

Beattie, V. and Goodacre, A. (2004) Publishing patterns within the UK accounting and finance academic community. *The British Accounting Review* 36(1):7-44.

http://eprints.gla.ac.uk/archive/00000769/

# Publishing Patterns within the UK Accounting and Finance Academic Community

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#### Acknowledgements

The authors would like to thank the Faculty of Management, University of Stirling, for awarding us a research grant to fund this project. We are grateful to Joanne Lello in particular for her assistance with data collection. Special thanks go to Elizabeth Davie for her advice and assistance in designing the Access database.

# Publishing Patterns within the UK Accounting and Finance Academic Community

#### **ABSTRACT**

This study reports on publishing patterns in the UK and Irish accounting and finance academic community for the two-year period 1998 to 1999 using the data contained in the BAR Research Register. It is found that the community has been growing modestly since 1991, with a doubling in the number of PhD-qualified staff (to 30%) and a reduction in the number with a professional qualification (from 81% to 58%). Nearly half of all outputs appear in other than academic journals. The mean number of publications is 1.76 per capita, with significantly more staff active in publishing than in 1991 (44% compared to 35%). However, only 17% publish in a subset of 60 'top' journals. Just over half of all articles are published in the core discipline journals, the rest appearing mainly in management, economics, sociology, education and IT journals. This may indicate a growing maturity in the disciplines, whereby applied research findings are flowing back into related foundation and business disciplines. Nearly two-thirds of academic articles are co-authored, with 25% of contributions coming from outside the community, indicating an openness to interdisciplinary collaboration, collaboration with overseas academics and collaboration with individuals in practice. The findings of this study will be of assistance to those making career decisions (either their own career or decisions involving other people's careers). They also raise awareness of the way in which the accounting and finance disciplines are developing.

<u>Keywords</u>: co-authorship; journals; non-serial publications; publication media; scholarly knowledge development

# Publishing Patterns within the UK Accounting and Finance Academic Community

#### INTRODUCTION

Academics in all disciplines are interested in the publication records of their peers, whether at the country, department or individual level of analysis. There are two main reasons for this, apart from natural curiosity. First, as academics we have to make decisions that are based, in part, on an assessment of research output. These may be decisions about our own career, such as which jobs to apply for and when to seek promotion (Read, Rama & Raghunandan, 1998; Tompkins, Hermanson & Hermanson, 1996). Alternatively, we may be in the position of making decisions about the career of others, in our role on appointment panels and advancement committees and as external assessors, or of judging whether probationary hurdles have been passed (Hasselback & Reinstein, 1995; Zivney, Bertin & Gavin, 1995; Zivney & Bertin, 1992). Second, the analysis of publication patterns can contribute to our understanding of the cognitive and social aspects of scholarly knowledge development. 'Disciplinary self-awareness' of this form is viewed as a sign of a discipline's maturity (Borgman, 1990).

In the disciplines of accounting and finance, there are a growing number of studies of publication records. Most studies relate to the US, but there are also studies covering the UK, Australia, New Zealand and, most recently, continental Europe (Lukka & Kasanen, 1996). Most studies focus exclusively on academic journal articles, thus excluding professional journal articles and non-serial publications such as books and research reports. Moreover, most studies focus on publications in a restricted set of journals within the discipline. Given the growing evidence of the existence of research élites who control the 'top' journals (Lee, 1995, 1997; Williams & Rodgers, 1995), it is of critical importance not to restrict studies to a small 'self-referential closed set' of élite journals (Lee & Williams, 1999, p.870). Raw counts are often transformed into 'quality'-adjusted measures based on journal rankings. Many studies report only on the more prolific authors and the most productive departments, omitting details about the entire distribution of performance, and thus presenting a 'limited and fragmented' view of publishing activity (Zivney et al., 1995, p.1). Of course, given that the distribution is very skewed, it is of interest to report on the level

of concentration of publication activity across the distribution (Hasselback & Reinstein, 1995).

The US literature treats the quantitative 'quality-adjusted' rankings so produced as essentially objective and entirely unproblematic, consistent with the positivist, scientist tradition of research in the US. In the UK and elsewhere, however, there has always been an awareness that such data may be used for political ends and the need for a sensitive treatment of the data if unintended consequences are to be avoided (e.g. Hutchinson, 1989). In the last decade, several writers have offered critical discussions that point to the 'commodification' of academic labour and the apparent desire of government and institutions to 'control' and 'manage' scholarly activity (e.g. Puxty, Sikka & Willmott, 1994; Willmott, 1995; Parker, Guthrie & Gray, 1998; Gray, Guthrie & Parker, 2002). These authors express concern that information about publication records is a double-edged sword – while the information is valuable to academics, it can also be used against us.

The purpose of the present paper is to contribute to our knowledge of publishing patterns by UK and Irish accounting and finance academics at the community level. The results reported are based on the data contained in the *British Accounting Review Research Register 2000*, (hereafter the *Register*) the most recent edition of this biennial publication available at the time this study was conducted (Helliar & Gray, 2001). This publication covers both the accounting and finance disciplines because they are closely related and are usually located within the same organisational unit within institutions. This publication includes *all* the self-reported publications of 1,508 staff in the UK and Ireland across 110 institutions.

The paper reports on (i) community demographics; (ii) the distribution of outputs across all publication media; (iii) the distribution of professional journal articles across specific outlets; (iv) the distribution of academic journal articles across specific outlets; (v) the distribution of academic journal articles across disciplines; and (vi) the incidence of co-authorship. In reporting on the distribution of outputs across all publication media, separate analysis will be presented for key subgroups (viz. institution type, academic rank and faculty qualifications).<sup>1</sup>

The remainder of this paper is structured as follows. Section two briefly reviews five diverse strands of relevant literature, relating to the value of alternative publication forms, the heterogeneous value ascribed to academic journal articles, prior empirical studies of community-level publication records, interdisciplinary influences and coauthorship. The third section sets out our methods, in particular it describes how the database was constructed from the *Register* as initial data source. Results are presented and discussed in section four. A final section summarises and concludes.

#### PRIOR LITERATURE

In this section we review five diverse strands of relevant literature. First, to provide a context in which to interpret the empirical findings of the study, this includes a discussion of the role, intrinsic value and extrinsic value of different forms of publication. Second, the extrinsic value of academic journal articles, while generally high relative to other publication forms, is generally viewed as being highly variable, depending on the 'quality' of the journal. The methods and findings of such studies are reviewed. Third, we review the prior literature regarding aggregate and average publication output, both empirical studies and commentaries. Fourth, we consider the limited findings regarding interdisciplinary influences. Finally, we review the literature on co-authorship.

Before embarking on this review of the literature, however, it is worth setting publication activity in the general context of scholarly activity, which also includes teaching and service (both internal and external to the institution) (Gray *et al.*, 2002). It follows that a focus on publication output provides a partial view of scholarly contribution. There is evidence, however, that publication is, and is seen to be, the major (and growing) element in the assessment of academics. For example, the qualitative evidence presented by Parker *et al.* (1998, pp.381-383) from interviews with 40 senior academics in the UK and Australia supports this view.

#### Relative importance of publication media

There is general recognition of the important role played by publications other than academic journal articles in the dissemination of knowledge to fellow academics, students, the profession and the business world. However the extrinsic value placed

on such outputs does not appear to reflect this intrinsic value. For example, Parker *et al.* (1998) report a major shift in the weightings used by the Australian Federal Government's Department of Employment, Education and Training (DEET) in undertaking quality reviews. While the 1996 weightings covered a comprehensive range of publication media, the list was pruned in 1997 to include only four media: research books, articles in scholarly refereed journals, chapters in research books and refereed conference proceedings.

Parker *et al.* asked senior academics about the 'significance and desirability' of seven media. Overall, these were ranked (in descending order) as follows: refereed research journal articles, research monographs, research books, textbooks, chapters in books, refereed conference papers, and edited books and professional journal articles (1998, pp.379-380). They also find evidence of a 'quantity plus quality' evaluation rule being applied by many gatekeepers.<sup>2</sup>

It is noticeable that in these weightings (both official government weightings and the informal weightings of senior academics), textbooks (which act as a bridge from research to teaching) and professional journal articles (which act as a bridge from the academic community to practice) no longer feature. In the UK, there is no indication that professional publications were valued from an RAE perspective. The gap (or schism) between research and practice has been a concern for several decades (Baxter, 1988). Zeff & Hofstedt (1974) argue that the gap can be attributed to a failure by academics to communicate. In this case, there exists the possibility of closing the gap. Bricker & Previts (1990) claim that the shift by the academic community toward a social science model of research and the growing differences in the educational credentials of the two communities are to blame. Yet others argue that the gap is inevitable, as practice will always resist basic research that carries with it the potential for upsetting the status quo (Lee, 1989).

