
Papers_per session	6.238* 3.67	3.088 3.25	2.67 2.95	0.105 2.61	1.845 2.51	1.118 1.64	0.718 1.65	1 1.58	0.654 1.58	0.804 1.57
Auth_session_1	-1.612*** 0.66	-0.839 0.6	-0.7 0.54	0.204 0.52	-0.161 0.47	0.102 0.3	0.009 0.31	-0.003 0.29	-0.086 0.31	-0.098 0.29
Auth_session_2	-0.222 2.33	-0.576 2.06	0.85 1.89	2.515 1.72	0.57 1.6	0.339 1.03	0.487 1.04	0.92 1.01	1.68 1.04	1.087 1
Sessions_theme	0.61 2.17	1.781 1.95	2.73 1.93	3.167* 1.69	3.529*** 1.66	1.866* 0.96	2.378** 0.98	2.869*** 1.03	2.905*** 1.02	2.519** 1.04
Papers_theme	-0.183 0.49	-0.378 0.44	-0.64 0.43	-0.735* 0.38	-0.748*** 0.37	-0.372* 0.22	-0.470** 0.22	-0.594** 0.23	-0.61*** 0.23	-0.52** 0.23

Age		-0.93** <i>0.39</i>	-0.725** <i>0.35</i>	-0.431 <i>0.31</i>	-1.025*** <i>0.3</i>	-0.611*** <i>0.21</i>	-0.505** <i>0.2</i>	-0.55*** <i>0.2</i>	-0.49** <i>0.2</i>
Women		1.962 <i>8.7</i>	8.1 <i>8</i>	2.237 <i>7.07</i>	0.722 <i>7.02</i>	-2.181 <i>4.4</i>	0.741 <i>4.33</i>	-0.593 <i>4.3</i>	0.964 <i>4.39</i>
Europe		32.00*** <i>12.19</i>	25.293** <i>11.09</i>	15.225 <i>9.84</i>	18.786** <i>9.47</i>	9.622 <i>6.27</i>	8.447 <i>6.02</i>	7.492 <i>5.95</i>	7.627 <i>5.97</i>
Professionals		-16.125 <i>11.56</i>	-3.48 <i>10.68</i>	3.972 <i>9.42</i>	-6.751 <i>9.08</i>	-2.834 <i>5.87</i>	1.145 <i>5.72</i>	1.678 <i>5.67</i>	2.778 <i>5.71</i>
Full_professors		66.11*** <i>9.86</i>	44.024*** <i>9.79</i>	31.612*** <i>8.8</i>	32.939*** <i>8.47</i>	15.095*** <i>5.7</i>	10.331* <i>5.61</i>	9.736* <i>5.52</i>	8.472 <i>5.61</i>
h_av_presenting			0.44 <i>0.51</i>	1.673** <i>0.69</i>	1.525* <i>0.81</i>		0.449 <i>0.28</i>	1.211*** <i>0.42</i>	-0.144 <i>0.55</i>
h_av_signing			1.345** <i>0.54</i>	3.258*** <i>0.76</i>	-3.149*** <i>0.88</i>		0.296 <i>0.3</i>	-0.073 <i>0.52</i>	1.793** <i>0.77</i>
h_chair			-0.07 <i>0.23</i>	0.027 <i>0.2</i>	-0.196 <i>0.2</i>		-0.094 <i>0.12</i>	-0.024 <i>0.12</i>	-0.006 <i>0.13</i>
h_max_presenting				-1.101*** <i>0.26</i>				-0.388** <i>0.17</i>	
h_max_signing				-0.399** <i>0.15</i>				0.122 <i>0.1</i>	
h_av_presenting ²					-0.069** <i>0.03</i>				0.032 <i>0.02</i>
h_av_signing ²					0.255*** <i>0.04</i>				-0.10** <i>0.05</i>
Constant	4.926 <i>12.89</i>	9.526 <i>22.44</i>	-6.22 <i>20.44</i>	-5.396 <i>17.88</i>	24.828 <i>17.94</i>	19.073 <i>11.74</i>	9.469 <i>11.55</i>	11.777 <i>11.41</i>	7.724 <i>11.46</i>
Observations	136	136	136	136	136	134	134	134	134
R-squared	0.178	0.442	0.558	0.668	0.687	0.301	0.449	0.477	0.471
Adj. R-squared	0.09	0.356	0.477	0.6	0.623	0.225	0.346	0.368	0.361

Note: *** p<0.01, ** p<0.05, * p<0.1. Standard errors in italics

mattered in the case of the model that included the two *outliers*, which reflects the fact that these two sessions offered a marked European point of view. Geographical origin was not significant in the other 134 sessions.

