Economics Working Paper

A portrait of the Spanish accounting community

Oriol Amat *
John Blake **
Catherine Gowthorpe **
Soledad Moya *
Ester Oliveras **

Keywords: Accounting, academic community

Journa/ of Economic Literature classification; M4 I

^{*}Universitat Pompeu Fabra

^{**} Central Lancashire University

John Blake Department of Accounting and Financial Services University of Central Lancashire Preston PR I 2HE

Tel: 01772 893639

Oriol Amat Salas Department d'Economía, Secció Empresa Universitat Pompeu Fabra Ramon Trias Fargas 25-27 08005 Barcelona

> Tel: 93.5421655 E-mail: oamat@upf.es

Catherine Gowthorpe
Department of Accounting and Financial Services
University of Central Lancashire
Preston PRI 2ltE

Tel: 01772 893638 E-mail: c.gowthorpe@uclan.ac.uk

Soledad Moya Gutiérrez Departament d' Economía Universitat Pompeu Fabra Ramon Trias Fargas 25-27 08005 Barcelona

Ester Oliveras
Department of Accounting and Financial Services
University of Central Lancashire
Preston PRI 2HE

Abstract

This study presents a portrait of the Spanish academic accounting community in 1995, based upon a questionnaire circulated to Spanish accounting academics in 1995 and upon an analysis of authorship and citations in the main Spanish accounting journals. The approach to these analyses is grounded in similar studies which have been carried out in the United States, Spain and elsewhere. but the combination of techniques used in this study is particularly broad in range.

The results of the study are used to describe a range of characteristics of Spanish accounting academics, for example, publications records and length of academic experience. The analysis of publications produces a ranking by institutional affiliation of the most significant contributors to current debates on accounting. Citation analysis is used to identify the range and extent of international influences upon the Spanish academic accounting community, and to provide an additional ranking by institutional affiliation of the most frequently cited sources A significant finding was that the nature and extent of international influence had changed very little over the ten year period since Spain entered the European Union and started to implement European Directives.

Perceptions of journal quality were elicited by questionnaire. Forty five journals, Spanish and international are included in a list ranked for perceived importance as outlets for publication. and as sources of support for teaching and research. The results of this exercise show that Spanish journals were ranked low relative to journals published in the United Kingdom and United States.

Finally the study examines the extent of purpose upon Spanish accounting academies to publish, by presenting results of a question about criteria for promotion, and also by examining and increasing tendency to publish co-authored work.

A portrait of the Spanish academic accounting community

Introduction

The objective of this study is to illuminate the current position and attitudes of the Spanish academic accounting community, applying a variety of methodologies which allow a detailed picture to be drawn. This type of study has most frequently been carried out in respect of US academic accountants but one previous study of Spanish accounting academics (Garcia Perez et al, 1986) has been carried out which covered the period 1979-85. After a lapse of 10 years it seems to us appropriate to replicate some of this work in order to identify developments over time. This research both replicates that study and extends it into areas not previously considered in a Spanish context.

This study will identify, amongst other things, those Spanish university departments whose members have published most frequently in the Spanish journals over five year period to mid-1995. During that period, and throughout much of the 1980s Spanish accounting has undergone a revolution in practice. Spain experienced a major political upheaval during the 1970s with the end of Franco's authoritarian regime in 1975 and the remarkably rapid transition to a democratic political system immediately afterwards. By 1986 Spain had fulfilled the conditions for entry into the European Community, and a major preoccupation in accounting practice since then has been the implementation of the relevant EC directives. We would expect, then, that the Spanish academic accounting community has been much influenced by events occurring and ideas originating outside Spain. In order to test this assertion we will examine in this study the extent to which foreign sources are cited in the Spanish journals, and the nature of those sources. Also, as further evidence of the extent and nature of the influences on the academic accounting community we provide an analysis of those accounting journals, Spanish and other, which are most highly regarded for their prestige and their contribution to teaching and research by Spanish accounting academics.

The work undertaken subdivides into five parts:

- a summarisation of descriptive data gathered from the community on such matters as membership of professional bodies, length of academic experience, and number and nature of publications by individuals;
- 2) a study of authorship, in order to determine which individuals and institutions in the Spanish academic accounting community have been publishing in significant Spanish accounting journals in recent years, and to attempt a ranking using objective criteria by institutional affiliation of the most significant contributors to academic debate;
- a description of the most significant influences on the Spanish academic accounting community, from both within and outside Spain, which are suggested by an analysis of citations in the Spanish journal articles;
- 4) a study of opinions on journal quality, which involves establishing a ranking of those journals, both Spanish and non~Spanish, considered most prestigious by Spanish academics;
- 5) an examination of whether or not the most important criterion for success and promotion in Spanish academic accounting departments is publication in academic journals.

Analysing academic publication records

Several studies have been carried out, mostly in the US, which involve analysis of authorship of articles in journals. A frequently cited study by Bazlcy and Nikolai (1975) conducted contents analysis of 4 leading US journals over a six year period from 1968 to 1974; their data was subsequently re-analysed by Andrews and McKenzie to take account of the perceived quality of the journals examined. Similarly Dyl and Lilly (1985) examined publications in 7 US refereed

journals over a 4 year period. Dyckman and Zeff (1984) and Heck and Bremser(1990) analysed the contents of single journals only, (the Journal of Accounting Research and The Accounting Review, respectively) upon significant anniversaries since first publication. More recently, a major study by Heck, Jensen and Cooley (1990) analysed contributions to 24 leading academic journals, including 4 non-US journals, from their inception to 1988. All of the studies referred to so far concentrate primarily upon academic accounting journals; an exception to this approach is found in Windal (1981) who examined the publication rates of faculties in 12 US journals across a wider range, including taxation journals and those journals aimed primarily at practitioners. Reeve and Hutchinson (1988) established a ranking by institution located outside the US of contributors to leading English-language journals, and in 1984 Groves and Perks (1984), in an examination of the teaching and research of accounting in UK universities, looked at output per University department in terms of number of publications of journal articles of all types and books. Just one study relates specifically to Spain: Garcia Perez et al (1986) studied and analysed the authorship of articles in three Spanish accounting journals over a six-year period.