#### Academic journal ranking studies

Given the pre-eminent position of academic journal articles, it is not surprising that academics have devoted a great deal of effort towards the creation of journal rankings. Three main approaches have emerged: citation studies, perception studies and, most recently, 'market-test' studies. In all cases, the number of journals ranked varies

enormously (and has increased over time as the number of journals has increased). Each of the approaches has limitations.

Many citation studies make use of the *Social Sciences Citation Index (SSCI)*. The basic idea is that a citation is an objective indicator of influence. The number of accounting and finance journals covered by this index is, however, limited, with many major outlets (for UK academics) not included. The most recent study in the finance discipline is Chan, Fok & Pan (2000) who rank 59 journals using the *SSCI*.

Perception (or peer-review or opinion survey) studies appear to have been the dominant approach used in the accounting discipline. Typically, respondents are asked to assign points to each journal, based on its 'value', 'familiarity' and/or 'quality'. The only recent UK study evaluates 44 accounting and finance journals (Brinn, Jones & Pendlebury, 1996).

The market-test is based on an analysis of library holdings. Bertin, Prather & Zivney (1994) rank 62 journals using the holdings of 264 schools. Zeff (1996) reports on subscriptions to 67 accounting journals by twelve major libraries (located in the US, the UK and Australia), identifying three modal groups across the grading of journals. These gradings are interpreted as quality rankings by Wilkinson & Durden (1998) and Durden, Wilkinson & Wilkinson (1999) and used by them to construct weighted measures of productivity of accounting faculty in New Zealand and Australia, respectively. Locke & Lowe (2002) replicate Zeff's analysis for all 46 universities in Australia and New Zealand, with the intention of constructing a set of journal rankings of relevance to authors from that region. They find a 'good deal of disparity' in the two sets of journal gradings.

While many journal ranking studies appear content to treat the measures obtained (using any approach) unproblematically as interval level measures, some writers have chosen instead to classify the measures into broad ordinal categories. Gray & Helliar (1994) establish two journal groups – premier and secondary. Premier journals (of which there are 40) are those that are always refereed. Secondary journals (of which there are 39) are those that are predominantly academic but not always refereed or where the refereeing policy is unclear. Brown & Huefner (1994), in a perceptions

study of 44 accounting journals using US respondents, refer to 'three thresholds of quality'. Zeff (1996) identifies three modal groupings from his market test study. Hickman & Shrader (2000) create three quality groupings out of the 71 finance journals listed in Heck's *Finance Literature Index*, making use of Alexander & Mabry's (1994) citation-based quality ratings. Hasselback, Reinstein & Schwan (2000) create four groups in their study of productivity benchmarks for accounting faculty by using cluster analysis: the best 4, the best 12, the best 22 and the best 40. This ordinal grouping approach has the advantage of not suggesting spurious accuracy in the ranking measures although inevitably a boundary problem exists for a few journals at the margins.

# Empirical studies of community-level publication records

In the UK, Gray & Helliar (1994) report on the publication record of the entire population of 1371 accounting and finance academics for the two-year period 1990 to 1991. In addition to reporting demographic data, they report statistics for the percentage of faculty having at least one publication in a comprehensive range of publication media (reported in the results section of the present paper to enable comparison to be made across time). Overall, 62% of 'old' university faculty have at least one publication of *any* form, compared to 14% of 'new' university faculty. They also report the average publication per head of those who do publish in the different media, with old university faculty publishing more frequently in certain media (premier journals; chapters; conference proceedings and other publications).

Gee & Gray (1989) analyse publication outputs by departments (before the abolition of the binary divide) using the 1986 and 1988 *Registers* and eight different criteria. They argue that to make valid trans-binary comparisons, there should be recognition of a 'dilution' effect, due to polytechnic staff not involved with degree-level work and therefore not necessarily involved in research and publication. For this reason, they propose using 'output per capita of publishing staff' as a more equitable measure. In a response to this study, Hutchinson (1989) notes the difficulties in making valid comparisons across the two sectors. He observes that the notion of research in the polytechnic sector is broad, including consultancy, technical matters and pedagogic issues, activities which may not lead to publication. He also notes the lower funding levels per FTE student, which may result in higher teaching loads and less support

staff and other facilities, thereby reducing the time available to produce published outputs. Despite the abolition of the binary divide, comparisons between the old and new university sectors are influenced by the carry-over effect of lower levels of funding and continuing differences in the mix of courses taught.

Studies in other countries tend to focus exclusively on publications in a set of core journals, usually only accounting and finance journals. In the US, Zivney *et al.* (1995) report on the publication record of nearly 5,000 doctorally qualified accounting faculty (virtually the entire population) over a 28-year period (1963-1990). By reporting data on the entire distribution of faculty publications they claim to offer a 'comprehensive' examination, however they focus on a restricted set of 66 established journals. The journals are those included in Heck's *Finance-Accounting Literature Database*. These are divided into two groups – academic accounting journals and other journals (finance journals and practitioner-oriented journals). It is found that the average number of publications over this period is 4.4 articles, which represents 0.16 articles per year. 50% of faculty publish at least one article over their career, 40% publish at least one academic accounting article and 23% publish at least one article in the top three journals (*TAR*, *JAR* and *JAE*).<sup>4</sup>

Hasselback, Reinstein & Schwan (2000) report on the publication record of nearly 4,000 accounting faculty with *accounting* doctorates earned between 1971 and 1993 (a 23-year period). They focus on a restricted set of 40 accounting journals. They find that 39% of the group had not published any articles in the journal set with 9% publishing more than 9 articles. The latter figure falls to 3% if an adjustment is made for joint authorship.

In New Zealand, Wilkinson & Durden (1998) report on the publication record of 101 faculty at seven universities over a six-year period (1992-1997). Publication data is obtained from two literature indexes and directly from Australian and New Zealand journals. The latter source was used to construct a journal set appropriate to New Zealand academics. While their analysis is restricted to journal articles, they do include at least some non-accounting journals (specifically those indexed in *ABI Inform*). Among the measures reported are the total unweighted number of journal articles per annum per capita (0.37, derived from Table 7, p.87) and the total

unweighted number of professional journal articles per annum per capita (0.18, derived from Table 9, p.88).

Durden, Wilkinson & Wilkinson (1999) essentially replicate Wilkinson & Durden (1998) for the Australian academic community. They identify 57 distinct campuses across 36 universities. In this study it is not, however, possible to deduce the total number of faculty for all institutions and thereby calculate overall average publication measures.

### Interdisciplinary influence

It is well known that the level of interdisciplinary borrowing (in relation both to theories and analytical methods) is relatively high in the disciplines of accounting and finance. Patterns of this nature are most commonly studied using citation analysis. Cox, Hamelman & Wilcox (1976) undertake an early citational analysis of the business literature (defined to include 38 journals in the disciplines of accounting, economics, general business, finance, management and marketing but reduced to 19 journals in the final analysis due to data limitations). They identify two main clusters – economics and functional applications of existing theory/business. It is argued that the relational characteristics of journals can reveal important clues about the development of disciplines. It may be noted that when all five initial accounting journals are eliminated, the *Journal of Finance* is located closest to the economics cluster. Longitudinal analysis would reveal emergent or dissolved interdisciplinary linkages.

McRae (1974) used citation analysis to examine the flow of messages between the accounting knowledge system and other knowledge systems and within the accounting knowledge system itself. The accounting knowledge system is viewed as nesting within the social science knowledge system. It is composed of (at least) three sub-systems: academic accounting, and applied accounting, the latter being composed of 'business' and 'professional'. Citations in 17 accounting journals (academic and professional) for the two years 1968-1969 are collected and classified into systems, thus the focus is on the degree of influence *from* other systems *to* academic accounting. For the academic journals only, 67% of citations were within the accounting knowledge system, 27% were to other social science knowledge systems

and 6% were to other knowledge systems. The distribution of citations to non-accounting journals was as follows: 56% to business (including finance and tax); 18% to economics; 7% to mathematics and statistics; 5% to law; 4% each to psychology and engineering; 3% to history; 1% to sociology/politics and 2% other. The flow in the other direction was found to be negligible – only 2 out of over 5,000 citations in four mainstream journals in economics, psychology, sociology and politics and three interdisciplinary journals were to accounting journals.