The proportion of full professors participating in the thematic area is significantly important in most, which is clearly related to the potential quality of the session. In the regressions conducted here, this is controlled with the use of the bibliometric h-index, which is included in the model as the average, squared and maximum values for both presenters and signers of the papers. The main results are as follows:

- The average h-index of both the presenters and signers of the paper matter.
- The h-index of the person chairing the session has no influence on audience size.
- When either the maximum h-index or the squared value of the average h-index of the presenters or signing authors are included, the parameters are significant and the adjustments higher. Non-linear relationships arise, but the picture varies with the model. Thus, in the regression run with the full sample, the squared value of the average h-index of the signing authors is positive, suggesting that having three or four leading researchers in the same room will attract a large audience. By contrast, when we eliminate the two outliers (restricted sample), the parameter for the squared variable is negative, *i. e.*, having leading researchers in a session increases attendance but at a diminishing rate.

Interestingly, these simple models are able to reproduce up to 69% of the variance for the full sample (136 sessions) and 47% of the variance for the restricted sample (134 sessions).

The most important variables by far are those related to the quality of the presenters. This is, of course, to be expected: at a conference: the supply of sessions is considerable and time is limited. Consequently, delegates choose to attend the sessions that potentially offer the highest return in terms of scientific quality. There are two indications of such quality at the ERSAs conferences. First, papers presented at Refereed Sessions have passed a review process by the Scientific Committee, while those presented at Special Sessions have been reviewed by the specially nominated Convenors. And second, an author's reputation in his or her line of research counts for a great deal. Our findings show that reputation is at least as important (if not more) than the formal indications of quality.

6. Conclusions

This paper has presented the state of the art of Regional Science by analysing contributions made at the 51st ERSAs Conference held in Barcelona in 2011. The main findings can be summarised as follows:

1. The thematic areas attracting greatest attention are, by some distance, *Regional economic growth and development* followed by *Innovation*,

knowledge, economy and regional development and the topics discussed within the *1st European Meeting of the Urban Economics Association*. By contrast, a number of other themes included in the program attract little attention.

2. The attendance of female and young delegates at the conference is high and on the increase.
3. The European conference is attended principally by European delegates; however, a sizeable number (20% of the 952 registered delegates) come from outside Europe.
4. The attendance of professionals in the field of Regional Science is significant, but remains relatively low (9%).
5. Co-authorship is gaining in importance.
6. Authors presenting papers at the Special and Refereed Sessions have higher bibliometric indices, their papers display a higher quality and a higher degree of homogeneity than is the case of papers presented at Ordinary Sessions. However, only the Special Sessions attract significantly higher attendance.
7. Non-presenting authors have higher h-indices than those of the presenting authors. This might reflect the two-paper per author maximum imposed at the ERSA conference or, alternatively, it might be indicative of the fact that younger or less experienced academics consider ERSA a good occasion on which to present their work.
8. Both the delegates and those chairing the sessions reported high levels of satisfaction with the sessions and the conference in general. The homogeneity of the sessions is an important concern for delegates while the Special Sessions help ensure a high degree of homogeneity.
9. The conference schedule seems to be influential in determining which sessions delegates attend: the time slot immediately following lunch being the most popular.
10. Quality matters but an author's reputation is more important than any formal recognition granted (refereed versus ordinary sessions).

In short, the ERSA conference is a massive meeting in Regional Science, at which young academics and professionals enjoy the opportunity to present their research and discuss it with leaders in the field. Moreover, the conference organises an excellent range of sessions delivered by top academics, making it the ideal setting for networking.

How then might ERSA improve the quality of its conference? According to the ERSA satisfaction survey, most respondents called for fewer parallel sessions (53%) and for more time to be dedicated to each paper (45%). Arguably, these suggestions run contrary to the event's current strengths. ERSA conferences seek to be comprehensive, all-embracing occasions, promoting regional science among young academics and professionals, from developing countries, and covering a wide range of themes and points of view. In short, the ERSA conference is an event at which everyone in the field has an opportunity to meet and talk together. The quality of sessions

in this multidisciplinary science are apparent in the rejection rate (around 5%) and the session types: thus, Ordinary Sessions allow researchers to get feed-back on their work in progress; Refereed Sessions are for finished studies that have been reviewed by the Scientific Committee and which dispose of more time for in-depth discussion and comments from colleagues; and, Special Sessions are for papers reviewed by the session convenors and which function as a specialist workshop within the framework of the broader conference and ensure that the presenter finds the right audience among what is a large multidisciplinary gathering.

Thus, the delegates are in favour of maintaining the comprehensive nature of the ERSA conference but would like to see an improvement in the means of signalling the formal recognition afforded higher quality papers. This might be achieved by better publicity for session types and, more importantly, by introducing a formal policy regarding the work of the Scientific Committee at the conference. All such steps would improve the quality of the papers delivered in the Refereed Sessions and, consequently, boost attendance.