Analysing citations

Citation analysis has been the subject of a number of studies with varied objectives. Wade (1975) described some of the uses of this type of analysis; for example, as a means of assessing scientific productivity, and for use as evidence in deciding applications for academic promotion. In the accounting field Brown and Gardner (1985) used citation analysis to assess the overall impact of major accounting research journals on contemporary accounting research, identifying specifically the impact of certain key articles. They identify a number of significant weaknesses in and limitations to citation analysis: for example, well-known writers will be cited more frequently. authors will tend to cite themselves and their friends, and also members of the editorial board of their target journals. Nevertheless they conclude that citation analysis does have a value in providing objective measures of impact. Dyckman and Zeff (1984), in their study of the first twenty years of the Journal of Accounting Research, drew upon the evidence of their own, and Brown and Gardner's (1985) citation analyses to assess the impact of one journal. Similarly, Beattie and Ryan (1989) examined the strength of seven journals by recourse to analysis of citations appearing in

them over a period of time. Mc Rae (1974) was also concerned with impact studies; he conceptualised citations as information flows between knowledge systems and sub-systems. His various analyses included a geographical analysis of citations in order to determine the extent of cross-border influences.

Garcia Perez et al (1986) used citation analysis in their study of Spanish academics with two objectives: firstly, to establish the influence which certain researchers, or groups of researchers exert over others, and secondly, to examine the extent of foreign influences on Spanish accounting research.

Journal quality

Perceptions of journal quality have been the subject of several academic enquiries in recent years, but none of the studies, so far as we are aware, have included Spanish accounting journals, or have canvassed the views of Spanish accounting academics. Benjamin and Brenner (1974) asked a sample of US academics to rate 24 accounting a business journals on a 5 point quality scale. Subsequently, Howard and Nikolai (1983) devised a methodology based upon magnitude estimation procedures, where a key journal is assigned an arbitrary value of 100 and respondents in a survey were asked to assign values, relative to that benchmark, to other named journals. Their survey population comprised accounting educators in the US who were asked their opinion upon 51 US journals. Their methodology was adopted by Nobes (1985) who studied the responses of accounting academics in the UK, Australia and New Zealand to a list of 37 influential US and non-US journals. Another non-US study is that of Houghton and Bell (1984) who examined the attitudes of Australian and New Zealand academics. Recently Brinn et al (1996) surveyed United Kingdom accounting academies perceptions of research journal quality using the benchmarking technique.

Criteria for success in promotion in the academic field have been discussed in the accounting literature. Benjamin and Brenner (1974) conducted their study of journal quality because they perceived the importance which was attached to journal output in decisions about promotion, tenure and salary increments in the US. Chan (1978) found that the most important indicator of research effectiveness in university engineering departments in the US was the number of articles published in prestigious journals. Cargile and Bublitz (1986) in their study of the predominant characteristics of the "research environment" also emphasise the importance of publication.

Investigating the Spanish academic accounting community

The study involved two approaches. A questionnaire was circulated to Spanish academics during the autumn of 1995, and a review of Spanish accounting Journals was undertaken, which provided the main evidence for the authorship study and the citation analysis.

Questionnaire

The questions covered the following areas:

A. Descriptive data

- a) University, department, sex, name (optional).
- b) Number of years at the University
- c) Employment category and status (e.g. full professor, visiting professor, research assistant, etc.).
- d) Membership of professional bodies.
- e) Number and type of publications.
- f) Languages in which published.

- B. Information about attitudes to the following:
- a) Importance of publication record for promotion prospects in Spanish universities
- b) Opinion as to the five most prestigious Spanish universities.
- c) Ranking by relative prestige and usefulness of a list of accounting journals.

Procedure followed in gathering data from Spanish accounting journals

A review was undertaken of five years of publication of the major Spanish accounting journals, from mid-1990 to mid-1995. The earlier study (Garcia Perez et al, 1986) analysed six years of publication of three journals:

- 1. Revista Española de Financiación y Contabilidad (REFC)
- 2. Revista Técnica, del Instituto de Censores Jurados de Cuentas de España (RT)
- 3. Ténica Contable (TC)

This study examines these three, which we know to be very familiar to Spanish accounting academics based upon evidence of academic journal readership presented by Garcia Benau et al (1996) and in order to provide a more comprehensive picture, includes a further three journals:

- 4. Harvard Deusto, Finanzas y Contabilidad (HD) (commenced publication January 1994)
- 5. Partida Doble (PD) identified as widely read by academics in the Garcia Benau et al (1996) study.
- AECA Boletin (AECA) the journal of the Asociación Española de Contabilidad y Administración de Empresas (The Spanish Association of Accounting and Business Administration).

These six publications between them represent the main Spanish language outlets for work of the Spanish academic accounting community with respect to work on accounting. Journals dealing primarily with finance, economics and financial services for example, have not been included, although accounting academics in Spain, as in other countries, may sometimes publish articles in them. The main reason for this selectivity regarding journals is that we are attempting to portray the accounting community and its activities. To include finance and economics journals would necessarily involve inclusion in the study of academics whose main interests and experience lie outside accounting, and would involve difficult and arbitrary judgements as to what might properly be regarded as strictly accounting research.

Two of the publications selected (RT and AECA) are professional body journals and therefore contain technical update material, book reviews, news, correspondence and material similar to that found in professional body journals elsewhere. Such material was excluded from the study, leaving only articles on technical subjects under consideration. Similarly, book reviews were excluded from the other journals, and also such items as reproductions of international accounting standards. Similar exclusions have consistently been made in other publication analysis studies (e.g. Bazley and Nikolai, 1975). All other articles were listed and analysed.

In respect of all articles published in the calendar year 1994, a citation analysis was undertaken, in order to identify the most significant influences on Spanish academic accountants. The data gathered covered the author(s) of the sources cited, the nature of the source (i.e. book, journal article, conference paper or other), and the provenance of the citation journal title, place of book publication, and so on) in an attempt to identify the key influences on recent Spanish academic accounting research. Self-citations were excluded, in accordance with the practice generally adopted in such studies (e.g. Beattie and Ryan, 1989). No distinction was attempted between negative and positive citations; some studies (e.g. part of the evidence adduced by Dyckman and Zeff, 1984) have excluded negative citations, but a negative citation can be as indicative of influence as a positive and we have chosen to include them.