McRae, Letza & Sim (1993) repeat this analysis for the two years 1987 and 1988, i.e. almost 20 years later. A somewhat different journal set is used, given the emergence of new journals. In this latter study, *AOS*, *ABR*, *BAR* and *JBFA* are included.<sup>5</sup> There are 11 academic journals and 14 professional journals. They conclude that the academic and professional networks are drawing further apart and there has been a huge increase in the citation of journals outside the accounting network.

While McRae (1974) specifically *excludes* book citations, the focus of Beattie & Ryan's (1991) study is to examine the influence of other disciplines by categorising into foundation disciplines the citations to non-serial publications (specifically books) appearing in thirteen leading journals. Book citations are found to account for 18% of all citations, made up as follows: accounting – 21%; economics and finance – 26%; sociology/political science – 20%; statistics – 12%; management – 11%; psychology – 5%; others – 5%.

It appears, therefore, to be generally assumed that disciplinary links (certainly for accounting) operate only in one direction (there are minimal citations *to* accounting from journals outside the core disciplines. Thus, there seems to be no real knowledge feedback loop from the application discipline back to the source discipline. The present paper examines the relative incidence of publishing outside the core disciplines (rather than the relative incidence of citation *to* accounting and finance journals from journals outside the discipline. Of course, the fact of publishing outside the core discipline is a necessary, but not sufficient condition, for accounting and finance to influence these other disciplines. However the existence of significant 'outside' publishing activity could be a sign of the maturing of very 'young' disciplines (This assumes that the individuals in the *Register* all view accounting as

their 'home' discipline). The studies applying concepts and methods from these outside disciplines have become of sufficient quality to merit recognition in the journals of the foundation discipline.

#### Co-authorship

Mullins (1973) identifies four types of social relationship that can exist between scholars: co-authorship; trusted assessorship; colleagueship; and apprenticeship. Co-authorship involves an extremely close association where two or more scholars engage in collaborative research. Heck, Jensen & Cooley (1990) present evidence of a marked increase in co-authorships in 24 accounting journals<sup>6</sup> for the decade 1979-1988. They also report that the proportion of articles co-authored has risen from 3% in 1952, to 10% in 1962, 26% in 1972, 40% in 1982 and 50% in 1988. They identify three possible reasons for this: increases in professor/doctoral student joint authorship; large-team research efforts; and 'publish or perish' pressures, whereby two joint authorships are preferred to one solo effort. Hasselback *et al.* (2000) examine a set of 40 accounting journals and report that the average number of authors per article has grown from 1.86 in 1971 to 2.30 in 1993, a rate of 0.017 authors p.a. (p.95).

It is now relatively common for studies of publication output to make an adjustment for joint authorship based on the principle of indifference (Beattie & Ryan, 1989), allowing fractional credit based upon the number of authors. Whilst some form of adjustment seems appropriate, given the evidence that some institutions don't give full credit for co-authored publications (Hasselback *et al.*, 2000, p.84), survey evidence shows that the credit given is more than proportionate (Schinski, Kugler & Wick, 1998). Most studies tend to adopt one or other option, however Hasselback & Reinstein (1995) and Hasselback *et al.* (2000) report both bases. Neither of these studies formally investigates whether the co-authorship adjustment makes a significant impact on rankings. Interestingly, Heck *et al.* (1990) report that the Pearson correlation coefficient between adjusted and unadjusted number of publications for all contributors to the 7,827 articles in their dataset was 0.861.

In summary, the prior literature indicates that certain tensions exist with regard to the value placed on various types of publication. In particular, increased weighting is being (or is being seen to be) given to academic journal articles in some countries.

Given the financial consequences of these weightings at both the micro (personal) and macro (institutional) levels, there is a danger of instrumental behaviour. This emphasis on academic journal articles has resulted in great interest in assessing the 'quality' of different journals, using a range of methods. While there is a good level of consensus across methods and countries, the journal set evaluated and the rankings must be relevant to the geographic location of the community of interest. There is a growing tendency to use such rankings conservatively by forming broad quality groupings.

The main prior study of publication patterns by the UK academic community was undertaken by Gray & Helliar (1994). In addition to updating aspects of their study, the present study addresses two further issues argued by the prior literature to be of considerable significance in understanding the cognitive and social aspects of scholarly knowledge development. These are the extent and nature of interdisciplinary information flows and the extent of co-authorship.

#### **METHODS**

#### The data-source

The Register collects, via a survey of all institutions, details of the publications during 1998 and 1999 of accounting and finance faculty in post at 31st December 1999. Knowledge that the register is widely used by academics provides strong incentives on both individuals and institutions to ensure completeness. The definition of 'publication' used excludes working papers, unpublished conference papers, in-house publications, private reports, and forthcoming publications. The Register's convention is to list only once those publications co-authored by individuals at the same institution. However, where an item is co-authored by accounting and finance faculty at different institutions, the item will be cited two or more times. This somewhat unbalanced treatment means that to ensure that the publication record of the community as a whole is not overstated, items involving inter-institutional coauthorship need to be identified and eliminated. By contrast, where we report measures requiring the attribution of credit to institutions or individuals (such as measures by institution type of on a per capita basis) we give full credit to each author.

#### The database

We designed the database so that it would not only support a rigorous analysis of publications at the community, institutional and individual levels, but would permit an analysis of certain social aspects of publishing activity (co-authorship behaviour, promotion requirements and gender issues). (These latter issues will be reported in detail in subsequent papers.)

Consequently, we set up a relational database, using Microsoft Access. The two principal data tables are the staff table and the publications table. The staff table included 7 fields relating to the 2000 edition of the *Register*. Aspects of background experience and training are captured by recording whether individuals have a professional qualification and whether they have a Ph.D. The staff table has two supporting tables: institution and position. We now discuss each briefly.

In our paper, details are presented for 108 institutions, rather than the 110 in the *Register*. As in the *Register*, the database maintains separate entries for Edinburgh University's 'Accounting and Business Method' and 'Business Studies' departments. However we chose to combine Nottingham Trent University's departments of 'Accounting' and 'Finance'. Both choices were made to maintain consistency with prior registers. Bath University is omitted as no details of publications are provided. The number of individuals is 1,492, 16 less than the 1,508 stated in the *Register*. This difference is primarily due to individuals included in the names index at the back of the *Register* for whom there is no individual entry in the body of the *Register*.

We recorded in the database 27 different position titles (i.e. academic ranks). These included common UK titles, as well as US titles, research-only titles and teaching-only titles. In most of the results that follow, these are grouped into a smaller number of categories.<sup>9</sup>

The other principal data table, the publications table, is linked via the author identifier to the staff table. The publications table captures authorship details as well as recording the type of publication (pub-type). This latter field has a supporting table. We draw a fundamental distinction between serial and non-serial publications. The

title of all serial publications was recorded. We included the 64 publications listed in the Appendix to the *Register*, which relate to individuals in transit during the period. In subsequent analysis, serial publications were further divided into academic and professional (a catch-all term for non-academic serial publications that includes newsletters, magazines and newspaper articles). <sup>10</sup>

#### Classification of journals by discipline

In developing a set of decision rules to classify academic journals into disciplines we adapted the foundation disciplines used by Brown, Gardner & Vasarhelyi (1987) and Beattie & Ryan (1991) and the criteria for identifying accounting journals used by Zeff (1996). The general thrust of the decision rules was to broadly circumscribe the accounting and finance discipline. The aim was to include all journals that accounting/finance faculty might reasonably be expected to publish in.

Consequently, in dealing with journals at the interface of two disciplines, different rules were applied depending on whether the interface involved either accounting or finance. If it did, then the journal was treated as either accounting or finance. If it didn't, then the classification was made on the basis of fundamental discipline rather than area of application. Interface journals that lie wholly outside accounting and finance and with no apparent application perspective (often signalled by the word 'and') were allocated equally to their respective disciplines. A full explanation of the decision rules adopted together with examples is given in Appendix 1.

Once the criteria had been agreed, both researchers categorised all of the journals independently. Differences in classification were identified (8.6% - see Appendix 1 for details of their nature). There were discussed and, where necessary, resolved by reference to the categorisation in Ulrichs (2001).

#### **RESULTS**

#### Community demographics

By the end of 1999, the size of the community had grown to 1,492 individuals (up from 1,371<sup>11</sup> at the end of 1991). This represents a growth of 9% in 8 years. These individuals are employed across 108 institutions, of which 59 are 'old' universities

and 49 are 'new'. The mean size of departments in the new universities is significantly larger than the old universities, with a mean staff complement of 16.8 compared to 11.3, respectively. The corresponding figures for 1986-87 based on 79 institutions were 15.3 and 8.6 (Gee & Gray, 1989, p.49). This suggests that the size gap is shrinking as the size of old universities increases.