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Comment on «Regional Science trends through the analysis of the main facts of the 51st ERSA Conference», by Vicente Royuela

Charlie Karlsson*

The European congress of the Regional Science Association International —the ERSA congress— has in recent years established itself as by far the largest meeting for regional scientists, and policy makers in the world with more than 800 participants in Liverpool UK in 2009, in Jönköping Sweden 2010, and Barcelona Spain 2011, and in 2012 in Bratislava Slovakia. When we had the meeting in Cambridge in 1989, there were only 200 participants. The very substantial growth in attendance at the European congresses mirrors the increased interest among researchers in spatial issues but also the increased importance on spatial development and spatial policies among policy makers all the way from the local level to the EU level. A very positive aspect of the growth of attendance is that we have an increasing share of young scientists and not least young female scientists among the participants. There was a time when one could think that a European congress was a business for middle-aged and elderly men only. We welcome the changes in attendance that we have been able to observe during the last 10-15 years and we see these changes as a proof that regional science today is a very healthy research field offering many interesting and important research questions both from the viewpoint of science and from the viewpoint of policymaking.

An ERSA congress in the 2010s looks very different from the early ERSA congresses in the 1960s and 1970s. In the first ERSA congress in The Hague 1961, there were only 122 participants of which only three were women. This can be compared with about 1000 participants at the Barcelona congress of which around a third were women. At the first congress 29 countries were represented, which can be compared with 44 countries at the Barcelona congress. This is a substantial increase but we can observe that a substantial number of European countries were not represented at the congress. They include Albania, Belarus, Bosnia-Herzegovina, Bulgaria, the Czech Republic, Estonia, Iceland, Ireland, Lithuania, Malta, Montenegro, Moldova, Luxembourg, Serbia, Slovenia, and Ukraine. This illustrates that there is still a substantial job to do for the RSAI and ERSA communities to attract researchers and policy-makers from these countries to the ERSA congresses and to help them organize their own sections.

What has exploded at the ERSA congresses is the scientific program. At the first ERSA congress there were just 15 papers presented. In Barcelona there were more than 900 papers presented. At the first congress, all sessions were plenary sessions. At the Barcelona congress, there were keynote sessions, round tables, refereed ses-

* President of ERSA. Jönköping University.

sions, ordinary sessions, special sessions, young scientists sessions, etc. With an increasing number of participants and papers, we also have an increased diversity in terms of types of sessions. At the first ERSA congress, there was no social program. Walter Isard who organized the congress thought that the time was too valuable to be used for such things. All the time should be used for intellectual discussions. At the Barcelona congress, there was a rich social program with a reception, an informal dinner and an excellent gala dinner. Interestingly, it was the Barcelona congress in 1981 that set the new standards for the social program at ERSA congresses. I actually miss a section in the paper by Vicente Royuela presenting and analysing the social program at the 2011 ERSA congress. Such an analysis would have been valuable for future organizers of ERSA congresses. There is no information about the technical excursions, either. Neither is there any deeper discussion of all the problems met when organizing the congress as well as during the congress, and how they were dealt with. I am certain that the author has enough material and experience for another paper focusing these topics.

It is not easy to describe the field of regional science with a few words. Wikipedia offers the following description: «*Regional science* is a field of the social sciences concerned with analytical approaches to problems that are specifically urban, rural, or regional. Topics in regional science include, but are not limited to location theory or spatial economics, location modeling, transportation, migration analysis, land use and urban development, inter-industry analysis, environmental and ecological analysis, resource management, urban and regional policy analysis, geographical information systems, and spatial data analysis.» I cite this description here not because it necessarily is the best but because it shows the breadth of the field of regional science. The paper by Vicente Royuela in a very interesting manner illustrates the breadth of themes at the Barcelona congress that goes well beyond the breadth of the above definition. Whatever interest a regional scientist or regional policy-maker have, they can always find interesting and relevant presentations with a strong relevance for their interest.

It is beyond the scope of this short comment to try to disentangle the results in the econometric part of the paper. I must say that I appreciate this part of the paper very much. It contains very valuable information for those that have the responsibility to plan future ERSA congresses. This part tells future organizers which types of sessions that attract a large audience. It is a demanding task for any ERSA congress organiser to organize a good scientific programme but in this part of the paper, they get very valuable information concerning how to make a good program.

As president of ERSA, I sincerely thank Vicente Royuela for all his efforts in getting this paper together. It contains a lot of valuable information for ERSA and future ERSA congress organizers. It is my hope that future organizers will repeat this kind of effort, so that we over time can build up a solid and dynamic information bank on the noble art of «the organizing of ERSA congresses».