Responses to the questionnaire

300 questionnaires were circulated amongst accounting academic staff at Spain's universities during the second half of 1995. Of these, 70 were returned, a response rate of 23.3%, which is a relatively good response rate for questionnaires in Spain. With such a low rate of response, non-response bias is a distinct possibility; however, it is encouraging that the responses came from the full range of academic staff grades.

Summary of questionnaire data

The first set of questions related to staff grade, length of service and educational background. Responses were received from five categories of staff and a brief explanation of the categories is appropriate at this point for those not familiar with the Spanish university system. "Catedrático" (CAT) is a full professor and "Profesor Titular de Universidad" (PROF) is the equivalent of a reader grade in a British university. "Profesor Titular de Escuela Universitaria" (PTEU) is a tenured lecturer post. "Asociado" (ASOC) is a lecturer, and "ayudante" (AYUD) is the equivalent to a research assistant. "Profesor visitante" is a visiting professor (VIS).

Respondents were asked to indicate whether or not they had completed a doctorate, or are in the process of completion. Table I shows the results of this part of the survey:

Table 1: Educational background of respondents

Grade	Number of	Average years	"Doctorado"	Completing
Grade	respondents	of service		"doctorado"
CAT	14	21.2	14	0
PROF	12	11.2	12	0
PTEU	19	7.4	3	15
ASOC	13	5.1	2	
AYUD	10	3.8	1	5
VIS	2	5.5	2	0
TOTAL	70	9.9	34	28

The table shows, as might be expected, increasing average lengths of service in the higher staff grades. The completion of a doctorate is essential, it appears, for promotion to full professor and over 88% of our respondents have either completed or are in the process of completing their doctoral studies.

Respondents were asked to indicate their membership of professional bodies. The Asociación Española de Contabilidad y Administración de Empresas (AECA), founded in 1979, is the main private sector accounting body in Spain; it published influential accounting standards and is a major influence in Spanish accounting regulation. ASEPUC is the association of Spanish lecturers in accounting. The "Instituto Censores Jurados de Cuentas de España" (ICJCE) is the longest established auditing body, founded in 1942. The "Registro de Economistas" is a large body whose members are designated as either "economistas" or "economistas auditores". We asked respondents to indicate whether or not they are members of the "economistas auditores" section of the register (REA). The membership of the "Colegio de Economistas" (ECON) comprises those who have the "licenciatura" qualification in economics; "licenciatura" is a five year degree equivalent in level to a British Masters degree. "Titulares Mercantiles" (TM) is an old qualification which will run out in due course. It was awarded to those who had completed the equivalent of a honours degree in Business Studies. The "Registro Oficial de Auditores de Cuentas" (AUD) is the official register of auditors whose membership is controlled by ICAC, the Spanish accounting body set up by the Government and ACODI is an association of management accountants.

The results of this part of the survey are set out in Table 2, which shows the numbers of each university staff grade category who are members of each of the bodies described above. The percentages show the proportion of each category of respondents who are members of the bodies.

	CAT	%	PROF	%	PTEU	%	ASOC	%	AVUD	%	VIS	%
AECA	12	86	12	100	9	47	7	54	4	40	2	100
ASEPUC	11	79	9	75	9	47	7	54	4	40	0	0
ICJCE	7	50	4	33	1	5	3	23	0	0	0	0
REA	1	7	2	17	0	0	3	23	0	0	0	0
ECON	11	79	8	67	6	32	6	46	3	30	1	50
TM	3	21	1	8	2	11	3	23	0	0	0	0
AUD	7	50	7	58	1	5	6	46	1	10	1	50
ACODI	9	64	5	42	2	11	3	23	1	10	0	0

Membership of several bodies is common, probably rather more so than would be the case in the United Kingdom. AECA, the private sector accounting body, has been very successful since its foundation, and a majority of our respondents are members. As might be expected membership of ASEPUC, the lecturer's association, is common.

Respondents were asked about the nature of their publications, and the results of this analysis are shown in Table 3, which gives average figures by staff category (including in the calculation those who have not produced any output in a category) for type of output. Columns headed "n" show the number of people in each category who have produced each type of output.

Table 3: Average output by staff category

<u></u>	CAT	n	PROF	n	PTEU	n	ASOC	n	AYUD	n	ViS	n
National conference	10.6	14	9.4	12	1.4	11	0.5	3	0.4	2	4.5	2
International conference	3.9	10	2.8	10	0.3	3	0.2	2	0.1	1	7.5	2
Spanish academic journal	17.1	14	13.8	12	2.9	11	0.6	6	1.5	6	4	2
International academic journal	0.9	6	1.6	7	0.2	5	0	0	0.2	2	1.5	2
Spanish books	6.7	14	4.4	11	0.5	4	0.3	3	0.2	2	4	1
Non-Spanish books	0.1	1	0.3	3	0	0	0	0	0	0	0	0
Chapters in Spanish books	5.7	14	3.7	11	0.3	6	0.1	1	0	0	3	1
Chapters in non-Spanish books	0.3	5	0.3	3	0	0	0	0	0	0	2	2
Average output per individual	45.3		36.3		5.6		1.7		2.4		26.5	
Average years of service (Table 1)	21.2		11.2		7.4		5.1		3.8		5.5	
Average output per year per individual	2.1		3.2		0.8		0.3		0.6		4.8	

The average output per year per individual is obviously a crude measurement, but it does show that readers are typically producing a high level of output compared to other categories of staff. This may reflect the importance of publications in decisions about promotions; if we assume that most people in the reader category are working towards appointment to full professorship then it would be quite logical for this group to publish more than any other. If publications in international journals are regarded as the most prestigious type of output, then, again, staff at reader level are producing on average more prestigious work than full professors.

The final question in this part of the questionnaire related to the languages in which respondents had published. They were asked to check boxes for the following different languages: Spanish, Catalan, Galician, Basque, English, German, French and other. An analysis of the response is shown in Table 4:

<u>Table 4: Languages in which respondents have published (number of respondents)</u>

	CAT	PROF	PTEU	ASOC	AYUD	VIS	Total
Spanish	14	12	14	9	7	2	58
Catalan	2	1	3	0	0	1	7
Galician	0	0	0	0	0	1	1
Basque	1	0	0	0	0	0	1
English	7	6	2	1	1	1	18
German	0	0	0	0	0	0	0
French	1	3	1	0	0	0	5
Others	2	2	0	1	0	1	6*

^{*} Five Portuguese, and one Dutch.