A detailed breakdown of the population by type of institution, academic rank, and qualifications (including comparisons with Gray & Helliar (1994) where possible) is given in Table 1. Since 1991, there has been a general increase in the seniority of faculty at the old universities, with the distribution at the new universities remaining very stable. Across the combined set of institutions, the proportion of faculty with PhDs has doubled (from 16% to 30%), while the proportion with a professional qualification has declined significantly (from 81% to 58%). It is noticeable that the proportion of faculty with a PhD increases with rank while possession of a professional qualification seems to be unassociated with rank.

#### [Table 1 about here]

#### Distribution of outputs across all publication media

To establish the total output of the UK accounting and finance community for the two-year period 1998/99 across all forms of publication it is critical to exclude multiple entries, as discussed above. This gives a figure of 2,178 outputs. The distribution of these outputs across publication media is shown in Table 2.

#### [Table 2 about here]

It is interesting (and arguably comforting) to note that, despite the pre-eminent position that academic journals are widely believed to hold, nearly half of all outputs are in other media, principally professional journals and books. Research reports (at 3.5% of total) fall a long way behind.

Table 3 presents per capita data publication measures for different sub-groups within the community. The primary distinction made is between faculty at old and new universities. These two sub-groups are then further partitioned by academic rank and

by faculty qualification. Full credit is given for co-authored publications, giving a total of 2,629 attributed publications.<sup>13</sup> The original set of publication media is reduced to three categories in this table: academic journal articles, professional journal articles and non-serial items (a category formed by combining all non-serial media).

Academic journal articles are split out into three categories: *Top30 A&F* (being the top 30 ranked accounting and finance journals in Brinn *et al.* (1996)), *Top30 Oth* (being the top journals from other relevant disciplines, based on an evaluation of the many rankings reported in Harzing (2001)); and *Non-top60* (being all other academic journal articles). The second of these categories was formed because of the extent of non-core discipline journal publishing by the community. Combining the first two of these categories forms a derivative category of *Top60*. A full list of the journals included is given in Appendix 2. We chose to use broad two-tier groups of journals because of the difficulties associated with journal rankings. We also chose to base this grouping on the perceptions of UK faculty, since it is the publications of UK faculty that are being categorised and perceptions studies have been shown to be sensitive to the geographic location of respondents.

### [Table 3 about here]

Table 3 shows that the mean number of publications by the community during 1998 and 1999 was 1.76. Faculty in the old universities produce, on average, nearly three times as many items as those in the new universities. As one would expect, given the significance of research in promotion decisions, there is a strong positive correlation between academic rank and number of publications and this applies across all publication media. Possession of a PhD is strongly associated with academic journal outputs and non-serial outputs, but does not seem to affect the number of professional journal outputs. Possession of a professional qualification seems to increase the numbers of professional outputs (but only in the old university sector). If fractional rather than full credit is given for co-authored publications, the overall patterns remain essentially unchanged, although the reported means all drop significantly. For example, the overall mean falls from 1.76 to 1.09, because some co-authors are outside the UK accounting and finance academic community.

Due to the differences in the nature of the data available, only crude comparisons are possible with other countries. It is, however, interesting to observe that Zivney *et al.* (1995) report an average number of publications in a set of 66 accounting and finance journals of 0.16 p.a. In the present study, using a set of 30 journals, the figure is 0.12. Given the difference in the size of the journal set, the publication activity (i.e. quantity of output) of UK academics appears to compare very favourably to that of US academics.

While Table 3 presents mean per capita measures for particular groups, it is also important to examine the overall distribution, particularly as publication activity is known to be skewed. The distributions for selected academic ranks within each institution type can most effectively be shown graphically. Figure 1 shows the percentage of faculty that have at least a given number of publications. Panels A to C refer to three different output categories: all publications, all academic journals and *Top60*, respectively. Given that publication activity is strongly linked to academic rank, we plot only the upper and lower ranks in each institution type, along with the Senior Lecturer (old universities) rank as an 'average'. The SL and L profiles in the new universities are very similar. Table 4 presents this information in tabular format.

#### [Figure 1 and Table 4 about here]

Table 4 panel A shows that, overall, 56% of staff published nothing during the two-year period. This is down from 65% in 1991 (Gray & Helliar, 1994, derived from Table 3). The figures for old and new universities are 31% and 76%, respectively, in 1999, down from 38% and 86% in 1991. Panel A of Figure 1 plots the corresponding frequency distribution. Professors at the new universities are seen to outperform professors at the old universities in terms of the total number of publications. There are significant gaps between the curves for the various groups shown, with the lecturer curves being particularly concave, reflecting the extremely skewed nature of their distribution.

Panel B of Table 4 and Figure 1 refer to the academic journal subset of all publications. The percentage of staff publishing no academic articles in the period is

65% overall. This comprises 41% for old universities and 84% for new universities, with the corresponding figures for 1991 being 63% and 98% (Gray & Helliar, 1994). Once again, there is evidence of a significant increase in the proportion of staff actively publishing in academic journals. Looking at Figure 1, panel B, the difference in relative performance of professors from the old and new institutions is seen to be less than in panel A. The distributions are very similar up to 3 publications but, thereafter, professors in the new universities continue to be more productive.

Panel C of Table 4 and Figure 1 refer to the *Top60* subset of academic journals. The distributions are shown at a finer level of detail than Panels A and B, and are curtailed at 6 articles as no-one in the community exceeded 6 publications in this subset. 83% of all staff published no *Top60* articles in the period. It is noticeable that at the new universities only professors generally publish in these journals. The curves in Figure 1 show that the publishing profiles of new university professors and old university senior lecturers are very similar. This may reflect the fact that professors at new universities are often recruited from the senior lecturer rank at the old universities. While 15% of all professors manage to publish 6 or more academic journal articles, only 1% manage to publish 6 or more in the *Top60*. In other words, only two professors manage to publish in the leading journals at this level of frequency; a further three published 5 *Top60* papers.

Panel D of Table 4 provides details for the *Top30 A&F* subset of academic journals and shows a similar pattern to the *Top60* results. Again, it highlights the difficulty of achieving high quality output with just 13% of professors publishing more than one *Top30 A&F* paper per year.

# Distribution of professional journal articles across specific outlets

The 355 distinct professional articles were spread across 92 different outlets. A full listing, classified by discipline and showing the number of items in each outlet, is given in Appendix 3. This is provided to help authors identify potential outlets for their work. 84% of all items appear in accounting and finance outlets. The most common outlet, *Management Accounting*, takes twice as many articles as its nearest rivals, *Accountancy* and *Student Accountant*.

Our findings in relation to professional journals can be compared to the results in Cottingham & Hussey (2000), who look at publications in five main professional accounting journals during the period 1987-96. They report on the number of UK academic authored articles in the house journals of the five main accountancy bodies. The reported figure for 1996 is 68 articles. If we select only these journals, our figure for the two-year period 1998-99 is 99, yielding a yearly average of 50. It appears, therefore, that in the space of only 2-3 years, there has been a substantial decline in publications by UK academics in this professional journal set. Looking at the trend since 1987 (when the figure was 90), there is evidence that this is a continuing and accelerating decline. There are, of course, several possible reasons for this observed decline. While it may be that academics are less inclined to seek publication in such journals, it may also be that the journals themselves are less disposed to accept academic articles. There has certainly been a marked shift in the editorial policy of some journals, showing a preference for very short commentary and lifestyle articles.

Having said this, however, it must be noted that publications in this subset of professional outlets represent only 28% of all professional publications, which (as reported above) represent a significant proportion of all publications.

Distribution of academic journal articles across specific outlets and across disciplines

The 1,141 distinct academic articles were spread across a staggering 442 different outlets (this should bring comfort to those unable to think where to target their next publication!). A full listing, classified by discipline and showing the number of items in each outlet, is given in Appendix 4. This is provided to help authors identify potential outlets for their work. The contents of this Appendix make for interesting reading.

In the discipline of accounting (taken to include taxation), there are 423.5 papers spread across 61 journals. None of the top ten journals (in terms of publication frequency) is clearly US based – eight are UK<sup>15</sup>, one is continental Europe and one is Australian. While there are 16 publications (ranking 11<sup>th</sup> in terms of frequency) in *AOS*, normally rated as one of the top four in terms of 'quality', there are no publications in any of the other top three journals (*TAR*, *JAR* and *JAE*), all of which

are US-based. There is only one publication in *Contemporary Accounting Research* (a Canadian journal normally rated just below these US journals and *AOS* in terms of quality). At least three, not necessarily mutually exclusive, interpretations of these findings are possible. First, it may be accepted that these North American journals do indeed represent the highest quality journals worldwide and that UK academics are generally unable to publish at this highest level. However, the pre-eminent quality often attributed to these journals is contested by some. Second, the findings are consistent with the high barriers to entry that are perceived by UK academics to exist for non-US faculty seeking to publish in this top set of US journals (Brinn, Jones & Pendlebury, 2001). Finally, the findings could be interpreted as offering strong support for the thesis of Lukka & Kasanen (1996), that accounting is a local rather than a global discipline.

In terms of sub-areas, certain journals clearly cater for particular areas while others are very general in nature. A fairly crude categorisation based on journal title suggests that about 50% of outputs appear in specialist journals (covering, in descending order of publication frequency, the areas of critical studies, education, history, management accounting, auditing, public sector, international and information systems). Of course, papers on these specialist areas appear in generalist journals too, so the implication is that mainstream financial accounting and reporting papers now represent the minority of papers.<sup>16</sup>

In the discipline of finance, there are 196.5 papers spread across 69 journals. Comparing this with accounting, three observations can be made. First, of the papers published in the core disciplines that make up our 'community', about one-third (32%) are published in finance journals and two-thirds in accounting journals. Second, if one compares the number of papers with the number of outlets, there appear to be *relatively* more outlets for finance papers. Third, five of the top eleven finance journals (in terms of publication frequency) are US based, three have a European perspective, two are UK based (*JBFA* and *Applied Financial Economics*), while *Journal of Banking and Finance* is US based but currently with a European editor. Five of these journals are typically placed highly in ranking studies of finance journals. For example, in Chan *et al.* (2000), *Journal of Finance, Review of Financial Studies, Journal of Money, Credit and Banking, Journal of Banking and Finance* and

Journal of International Money and Finance are ranked 2<sup>nd</sup>, 3<sup>rd</sup>, 8<sup>th</sup>, 10<sup>th</sup> and 15<sup>th</sup> respectively. These findings appear to reflect the global nature of financial markets and of finance as an academic discipline.

A summary of the distribution across disciplines is shown in Table 5. A striking statistic is that only half of academic journal publications are located in the core disciplines of accounting and finance. This is all the more remarkable given that the boundaries of the core were broadly set. Accounting and (to a lesser extent) finance can be regarded as *applied* disciplines, drawing on foundation disciplines such as economics, sociology and psychology.

# [Table 5 about here]

The disciplinary distribution of outputs by accounting and finance faculty reveal, perhaps for the first time, the significant extent to which knowledge seems to be fed back to these disciplines. Prior research has focused on information flows *into* academic accounting and finance. The present study focuses on information flows (represented by publications) *out of* academic accounting and finance.

The finding that there are significant flows *out of* accounting and finance contrasts with that of McRae (1974), that the flow of ideas from accounting to other disciplines was negligible. Several non-mutually exclusive explanations exist. First, McRae (1974) examined citations (which are taken to capture 'impact') whereas the present study examines publications (which may not be subsequently cited). Second, it may be that some of the individuals included by the *Register* as accounting or finance faculty have a different 'home' discipline. For example, given the thin market for finance faculty, some economists have been recruited to accounting and finance departments. It would not be surprising for such individuals to publish economics research in economics journals. Third, it may be that, over the 25 or so years, research in the accounting and finance disciplines has matured and improved sufficiently to justify the publication of applied studies in foundation discipline journals.

A number of other points can be noted about this table. First, the concentration of outputs within the core disciplines is (as might be expected) far greater for professional outputs than for academic outputs (84% c.f. 54%). Second, management and economics are the two other disciplines in which the accounting and finance community more frequently publishes. Third, the number of outputs in non-English-language journals is now becoming significant (3%). There are at least two possible reasons for this: (i) the emergence of research collaborators based in Western continental European countries with refereed non-English journals (Lukka & Kasanen, 1996); and (ii) interest in the emerging economies of Eastern Europe as a research site, with findings sometimes being reported in both local language journals as well as English-language journals (to ensure that findings are accessible to all interested parties).

# Co-authorship

Patterns of co-authorship across output categories are shown in Table 6. While sole authorship is the norm for professional articles (two-thirds), only just over one-third of academic articles are sole authored. 24% of academic articles have three or more authors and the average number of authors is almost two (1.93). There are significant differences in co-authorship patterns across the subsets of academic output. For example, 48% of *Top30 A&F* papers are sole authored compared with 25% for *Top30 Oth*, giving average numbers of authors of 1.82 and 2.13, respectively. Overall, there is little evidence to suggest that more cooperation is associated with increasing quality of output. In fact, the average number of authors for *Top60* publications (1.89) is almost identical with the average number across all output types (1.87). However, the greater level of co-authorship in *Top30 Oth* is consistent with a measure of interdisciplinary collaboration. This view is reinforced by the observation that the co-authors in almost all (50 out of 51) of the co-authored *Top30 Oth* papers are from outside the home department. Interestingly, the average number of authors for co-authored papers of 2.5 is almost identical across all types of output.

#### [Table 6 about here]

These findings can be compared to those from US studies. Heck *et al.* (1990) report 50% co-authorship across 24 accounting journals in 1988, quite similar to the 52% for

Top30 A&F here. However, the overall figure for academic articles in the present study is 61%, consistent with the general growth in co-authorship that has been documented elsewhere. Hasselback *et al.* (2000) report an average number of authors of 2.3 in 1993 across 40 accounting journals and a growth rate of 0.017 p.a. This gives a projected estimate of 2.4 authors for 1999, the date of the present study. Our figures for Top30 A&F and academic articles are 1.82 and 1.93, respectively, which are significantly lower. This suggests that the preference is for smaller author teams in the UK relative to the US. We are currently unable to explain this finding.

A significant minority of co-authorships involve exclusively current colleagues (17.5% across all outputs), indicating a significant association between these two social links. It is also likely that many of the other co-authorships involve *former* colleagues, although further research would be required to establish the full extent of this. <sup>19</sup> The others involve either members of the UK accounting and finance academic community at different institutions (part of the group of 1492 individuals studied in this paper) or individuals outside this community. Separating the contributions made to the total set of outputs in this way reveals that 25% of contributions involve individuals from outside the community. This group is made up of: UK academics in other disciplines (and normally located in other departments); members of the non-UK accounting and finance academic community, or non-academics. This is a significant proportion and suggests that the UK accounting and finance academic community is reasonably open via interdisciplinary collaboration, collaboration with overseas academics and collaboration with individuals in practice. This is surely a healthy sign.

#### **SUMMARY AND CONCLUSIONS**

This study reports on publishing patterns in the UK and Irish accounting and finance academic community for the two-year period 1998 to 1999 using the data contained in the *BAR Research Register*. The comprehensive nature of this data supports a detailed analysis of outputs by publication media. The distribution of various types of output (including summary per capita measures) are reported, both for the community as a whole and for key subgroups. There is also an analysis of journal outputs by academic discipline and by individual journal and an analysis of co-authorship

patterns. These analyses offer insights into the cognitive and social aspects of scholarly knowledge development. Where appropriate, comparisons are made with previous UK studies and with studies in other countries.

It is found that the community has been growing modestly since 1991. The old universities display a significant increase in the proportion of senior staff and this may be attributable to the thin market in the disciplines and the need to offer seniority to attract and retain high quality staff. The proportion of staff with a PhD, though still low relative to the US (where nearly all staff have a PhD) has doubled since 1991 (to 30%), while the proportion with a professional qualification has declined from 81% to 58%. *Prima facie*, these shifts are not likely to serve to reduce the gap between research and practice in the profession. The possession of a PhD seems to be associated with advancement.

Across the whole community, there is a good mix of different forms or output, with nearly half of all outputs in other than academic journals. Professional journal articles account for 16% of the total and are spread across 92 different outlets. However there is evidence of a substantial decline since 1996. Non-serial publications (such as books and research reports) account for 31%. The 1,141 distinct academic articles were spread across 442 different journals.

On a per capita basis, giving full credit for co-authorship, the mean number of publications was 1.76, the figure for faculty at old universities being nearly three times that for faculty at new universities. More senior staff publish more frequently across all main media and possession of a PhD is associated with a greater volume of academic journal and non-serial outputs. This figure seems to compare favourably with measures for US faculty.

The skewed nature of publishing distributions was also explored. This skew is most in evidence for the lower academic ranks. Interestingly, while professors at old universities tend to publish more 'top 60' academic journal articles than those at new universities, the opposite is true for both 'non-top 60' academic and total output. The 'gap' between the upper and lower ranks is generally much greater in the new university sector. Publication in the top journals is concentrated among staff at the

old universities – a finding that may underpin the policy of increased specialisation proposed in the recent English Higher Education White Paper.