It is clear from this table that publication in international journals means in most cases publication in English. Only French and Portuguese are prominent as other European language of publication.

Review of authorship of Spanish journal articles

The analysis of authors of articles in the six journals selected over five years is summarised in Table 5. Authors are not named; the analysis is according to the university where they are based. Any difficulties of classification have been resolved by reference to García Perez et al. (1986), i.e.:

a) where the author has not stated any affiliation to a university he or she has been assigned to a non-academic category: auditors (censores-auditores), lawyers (abogados), Treasury civil servants (funcionarios de Hacienda), economists (economistas) or the category of "other" where it has not been possible to identify an appropriate category.

b) if an author has been affiliated to more than one university during the period under review, his or her articles have been assigned to the relevant university at the time they were published.

c) no distinction has been attempted between those academic authors who are members of an accounting department and members of other departments because of the difficulty of establishing such distinctions.

García Perez et al (1986) drew a distinction between three subdivisions of universities:

"facultad", "escuela ténica superior" and "escuela universitaria". However, nowadays, in most Spanish universities the "facultad" is affiliated to the department (usually of Accounting) and it is this which provides lecturing hours to the "facultad", "escuela técnica superior" and the "escuela universitaria". This means that a lecturer as part of his or her employment may lecture both in a "facultad" and in an "escuela universitaria", for example. We have, therefore, chosen not to draw a distinction between the subdivisions of universities to which lecturers belong as it is likely to be misleading.

The table is divided into two main sections. In the left hand section there is a ranking by university according to the number of articles written by authors affiliated to them. Following Garcia Perez et al (1986) articles which have been co-authored have been attributed as whole articles to each of their co-authors, so that, for example, an article with two authors is counted as two articles, an article with three authors as three articles, etc. In the right hand section of the table the co-author effect has been adjusted for: where an article has been co-authored by two people each author has been attributed with 0.5 of an article, and so on.

Table 5.. Analysis of authors by affiliation

Without ac	djusting for the co-author effe	ct	Adjusting for the Coauthor effect				
Ranking	University	Articles	Ranking	University	Articles		
1	Valencia	132	1	Valencia	91.58		
2	Zaragoza	115	2	Zaragoza	82.33		
3	Aut6noma de Madrid	73	3	Autónoma de Madrid	63.75		
4	Pais Vasco	53	4	Complutense de Madrid	35.5		
5	Complutense de Madrid	44	5	País Vasco	32		
6	Sevilla	40	6	Sevilla	24.5		
7	Oviedo	30	7	Oviedo	21		
8	Barcelona	24	8	Barcelona	16		
9	Murcia	22	9	Murcia	16		
=10	Carlos Ill de Madrid	19	10	Alcala de Henares	15.5		
=10	IESE (BS)	19	11	Carlos III de Madrid	14.92		
=12	Alcala de Henares	18	12	León	13,33		
=12	Alicante	18	13	Alicante	13		
14	Extremadura	17	14	IESE	11.5		
15	León	16	15	Vigo	11		
=16	Granada	15	16	Publica de Navarra	10,75		
=16	Publica de Navarra	15	17	Castilla La Mancha	10		
=18	Autónoma de Barcelona	14	=18	Autónoma de Barcelona	9,5		
=18	Castilla La Mancha	14	=18	UNED	9,5		
20	Pompeu Fabra	12	20	Extremadura	9.33		
	38 other Spanis Univ.	136		38 other Spanish Univ.	108.01		
	3 other Spanish Business Schools	12		3 other Spanish Business Schools	9.5		
	26 univ. outside Spain	35		26 univ. outside Spain	25.57		
		893			654.07		
	Non university	495			432.93		
	TOTAL	1,388			1,087		

It is striking that the number of articles published in the journals has increased substantially since the Garcia Perez et al (1986) study. They analysed 350 articles in all in the three journals they examined over six years: an average annual output of 58.33 articles. We analysed 1,087 articles over five years, of which 463 were published in the three journals examined in the earlier study: an average annual output in those three journals of 92.6 - a significant increase over the output in the period 1980-85. This increase in volume may reflect the general increase in activity and ideas which has taken place in the years since Spain entered the European Community and started to implement the EC directives. It may also be attributable to a growing need to publish amongst Spanish academics, which is discussed later in this paper.

It is frequently the case in this type of study that the authors deny any intention to produce a quality league table of universities, although of course, the results of any study which provides a ranking by university may be open to the interpretation that some institutions are more pre-eminent or prestigious than others. Universities differ in their missions or objectives and therefore a university department whose staff produce few or no publications has not in any sense failed if its objectives do not include high level research with visible outputs. Given that the results of this part of the study are likely to be interpreted by some as a league table of eminence we decided to gather additional evidence on institutional prestige, by asking Spanish accounting academics which five Spanish departments of accounting they consider to be the most prestigious and to provide a ranking of those five. Table 6 shows the results of this question: the third column shows the number of times a particular university was named, and the fourth column shows the results of a ranking exercise which assigned a score of 5 to a university placed first on the list, 4 to a university placed second on the list, and so on. The fifth column shows, by comparison, the position of each university in the analysis of authors by affiliation set out in the first column of Table 5.

Table 6: Assessment by academics of the most prestigious universities in Spain

Position	University Name	Number of times named	Ranking score	Position in Table 5
1	A 1 . 3 . 1 . 1	1	106	2
1	Autónoma de Madrid	45	186	3
2	Valencia	45	137	1
3	Zaragoza	33	106	2
4	Alcala de Henares	24	72	=12
5	Sevilla	23	43	6
6	Complutense de Madrid	21	70	5
7	Carlos III de Madrid	16	59	=10
8	Barcelona	13	33	8
	15 other universities	10 or below		

Some respondents cited their own universities as amongst the top five. Excluding these "self-citations", the rankings remain very similar, as shown in Table 7 below.

<u>Table 7: Assessment by academics of the most prestigious universities in Spain, excluding "self-citations"</u>

Position	University Name	Number of times named	Ranking score
1	Valencia	45	137
2	Autónoma de Madrid	41	170
3	Zaragoza	27	79
4	Alcala de Henares	23	68
5	Sevilla	23	43
6	Complutense de Madrid	18	56
7	Carlos III de Madrid	15	54
8	Barcelona	12	29
	13 other universities	10 or below	

Citation analysis

As in the Garcia Perez et al. (1986) study, a citation analysis was undertaken. Garcia Perez et al., however, examined citations in the journals they examined over the fall six-year period. We have chosen to examine citations from one year only: 1994. Even one year provides a large volume of citations and there seemed little to be gained from increasing that volume substantially over a longer period.