Significantly more staff are active in publishing in any media compared to 1991 (44% compared to 35%). However, the percentage publishing in the subsets of 'top 60' and 'top 30 accounting and finance' academic journals is relatively low at 17% and 14%, respectively.

Given that accounting and finance have been argued to be applied disciplines where the flow of ideas tend to be one-way (*in* rather than *out*), the disciplinary spread of academic journal publications is significant. Only just over half of all articles are published in the core discipline journals, the rest appearing mainly in management, economics, sociology, education and IT journals. This may indicate a growing maturity in the accounting and finance disciplines, whereby applied research findings are flowing back into related foundation and business disciplines. There is also evidence of a small but significant amount of research being published in non-English language journals.

Nearly two-thirds of academic articles are co-authored, with the average number of authors being 1.93. This seems to be lower that in the US, suggesting a preference for smaller author groups. Interestingly, 25% of all contributions to all outputs come from outside the community, indicating an openness to interdisciplinary collaboration, collaboration with overseas academics and collaboration with individuals in practice.

The findings of this study will be of assistance to those making career decisions (either their own career or decisions involving other people's careers). They also raise awareness of the way in which the accounting and finance disciplines are developing. The study does, however, have two specific limitations. First, although all journals are included in the analysis, we have formed broad quality groupings, given the pervasive influence of the concept of quality in the discussion of publication activity. These groupings are inherently subjective and contestable, and we make no particular claims regarding the groupings that we use. Second, the analysis covers a period of only two years. While we have no reason to expect that the findings for this

period are unrepresentative in any way, analysis covering a longer time-frame would confirm this.

We are currently extending this research in a number of directions to investigate issues that require longitudinal data. The relational database has been extended back to 1984, the date of commencement of the *Register*. Using this, it will be possible to (i) establish the extent to which co-authorships involve *former* as well as *current* colleagues; (ii) determine whether the productivity levels for the two-year period 1998/99 are representative of recent activity levels; and (iii) establish publication performance benchmarks for promotion decisions. Another potentially fruitful area for further research is the nature and extent to which accounting research informs other disciplines. Either a qualitative or quantitative approach could be taken to investigate this issue. For example, the content of the 521 academic articles published by the accounting and finance community in journals outside the core discipline could be systematically reviewed and assessed (albeit subjectively) to establish the extent and nature of interdisciplinary influence. Alternatively, following McRae (1974), one could use citation analysis.

#### **ENDNOTES**

<sup>1</sup> We do not report an analysis of the data by departments because we feel that it would be insensitive to do so. This inevitably precludes any comparison with the RAE 2001 outcomes. The latter would, in any case, be problematic for two reasons. First, some departments were submitted to the Accounting and Finance panel while others were included as part of a Business and Management submission. In the latter case, the grade awarded to the whole submission may not represent the implicit grade for the accounting and finance sub-group. Second, even the RAE 2001 outcomes for the 20 submissions to Unit of Assessment 44 (Accounting and Finance Panel) cannot meaningfully be compared. The problem lies in dealing with the letter grade dimension of the outcome, which moderates the quality rating. Is a 5F better or worse than a 4B, say?

- professor
- reader
  - old universities: reader: associate professor
  - new universities: reader; principal lecturer; head of department/school
- senior lecturer senior lecturer; assistant professor
- lecturer
- other assistant lecturer; associate lecturer; dean; doctoral fellow; emeritus professor; head of department/school (in old universities); professional tutor; research assistant; research associate; research fellow; senior academic; senior fellow; senior research fellow; senior tutor; teaching assistant; fellow; tutorial fellow; visiting professor, visitor; others.

The US ranks of assistant and associate professor are used primarily by London Business School. In the US, assistant professors normally face the tenure hurdle 6 years after receiving their doctorate, and so might reasonably be considered similar to lecturers in the UK, with associate professors similar to senior lecturers. However, inspection of the records of the individuals involved suggested that they had achieved a higher level of seniority than this.

<sup>10</sup> The following keywords were used: 'student', 'magazine', 'newsletter', and 'news'. In addition, article length was also considered in classifying items, with four pages or less serving to signal a potential professional outlet. It has been noted elsewhere that it is not a simple matter to distinguish refereed from non-refereed journals (Brown & Gardner, 1985, p.88).

<sup>&</sup>lt;sup>2</sup> Cole & Cole (1967) present evidence that the quality of a scientist's output is more important that quantity in explaining a variety of aspects of reputation (cited in Brown & Gardner 1985, p.85).

<sup>&</sup>lt;sup>3</sup> The 'new' universities are those created by the abolition of the binary divide together with a few degree-granting colleges.

<sup>&</sup>lt;sup>4</sup> The Accounting Review (TAR), Journal of Accounting Research (JAR) and Journal of Accounting and Economics (JAE).

<sup>&</sup>lt;sup>5</sup> Accounting, Organizations and Society (AOS), Accounting and Business Research (ABR), British Accounting Review (BAR) and Journal of Business Finance and Accounting (JBFA).

<sup>&</sup>lt;sup>6</sup> The list includes 4 non-US journals: *Abacus, Accounting and Business Research, Contemporary Accounting Research,* and *Accounting, Organizations and Society.* 

<sup>&</sup>lt;sup>7</sup> To be included, individuals must meet one or more of the following criteria: be located in an accounting and finance department; have a primary commitment to teaching and research in accounting and finance; be a teacher who does the bulk of their teaching on accounting and finance degree courses; or be a researcher who publishes in accounting and finance journals.

<sup>&</sup>lt;sup>8</sup> A detailed reconciliation is available from the authors upon request.

<sup>&</sup>lt;sup>9</sup> The groupings formed were as follows:

<sup>&</sup>lt;sup>11</sup> Reported in Gray & Helliar (1994, Table 3).

<sup>&</sup>lt;sup>12</sup> 134 (6.2%) outputs are included in the database twice (or more) under different institutions. The figures are higher for academic articles than other forms of output.

<sup>&</sup>lt;sup>13</sup> There are 2,178 unique publications listed in the register after allowing for 134 duplicate publications listed at more than one institution. In total this gives 4,069 possible attributions to individuals, as indicated in the analysis of co-authorship in Table 6 (1.87 × 2,178). These attributions fall into three main categories. 1,211 (29.8%) attributions relate to individuals from outside the UK accounting and finance community (defined by the register as staff in post at 31 December 1999). These individuals may be from other departments in UK institutions, from accounting and finance departments in overseas institutions or may have worked in a UK department of accounting and finance during the two year period but were not in post at 31 December 1999 (e.g. may have moved out of academe, retired or died). A further 5.6% of attributions were not recorded by co-authors in their home department's entry. [60% of these non-recorded items related to non-serial or professional publications, 26% to non-Top60 and 14% to Top60. These non-recordings do not affect Tables 2,5 or 6, which are based on the total number of unique publications. They have a small impact on Tables 3 and 4, which relate publications to individuals, mainly affecting lower-level publications by professors. For example, the overall mean number of total publications per member of staff in Table 4 is understated by about 0.16.] This leaves 2,629 attributions by the 1,492 members of staff in the UK academic community at 31 December 1999, as indicated in Table 3 (1.76×1,492).

<sup>&</sup>lt;sup>14</sup> Figure 1 reflects 100% minus the cumulated data in Table 4.

<sup>&</sup>lt;sup>15</sup> The editors of *Critical Perspectives on Accounting* originated from the UK.

<sup>&</sup>lt;sup>16</sup> We are suggesting here that the relative incidence of mainstream financial accounting papers is declining, although our evidence relates to a single period. This inference is based on the evidence that new journals tend to be specialist journals (Zeff, 1996).

<sup>&</sup>lt;sup>17</sup> Eleven journals are considered because of a tie in 10<sup>th</sup> position.

<sup>&</sup>lt;sup>18</sup> We had no a priori reason to expect that the incidence of co-authorship would be associated with journal quality, though Presser (1980) did find fairly weak evidence of this in relation to the editorial decision on papers submitted to a leading psychology journal.

<sup>&</sup>lt;sup>19</sup> For example, 4.5% of the total number of attributions across all output categories relate to co-authors who had worked in the same department during the two year period but who were not in post in that (or any other) UK accounting and finance department at 31 December 1999.

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# **Appendix 1: Decision Rules for Classifying Journals by Discipline**

After a preliminary review of the journal outlets contained in the database to identify the problem areas where classification was unclear, the following decision rules were developed.