In summary, the citation data is as follows:

Table 8: Summary of citation data

Category	Number
Books	648
Conference papers	97
Journals	868
Other	372
Total	1985

The category of "other" includes professional and technical pronouncements such as accounting standards and references to commercial law. Apart from noting the total as above in Table 8, no further analysis of these has been undertaken. Many of the remainder of the citations of course include more than one author, and the list of raw data above includes self-citations. The number of author citations in respect of books, conference papers and journals is 2,241; of these 199 are self-citations, which will henceforth be excluded from the analysis. Table 9 shows the analysis between books, conference papers and journal articles excluding self-citations. Column A shows total references giving a weighting of 1 for each contributing author to a book or paper; the "gross" total. Column B shows the totals giving proportionate weight to contributions to papers, e.g. a paper with 2 joint authors scores 0.5 for each author; this is referred to as the "net" total.

Table 9: Analysis of citations between books, conference papers and journal articles

Category	Column A "gross"	Column B "net"
Books	795	584.83
Conference papers	122	77.50
Journal articles	1125	785.42
Total	2,042	1,447.75

As a major objective of this paper is to identify influences upon the Spanish academic accounting profession, the next stage in the analysis was to analyse the citations by country, in descending order of magnitude. Table 10 shows the results of this analysis with, in the extreme right-hand column, comparatives derived from the data in the Garcia Perez et al. (1986) paper. The comparatives must be treated with caution; the Garcia Perez et al. (1986) analysis excluded items identified as books because they considered the content of books to be pedagogical in nature. This is not true of all books, and even if it were this does not invalidate them as a source of influence. Therefore, books have been included in our analysis.

Table 10: Citation analysis by country

Country	Citations "gross"	%	Citations "net"	%	Garcia Perez et al.
USA	949	46.48	631.68	43.63	46.6
Spain	735	35.99	547.57	37.82	32.82
United Kingdom	186	9.11	121.5	8.39	6.38
France	59	2.89	50	3.46	6.59
Other(18categories)	113	5.53	97	6.70	7.61
Total	2,042	100	1447.75	100	100

The table shows that there has been a decline in the French influence, and an increase in the influence from the United Kingdom. The USA, however, remains the preponderant influence on Spanish academics. Garcia Perez et al. (1986) made a point of noting the paucity of Latin American influences, despite the fact that there is no lack of university researchers and teachers in the Latin American countries publishing in widely distributed journals, and also, that there would in most cases be no language barrier to prevent Spanish academics from reading these sources. We have identified precisely the same phenomenon in our collection of citations.

A striking finding which emerges from our data is the sheer increase in citations since the earlier study. The two studies are not directly comparable because this one includes books and also three additional journals. The following table shows the breakdown of citations between the different journals and between books, conference papers and journals:

Table 11: Citation analysis between books, conference papers and journals.

	Conference papers	Journal articles	Subtotal	Books	Total
REFC	61	539	600	250	850
RT	2	46	48	29	77
TC	42	325	367	256	623
Subtotal	105	910	1.015	535	1.550
Three other	17	215	232	260	492
journals					
Total	122	1.125	1.247	795	2.042

three journals common to this study and Garcia Perez et al. (1986). The total of 1,015 references arose over the 1994 calendar year; however, the citations identified by Garcia Perez et al. over a six-year period totalled only 972. There appears, then, to have been about a six-fold increase in the number of citations by authors over a period of only about 10 years. This study did not set out to identify this phenomenon or to seek explanations for it, so that explanations are speculative. For example, it is possible that Spanish authors have become more aware over that period of the need to comprehensively cite all sources, or that they have become aware of a richer range of sources.

Garcia Perez et al. (1986) identified the academic affiliation of the Spanish authors cited, and the same exercise has been undertaken in this study. This method is another accepted way of demonstrating the degree of influence of research centres. Table 12 shows the results of this analysis.

Table 12:Citation analysis showing academic affiliation

	per of citations of authors	from		ber of citations (adjusted	d for Co-	Ave	erage number of citations	per autho	or
u	niversities:			authors)					
No	University	Citations	No	University	Citations	No	University	Authors	Average
I	Valencia	82	1	Autonoma de Madrid	59.67	1	Alcala de Henares	3	9.19
2	Autonoma de Madrid	74	2	Valencia	56.08	2	Autonoma de Madrid	14	4.26
3	Alcala de Henares	39	3	Alcala de Henares	27.58	3	Valencia	14	4
4	Zaragoza	22	4	Zaragoza	22	4	Vigo	2	3.25
5	Complutense deMadrid	21	5	Complutense de Madrid	15.75	5	Pais Vasco	4	3.125
6=	Pais Vasco	20	6	País Vasco	12.5	6	León	2	3
6=	Sevilla	20	7	Oviedo	11	7=	Zaragoza	8	2.75
8	Oviedo	16	8	Sevilla	7.83	7=	Extremadura	2	2.75
9=	Carlos III	7	9	Vigo	6.5	9	Carlos III	2	2.42
9=	Vigo	7	10	León	6	10	Complutense de Madrid	8	1.97
11=	Extremadura	6	11	Extremadura	5.5	11	Oviedo	6	1.83
11=	Alicante	6	12	Carlos III	4.83	12	Sevilla	5	1.57
11 =	Leon	6	13	Alicante	4.33	13	Alicante	3	1.44
11=	Salamanca	6	14	Salamanca	3	14	Salamanca	4	0.75
	Sub~total	332		Sub-total	242.57				
	Other Spanish academics	59		Other Spanish academics	43.67		Other Spanish academics	38	1.15
	Spanish professionals	67		Spanish professionals	59.5		Spanish professionals	34	1.75
	Other Spanish (not identified)	277		Other Spanish (not identified)	201.84		Other Spanish (not identified)	213	0.95

	735		547.57			1362	1.51
--	-----	--	--------	--	--	------	------

The analysis was further developed by identifying those authors whose work has been cited several times. The García Perez et al. (1986) criteria of frequency of citation have been used for this purpose: numbers of authors cited more than 3 times, more than 5 times, more than 7 times and more than 10 times have been assembled form the data. In Table 13 the results of this analysis are shown and in Table 14 which follows a list of the names of those authors cited more than 7 times is shown.

Table 13: Frequency of author citation by affiliation

Authors cited

			mors cited	
	3 or more	5 or more	7 or more	10 or more
	times	times	times	times
Spanish (academic)				
Valencia	8	6	6	3
Autonoma de Madrid	8	6	4	2
Alcala de Henares	3	3	3	2
Zaragoza	4	1	-	-
País Vasco	2	2	2	1
Complutense de Madrid	2	2 3 2	1	-
Sevilla	3	3	1	-
Oviedo	2 3 2 2	2	-	-
Vigo	2	-	-	-
Carlos III	1	1	-	-
León	1	1	-	-
Extremadura	1	-	-	-
Alicante	I	-	-	-
Spanish (Professionals)				
Ministeno de Hacienda	6	2	1	-
Censores Auditores	2	-	-	-
Economistas	1	-	-	-
Non-Spanish				
USA	54	24	14	5
United Kingdom	20	1	-	-
France	4	-	-	-
Japan	1	-		-
TOTAL	126	54	32	13
(garcía Perez et al				
(1986) - totals)	(55)	(25)	(13)	(7)

Table 14 Audiois Cheu Hole Hall / Hilles

Spanish		Non-Spanish	
Name	Affiliation	Name	Origin
Alvarez López, J. Blanco	Pais Vasco	Altman, E.	USA
Ibarra, F.	Pais Vasco	Anthony, R.N.	USA
*Cañibano Calvo, L.	Autonoma de Madrid	Ball, R.	USA
Castello Taliani, E.	Alcala de Henares	*Beaver, W.H.	USA
*Cea García, J.L.	Autonoma de Madrid	Cooper, R.	USA
Garcia Benau, M.A	Valencia	Fama, E.	USA
Giner Inchausti, B.	Valencia	Foster, G.	USA
*Gonzalo Angulo, J.A	Alcala de Henares	Johnson, H.T.	USA
Hernandez Esteve, E.	Banco de España	Kaplan, R.	USA
Larriba Díaz-Zonta, A.	Alcala de Henares	Lev, B.	USA
Labatut Serer, G.	Valencia	Miller, M.H.	USA
Lizcano Alvarez, J.	Autonoma de Madrid	Page, E.S.	USA
Martín Marín, J.L.	Sevilla	Porter, M.E.	USA
*Montesinos Julve, V.	Valencia	Scholes, M.S.	USA
Ripoll Feliu, V.M.	Valencia		
Sanchez Fernandez de	Complutense de		
Valderrama, J.	Madrid		
*Serra Salvador, V.	Valencia		
*Tua Pereda, 3	Autonoma de Madrid		

NB: Names marked * appeared in the equivalent Garcia et al (1986) listing as having been cited more than 5 times.

Only six of the Spanish universities appear in this list and the predominance of authors affiliated to Valencia (6) and Autónoma de Madrid (4) is clear. The non-Spanish list is dominated by authors from the USA, whereas in the earlier study there was some representation from the United Kingdom, Australia and Canada.

Perceptions of journal quality

studies had assigned a value of 100 to the Journal of Accountancy, and The Accounting Review respectively. We assigned the base value to Revista Española de Financiación y Contabilidad (REFC), as a journal with which we could expect all Spanish accounting academics to be familiar. We asked respondents to assign values of between 0 *and* 200 to a list of other journals using REFC as a benchmark, or to mark the journal as one with which they are not sufficiently familiar to make a response. Respondents were asked to assess each journal under this system for three attributes:

- level of prestige as an outlet for publication;
- level of support it provides for teaching;
- level of support it provides for research.

Apart from REFC, 45 journals were included in the list: 11 Spanish, two French and the remainder English language, mostly published in the US. Respondents were allowed space to add up to three other journals not included on the list; most did not do so. The results are shown in Table 15 in descending order of number of respondents who were able to provide rankings. This table shows that, whilst most of our respondents were able to rank the Spanish journals, some of the journals were familiar to very few people. In order to concentrate the analysis upon those journals which are familiar to a significant number of our respondents, Table 16 shows in descending order by average ranking those journals which were familiar to more than 15 (approximately 20%) of our respondents. It is clear from the results that the greatest prestige is attached to English language journals. The Revista Española de Financiación y Contabilidad, the most prestigious Spanish academic accounting journal, does not appear until after number 14 on the list of journals in descending order of priority shown in Table 16, and the first 14 are either US or United Kingdom journals. Accountancy, the journal of the Institute of Chartered Accountants in England and Wales, a professional publication, scores more highly than any Spanish academic journal as an outlet for

Table 15: Values assigned to journals, by number of respondents

No	Journal	Nationality	No of	Outlet for	Support for	Support for	Average
			respondents	publication	teaching	research	
1	Técnica Contable	Spain	61	87	101	85	91
2	Partida Doble	Spain	60	86	95	85	89
3	Boletin AECA	Spain	57	72	75	72	74
4	Actualidad Financiera	Spain	53	73	82	71	75
5	Harvard Deusto, Finanzas y Contab.	Spain	51	77	84	72	78
6	Centro Estudios financieros	Spain	49	74	98	68	80
=7	European Accounting Review	United Kingdom	34	135	89	133	119
=7	Harvard Deusto Business Review	US	34	96	89	91	92
9	Accounting and Business Research	United Kingdom	32	146	95	153	131
=10	Harvard Business Review	US	31	148	128	135	137
=10	Journal of Accounting Research	US	31	164	96	157	139
12	Revue Française de Comptabilité	France	30	103	86	96	95
13	The Accounting Review	US	29	168	106	163	146
14	Journal of Accountancy	US	28	131	96	122	116
15	Accountancy	United Kingdom	25	106	83	94	94
16	Estrategia Financiera	Spain	22	76	88	73	79
17	Boletin de Estudios Económicos	Spain	21	75	73	74	74
=18	Abacus	Australia	20	116	79	99	98
=18	Accounting Horizons	US	20	162	108	146	139
18	Journal of Management Acc. Research	US	20	144	128	146	139
=18	Management Accounting	United Kingdom	20	151	113	141	135