#### **Basic categories**

Mnem	Discipline	Other subject keywords	
ACC	Accounting	Accounting history; accounting education;	
		management accounting; auditing; accounting	
		information systems	
ECON	Economics	Fiscal; political economy; development	
FIN	Finance	Corporate finance; treasury; financial	
		management; markets; institutions (banking;	
		insurance; actuaries); real estate; credit; financial	
		Very few publications so include under 'other'	
		Insolvency	
MGT	Management	Business; corporate governance; industrial	
		relations; administration; marketing;	
		entrepreneurship; strategy; human resource	
		management; quality assurance/management;	
DCV	Davida da arr	organisation	
		Ethios, foith, local accomment	
		Ethics; faith; local government	
		Management science; operational research	
		Include within core accounting/finance discipline	
		Physics; tourism; environmental; geography	
ОІП	Other	(places); wine; general sport; voluntary sector;	
		newspapers (general)	
DUP	Dunlicate nubtyne	newspapers (general)	
		Computing; information systems; decision	
11		support systems; expert systems [except where	
	Communication	accounting-related see Zeff criteria below]	
FOR	Foreign language publications		
		ACC Accounting  ECON Economics FIN Finance  ENG Engineering LAW Law  MGT Management  PSY Psychology SOC Sociology/politics/philosophy STAT Statistics/maths/econometrics TAX Taxation HIS History EDUC Education OTH Other  DUP Duplicate pubtype  MED Medicine/health IT Information technology/ communication	

#### **Decision rules**

Accounting and finance publications

Accounting and finance categories should include all journals that accounting/finance faculty might reasonably be expected to publish in; i.e. the expected 'domain' of the discipline. This recognises that the accounting discipline is essentially derived from many other disciplines. Thus a modified version of Zeff's criteria for recognition of academic research journals in accounting is probably acceptable for our use. This has the benefit of ensuring consistency with his list; all his journals will be subsumed under our accounting and finance list. His criteria were:

'Use of the words Accounting, Auditing, Taxation, Systems (or other accounting-related words) in the journal title, and a significant presence of accounting academics among the editorial staff and among the authors of published articles' (Zeff, 1996, p. 167)

Our criteria, adjusted to include finance, are:

'Use of the words Accounting, <u>Finance</u>, Auditing, Taxation, Systems (or other accounting/<u>finance</u>-related words) in the journal title, and a significant presence of accounting/<u>finance</u> academics among the editorial staff and among the authors of published articles'

Thus, for accounting and finance publications, the decision depends on the *area of application* rather than the *fundamental discipline*; e.g. Accounting Education: the fundamental discipline is education but it is applied in accounting so, based on our criteria, it forms part of the accounting discipline.

NB. Information systems journals were accepted as meeting the 'significant presence of accounting/finance academics' criterion only if >2 papers were published therein during the 1998 and 1999 period (i.e. in the *Register*).

Journals at the interface of accounting 'and' finance are allocated equally: e.g.

Accounting and Finance

ACC/FIN

# Publications outside accounting and finance

The decision here depends on the *fundamental discipline* rather than the *area of application*; e.g. Journal of Nursing Management: the fundamental discipline is 'management' so, even though it is applied in 'medicine', it is deemed to be within the 'management' discipline. Other examples:

Explorations in Economic History	HIS
International Journal of Economics of Business	<b>ECON</b>
Legal issues in Business	LAW

We recognise the inconsistency between the decision rules applied to identify publications within and outside accounting and finance. The justification is that our primary focus is to identify publications that would be generally accepted as within/outside the domain of accounting and finance, so a broad definition of 'accounting and finance' is necessary. This requires the inclusion of publications from non-accounting/finance disciplines that are *applied* within accounting/finance. All other publications will relate to non-accounting/finance applied in non-accounting/finance areas so our preference is to identify the fundamental discipline rather than the area of application.

'Interface' journals (often signalled by the use of the 'and' operator) that lie wholly outside accounting and finance are allocated equally to their respective disciplines. Maximum of two disciplines: e.g.

Crime Law and Social Change	LAW/SOC
Current Politics and Economics of Europe	ECON/SOC
Economic and Social Review	ECON/SOC
Economy and Society	ECON/SOC
International Journal of Business and Society	MGT/SOC

# Results of classification reliability check

	Number	%
Misclassifications:		
error in applying decision rules	19	3.3
ambiguous title	19	3.3
English/foreign language errors	6	1.0
differences of opinion between researchers	<u>6</u>	<u>1.0</u>
Total misclassifications	50	8.6
Total correct classifications	<u>527</u>	91.4
Total number of journals in database*	<u>577</u>	100

<sup>\*</sup> Some journals in the database had zero entries in the 2000 Register.

### Appendix 2: List of 'Top 60' academic journals

Accounting/finance core [Top 30 A&F]

Abacus

Accounting and Business Research Accounting Auditing and Accountability J Accounting Business and Financial History

Accounting Historians J

Accounting Organizations and Society

Accounting Review Advances in Accounting

Advances in Public Interest Accounting Auditing: A J of Practice and Theory Behavioral Research in Accounting

British Accounting Review

**Business History** 

Contemporary Accounting Research Critical Perspectives on Accounting Financial Accountability and Management

Financial Analysts Journal
International J of Accounting
J of Accounting and Economics
J of Accounting and Public Policy
J of Accounting Auditing and Finance

J of Accounting Literature J of Accounting Research

J of Business Finance and Accounting

J of Cost Management

J of Finance

J of Financial and Quantitative Analysis

J of International Financial Management and Accounting

J of Management Accounting Research Management Accounting Research

Source: Brinn, Jones & Pendlebury (1996)

Others [Top 30 Oth]

Academy of Management J Administrative Science Quarterly British J of Industrial Relations Business History Review Decision Support Systems

Economic J

European Economic Review

**Human Relations** 

International J of Public Administration

J of Banking and Finance

J of Business

J of Economic Theory
J of Empirical Finance
J of Industrial Economics
J of International Economics

J of International Money and Finance

J of Law and Society
J of Management Studies
J of Mathematical Economics
J of Money Credit and Banking

J of Public Economics

J of Social Welfare and Family Law

Management Science

Organization

**Organization Studies** 

Oxford Bulletin of Economics and Statistics

Oxford Economic Papers Public Administration Rand J of Economics Review of Financial Studies

Primary source: Harzing (2001)

## Appendix 3: List of professional journals and number of publications classified by discipline

Accounting (including taxation) [n = 37]	No	Management [n = 8]	No
Management Accounting	59	Henley Manager Update	8
Accountancy	28	Chartered Secretary	5
Student Accountant [was ACCA students newsletter]	28	Benefits And Compensation International	1
CPA J Of Accountancy [Ireland]	19	Business Times (Singapore)	1
Accountancy Ireland	13	Corporate Governance Newsletter	1
Accounting And Business [was Certified Accountant]	11	Director	1
Accounting Technician [AAT]	9	Sewells Automotive Marketing Review	1
Account	8	Strategy & Business	1
PASS	8	Total number of publications	19
Social And Environmental Accounting	8		
Chartered Accountants J Of New Zealand	6	Law [n = 5]	
International Accountant	6	Company Lawyer	3
Tax J	6	Insolvency Bulletin	2
Accountancy Age	5	Anti Laundering And Fraud Alert	1
Taxation Practitioner	5	Employers' Law	1
Certified Diploma Magazine	4	Social Legal Newsletter	1
Company Accountant	4	Total number of publications	8
Accountancy International	3		
CA Student	3	Sociology/politics/philosophy $[n = 4]$	
European Accounting Focus	3	Municipal J	2
Accountability Quarterly	2	Faith In Business Quarterly	1
Financial Director	2	New Review	1
Taxation	2	Stakeholder	1
Taxes	2	Total number of publications	5
Accounting Historians Notebook	1		
American Accounting Association - Public Interest	1	Education [n = 2]	
Australian CPA	1	Higher Education Equality Unit News	1
CA Magazine	1	Times Higher Education Supplement	1
CIMA Student	1	Total number of publications	2
Industry Accounting (China)	1	•	
Internal Auditing (UK)	1	Medicine/health [n = 2]	
Internal Auditor (US)	1	Health Matters	1
Perspective [ACCA Hong Kong]	1	Practice Manager	1
Public Services Accounting Special Group Newsletter	1	Total number of publications	2
Singapore Accountant	1		
Tolley's Practical Audit And Accounting	1	Other $[n = 15]$	
Tolley's Practical NIC	1	Tribune	3
Total number of publications	257	Edinburgh Evening News	1
		Examiner	1
Finance [n = 16]		Fire Prevention	1
Professional Investor	10	Irish Independent	1
Financial Times	6	Irish Times	1
Financial Times Financial Regulation Report	5	Local Environment	1
NGO Finance	3	RIBA J	1
Treasurer	3	Sleaze Report	1
Acquisitions Monthly	2	Soccer Analyst	1
CIB News	2	Sunday Business Post	1
European Fund Manager	2	Sunday Times Business News	1
Scottish Banker	2	The Guardian	1
City Magazine	1	The Times	1
Eurodeal	1	Uniserve Science News	1
Finance	1	Total number of publications	17
Financial News Briefing Notes	1	-	
London Stock Exchange News	1	Foreign language [n = 3]	
Risk Magazine	1	De Operational Auditor (Netherlands)	1
Treasury Management International	1	El Pais	1
Total number of publications			
	42	Ucetnictvi	1
	42	Total number of publications	3

### Appendix 4: List of academic journals and number of publications classified by discipline

Journals at the interface between disciplines (identified in *italics*) are allocated equally to each discipline. Half the number of papers is listed under each discipline.