No	Journal	Nationality	No of	Outlet for	Support for		Average
10	Desirts de Estadios Financians		respondents		teaching	research	70
=18	Revista de Estudios Financiera	Spain	20	81	80	74	78
=23	International Journal of Accounting	US	19	147	93	148	129
=23	Management Accounting	US	19	154	114	145	138
=25	Accounting, Organisations and Society	U.K	18	182	107	176	155
=25	Journal of Business Finance and Accounting	U.K	18	138	101	138	125
27	Journal of Accounting Auditing and Finance	US	17	139	84	123	115
28	British Accounting Review	U.K	15	141	80	134	118
=29	Critical Perspectives on Accounting	U.K	13	164	94	163	140
=29	CPA Journal	US	13	123	95	118	112
=29	Journal of Accounting and Economics	US	13	160	98	143	134
32	Accounting Auditing and Accountability	U.K	11	150	108	141	133
=33	Costes y Gestion	Spain	10	62	63	62	62
=33	Revue Française de Gestión	France	10	91	79	102	91
=35	Financial Analysts Journal	US	9	152	126	138	139
=35	Revista de Derecho Bancano y Bursatil	Spain	9	77	70	68	71
=35	The Accountant	US	9	93	75	98	89
=38	Certified Accountant	U.K	8	99	80	93	91
=38	Journal of Financial Economics	US	8	151	97	148	132
=40	Auditing: a Journal of Practice and Theory	US	6	121	98	111	110
=40	The Accountant's Magazine	U.K	6	106	93	105	101
=42	Accounting Historians Journal	US	5	130	85	140	118
=42	Journal of Law and Economics	US	5	140	130	140	137
44	Managerial Auditing Journal	U.K	4	140	100	120	120
45	Sloan Management Review	US	3	167	167	167	167

Table 16: Values assigned to journals ranked by .15 respondents in descending order

No	Journal	Nationality	No of	Outlet for	Support for	Support for	Average
			respondents	publication	teaching	research	
1	Accounting, Organisations and Society	U.K	18	182	107	176	155
2	The Accounting Review	US	29	168	106	163	146
=3	Journal of Management Accounting Research	US	20	144	128	146	139
=3	Journal of Accounting Research	US	31	164	96	157	139
5	Accounting Horizons	US	20	162	108	146	139
6	Management Accounting	US	19	154	114	145	138
7	Harvard Business Review	US	31	148	128	135	137
8	Management Accounting	U.K	20	151	113	141	135
9	Accounting and Business Research	U.K	32	146	95	153	131
10	International Journal of Accounting	US	19	147	93	148	129
11	Journal of Business Finance and Accounting	U.K	18	138	101	138	125
12	European Accounting Review	U.K	34	135	89	133	119
13	Journal of Accountancy	US	28	131	96	122	116
14	Journal of Accounting Auditing and Finance	US	17	139	84	123	115
	Revista Española de Financiaci6n y Contabilidad	Spain		100	100	100	100
15	Abacus	Australia	20	116	79	99	98
16	Revue Française de Comptabilité	France	30	103	86	96	95
17	Accountancy	U.K	25	106	83	94	94
18	Harvard Deusto Business Review	US	34	96	89	91	92

No	Journal	Nationality	No of respondents	Outlet for publicatio n	Support for teaching	Support for research	Average
19	Técnica Contable	Spain	61	87	101	85	91
20	Partida Doble	Spain	60	86	95	85	89
21	Centro Estudios Financieros	S am	49	74	98	68	80
22	Estrategia Financiera	Spain	22	76	88	73	79
=23	Revista de Estudios Financiera	Spain	20	81	80	74	78
=23	Harvard Deusto, Finanzas y Contabilidad	Spain	51	77	84	72	78
25	Actualidad Financiera	Spain	53	73	82	71	75
=26	Boletín AECA	Spain	57	72	75	72	74
=26	Boletín de Estudios Económicos	Spain	21	75	73	74	74

Criteria for success and promotion in Spanish academic accounting departments

Respondents to the questionnaire were asked whether or not they agreed that publication is more important than teaching via the following question: "In the United States decisions made in universities about the promotion of academic staff are usually based upon the publications of their staff rather than their teaching abilities. Do you think this is the case in your university?". The responses to the question are as follows:

Table 17: ResDonses to question on promotion criteria

Grade of staff	Yes	No	Don't know	Total
CAT	9	4	1	14
PROF	9	2	1	12
PTEU	16	3	0	19
ASOC	10	1	2	13
AYUD	10	0	0	10
VIS	1	0	1	2
TOTAL	55	10	5	70
	(79%)	(14%)	(7%)	(100%)

Also, less direct corroborative evidence was sought via the review of authorship of articles. Ettredge and Wong-on-Wong (1991) analysed publication trends in The Accounting Review and Journal of Accounting Research and identified a distinct trend towards co-authorship of articles over the period of nearly 20 years reviewed. They identified this as a "rational strategy" for researchers to adopt during a time when increased importance is attached to publication in decisions about promotion and tenure. Therefore, it is possible that any increased trend towards co-authorship noted in our review of authorship may indicate increased pressure upon Spanish accounting academics to publish. A comparison was made between the data in our study indicating the extent of co-authorship with the data from the earlier study. Garcia Perez et al.(1986) found 196.83 articles by academic authors with a total of 216 authors, indicating a modest level of co-

authorship: total articles as a percentage of total authors = 91.12%. In our study we found 654.07 articles by academic authors with a total of 893 authors: total articles as a percentage of total authors = 73.24%. The change in the level of co-authorship does, then, appear to be significant, indicating perhaps that there is indeed some pressure on individuals to increase the number of their publications.

Conclusions

We have described various characteristics of the current Spanish academic accounting community, identifying the level of publication output of different grades of university staff. Most publication, naturally, is in Spanish, but several of the respondents to our survey have published in English.

The analysis of authorship of journal articles over a five year period has established a list of universities whose staff publish most prolifically in these outlets. The order of ranking is similar to, but not the same as, the ranking of prestigious universities provided by the assessment of the academics who responded to the questionnaire. Reputation may, of course, rely at least partially upon factors other than publication records. The analysis of authorship also showed that, adjusting for differences between the journals examined in the two studies, the number of articles published in the Spanish accounting journals has increased very significantly.

The citation analysis revealed that, whilst there is a significant influence upon Spanish academics from outside Spain, that influence is dominated by the United States, a position which has changed little since the García Perez et al (1986) study. This is perhaps our most surprising finding. During a period when Spain has revolutionised its accounting procedures following upon entry into the European Union, one might expect a relative increase in the accounting literature influences from other parts of the Union. However, all that has occurred has been an increase in the United Kingdom influence, balanced by a decrease in the French influence. Our citation analysis also showed that, adjusting for differences in the data between the two studies, the number of citations has increased approximately six-fold.

The part of the study which deals with perceptions of journal quality shows that Spanish accounting academics do not tend to rate Spanish journals very highly. The top six in the listings are split between the United Kingdom and the US, and the highest rated Spanish journal on the list is 32nd out of 44. Brinn et al (1996) identified a similar phenomenon in their study of academics in the United Kingdom; they found that their respondents all rate US journals the highest, despite the fact that few publish in them.

Finally, we identified strong support amongst our respondents for the proposition that, as in the US, a good publications record is more important criterion than ability to teach in promotions decisions in Spanish universities. We also identified a significant increase in co-authored publications which lends support to the proposition that there has been an increase in pressure upon Spanish accounting academics to publish.

References

Andrews, W.T. & McKenzie P.B. (1978).. 'Leading accounting departments revisited' *The Accounting Review*, Vol. LIII, No.1, January

Bazley, J.D. & Nikolai, L.A. (1975). 'A comparison of published accounting research and qualities of accounting faculty and doctoral programs' *The Accounting Review*, July.

Beattie, V.A. & Ryan, R.J. (1989). 'Performance indices and related measures of journal reputation in accounting' *British Accounting Review*, 21, pp. 267-278.

Benjamin, J.J. & Brenner, V.C. (1974). 'Perceptions of Journal Quality' *The Accounting Review*, April.

Brinn, T., Jones, M.J. & Pendlebury, M. (1996) 'UK Accountants' perceptions of research journal quality' *Accounting and Business Research*, Vol 26., No.3, pp 265-278.

Brown, L.D. & Gardner, J.C. (1985). 'Using citation analysis to assess the impact of journals and articles on contemporary accounting research (CAR)' *Journal of Accounting Research*, Vol.23, No.1, Spring.

Cargile, B.R. & Bublitz, B. (1986). 'Factors contributing to published research by accounting faculties' *The Accounting Review*, Vol. LXI, No.1, January.

Chan, J.L. (1978). 'Organizational consensus regarding the relative importance of research output indicators' *The Accounting Review*, Vol.LIIT, No.2, April.

Dyckman, T.R. & Zeff, S.A. (1984). 'Two decades of the Journal of Accounting Research' *Journal of Accounting Research*, Vol.22, No.1, Spring.

Dyl, E.A. & Lilly, M.S. (1985). 'A note on institutional contributions to the accounting literature' *Accounting, Organizations and* Society, Vol.10, No.2, pp.171-175.

Ettredge M. & Wong-On-Wing, B. (1991). 'Publication Opportunities in Accounting Research Journals; 1970-1988' *Issues in Accounting Education*, Vol.6, No.2, Fall, pp. 239-247.

Fogarty, TJ. & Saftner, D.V. (1993). 'Down the up staircase: US academic accounting prestige and the placement of doctoral students' *Accounting Fducation*, 2(2), pp. 93-110.

Garcia Benau, M.A., Gandia Cabedo, J.L. & Vico Martinez, A. (1996) 'The relationship between accounting theory and practice: an analysis of the Spanish situation' Paper presented to the 19th Annual Congress of the European Accounting Association, Bergen, Norway.

Garcia Perez, M.C., Gonzalo Angulo, J.A., Jimenez Herreros, J.A. & Taravillo Cuenca, C. (1986?). 'Analisis de autores y citas en revistas contables españolas', *Técnica Contable*, pp.353-366.

Gee, K.P. & Gray, R.H. (1989). 'Consistency and stability of UK academic publication output criteria in accounting' *British Accounting Review*, 21, pp.43-54.

Gray, R. & Helliar, C. (1994). 'UK accounting academics and publication: an exploration of observable variables associated with publication output' *British Accounting Review*, 26, pp.235-254.

Groves, R.E. & Perks, R.W. (1984). 'The teaching and researching of accounting in UK universities' *British Accounting Review*, 16(2), pp.10-20.

Heck, J.L. & Bremser, W.G. (1986). Six decades of The Accounting Review: a summary of author and institutional contributors' The Accounting Review, Vol. LXI, No.4., October, pp.735-744.

Heck, J.L., Jensen, R.E. & Cooley, P.L. (1) (1990). 'An analysis of contributors to accounting journals. Part I: The aggregate performances' *The International Journal of Accounting*, 25, pp.202-217.

Heck, J.L., Jensen, R.E. & Cooley, P.L. (2) (1990). An analysis of contributors to accounting journals. Part II: The individual academic accounting journals' *The International Journal of Accounting*, 26, pp.1 - 17

Hendrickson, H.S. (1980). "Journals for accountants" *The Accounting Review*, Vol. LV, No.4, October, pp.707-718.

Houghton, K.A. & Bell, R. (1984) 'Evaluations of accounting and finance journals: the Australian view' *The International Journal of Accounting Education and Research*, Fall.

Howard, T.P. & Nikolai, L.A. (1983). 'Attitude measurement and perceptions of accounting faculty publication outlets' *The Accounting Review*, Vol. LVIII, No.4, October, *pp.765-776*.

McRae, T.W. (1974) 'A citational analysis of the accounting information network' *Journal of Accounting Research*, 12, pp. 80-92.

Nobes, C.W. (1985). 'International variations in perceptions of accounting journals' *The Accounting Review*, Vol. LX, No.4, October, pp. 70^{2} -705

Reeve, R.C. & Hutchinson, P.J. (1988). 'The contribution of non-US institutions to academic accounting journals' *Abacus*, vol.24, No.1, pp.90-94.

Wade, N. (1 975). 'Citation analysis: a new tool for science administrators' *Science*, vol.188, May, pp. 42⁹-432.

Windal, F.W. (1981). 'Publishing for a varied public: an empirical study' *The Accounting Review*, Vol. LXl, No.3, July, pp. 653-658.