Accounting (including taxation) [n = 61]	No		No
Critical Perspectives on Accounting	38	Asia-Pacific J of Accounting	2
European Accounting Review	29	J of Accounting and Public Policy	2
British Accounting Review	27	J of Accounting Case Research	2
Accounting Education: an International J	25	J of International Accounting Auditing and Taxation	2
J of Business Finance and Accounting	24.5	J of International Financial Management and Accounting	2
Accounting and Business Research	24	J of the Computer Audit Specialist Group of the BCS	2
Accounting Auditing and Accountability J	21	Petroleum Accounting and Financial Management J	2
Management Accounting Research	21	Accounting and Business Review	1
Accounting Organizations and Society	16	Accounting Commerce and Finance: the Islamic Perspective J	1
Financial Accountability and Management	16	Accounting Management and Information Technologies	1
J of Applied Accounting Research	15	Accounting Management and Insurance Review (Cairo Uni)	1
Accounting Business and Financial History	13	Accounting Research J	1
Managerial Auditing J	13	Advances in Taxation	1
International J of Auditing	12	Artificial Intelligence in Accounting and Auditing	1
Irish Accounting Review	12	Asia Pacific Accounting Review	1
British Tax Review	10	Asian Review of Accounting	1
Accounting Forum	9	Asian-Pacific J of Taxation	1
Accounting History	9	Contemporary Accounting Research	1
Irish Tax Review	7	Eco-management and Auditing	1
Research in Accounting in Emerging Economies	6	European Taxation	1
[formerly Research in Third World Accounting]		Indian Accounting Review	1
Abacus	5	J of Accounting Auditing and Finance	1
Institute for the Management of Information Systems J	5	J of Accounting Education	1
Accounting Historians J	4	J of Management Accounting Research	1
International J of Accounting	4	J of New Zealand Taxation Law and Policy	1
J of Cost Management	4	Research in Governmental and Nonprofit Accounting	1
Pacific Accounting Review	4	Research on Accounting Ethics	1
International J of Accounting and Business Society	3	Review of Accounting Information Systems	1
Issues in Accounting Education	3	Review of Quantitative Finance and Accounting	1
Personal Tax Planning Review	3	South African J of Accounting Research	1
Advances in International Accounting	2	[formerly De Ratione]	
Advances in Public Interest Accounting	2	Total number of publications	423.5
Finance [n = 69]	No		No
J of Business Finance and Accounting	24.5	Credit Management	2
European J of Finance	21	Financial Markets Institutions and Instruments	2
Applied Financial Economics	12	International J of Finance and Economics	2
European Financial Management	7	J of Corporate Finance	2
J of Futures Markets	7	J of Entrepreneurial and Small Business Finance	2
J of Banking and Finance	6	J of Financial and Quantitative Analysis	2
J of European Financial Services	6	J of Fixed Income	2
J of Finance	6	J of Insurance: Mathematics and Economics	2
J of Financial Regulation and Compliance	6	J of International Financial Management and Accounting	2
J of International Money and Finance	6	J of International Financial Markets, Institutions and Money	2
Review of Financial Studies	6	J of Portfolio Management	2
Derivatives Use, Trading and Regulations	4	Managerial Finance	2
European Finance Review	4	Multinational Finance J	2
J of Empirical Finance	4	Petroleum Accounting and Financial Management J	2
Advances in Pacific Basin Financial Markets	3	Public Finance	2
Asia-Pacific Financial Markets	2	Review of Derivatives Research	2
British Actuarial J	2	Venture Capital: an International J of Entrepeneurial Finance	2
Credit Control	2	Advances in Investment Analysis and Portfolio Management	1

Finance (continued)	No		No
Applied Mathematical Finance	1	J of Entrepreneurial Finance	1
Bank of England Quarterly Bulletin	1	J of Financial Information Systems	1
Banking and Financial Training	1	J of Financial Intermediation	1
Derivatives Quarterly	1	J of Financial Management and Analysis	1
European Investment Bank Papers	1	J of Money Credit and Banking	1
European J of Financial Services	1	J of Property Valuation and Investment	1
European Venture Capital J	1	J of Real Estate Finance and Economics	1
Financial History Review	1	J of the Society of Fellows of the Chartered Inst of Insurance	1
Financial Practice and Education	1	Korean J of Financial Management	1
Global Business and Finance Review	1	Mathematical Finance	1
International Finance	1	Pacific-Basin Finance Journal	1
International J of Finance	1	Quarterly Review of Economics and Finance	1
International J of Theoretical and Applied Finance	1	Research in Healthcare Financial Management	1
International Review of Economics and Finance	1	Review of Financial Economics	1
International Review of Financial Analysis	1	Review of Pacific Basin Financial Markets and Policies	1
J of Credit Management	1	Review of Quantitative Finance and Accounting	1
J of Derivatives	1	Total number of publications	196.5
		·	

Management [n = 106]	No		No
Corporate Governance: an International Review	12	J of Management in Medicine	2
Public Money and Management	12	J of Management Studies	2
J of Small Business and Enterprise Development	8	J of Product and Brand Management	2
Organization	8	J of Small Business Management	2
J of Management and Governance	6	Management Learning	2
Long Range Planning	6	Managing Service Quality	2
British J of Management	5	Middle East Business Review	2
Entrepreneurship: Theory and Practice	5	Nonprofit and Voluntary Sector Marketing	2
International J of Public Sector Management	5	Public Administration	2
Service Industries J	5	Qualitative Market Research: an International J	2
International J of Bank Marketing	4	Total Quality Management	2
International J of Commerce and Management	3	TQM Magazine	2
International J of Public Administration	3	Academy of Management Executive	1
International J of Technology Management	3	Administrative Science Quarterly	1
J of Financial Services Marketing	3	Advances in International Comparative Management	1
Management	3	ASCI J of Management	1
Management Decision	3	Australian J of Public Administration	1
Management Quarterly	3	British J of Industrial Relations	1
Omega	3	Canadian Public Administration	1
Public Policy and Administration	3	Career Development International	1
Academy of Management J	2	Competition and Change: J of Global Bus & Polit Economy	1
Barcelona Management Review	2	Corporate Governance International	1
Control	2	Corporate Reputation Review	1
Cyprus International J of Management	2	Employee Relations	1
Health Services Management Research	2	European Business J	1
International Association of Management J	2	European Business Review	1
International J of Business Studies	2	Executive Business Review	1
International J of Contemporary Hospitality Management	2	Farm Management	1
International J of Entrepreneurial Behavior and Research	2	Greener Management International	1
International J of Hospitality Management	2	Human Resource Management J	1
International J of Public-private Partnerships	2	International J of Arts Management	1
Irish Business and Administrative Research	2	International J of Business	1
J of Business Venturing	2	International J of Educational Management	1

Management (continued )	No		No
International J of Healthcare Quality Assurance	1	J of Strategic Change	1
International J of Healthcare Technology Management	1	J of Travel and Tourism Marketing	1
International J of Management	1	Leadership and Organization Development J	1
International J of Police Science and Management	1	Marketing Intelligence and Planning	1
International J of Service Industry Management	1	Optimum: J of Public Sector Management	1
International J of Sports Marketing and Sponsorship	1	Personnel Review	1
International J of Strategic Management	1	Public Administration and Policy [HK & Asia-Pacific]	1
International Rev of Retail Distn and Consumer Research	1	Public Management	1
International Small Business J	1	Quality and Quantity	1
Irish Marketing Review	1	Quality Assurance in Education	1
J of Air Transport Management	1	Quality in Higher Education	1
J of Applied Management Studies	1	R&D Management Journal	1
J of Brand Management	1	Shenshu Business J	1
J of Business	1	Sloan Management Review	1
J of General Management	1	Supply Chain Management	1
J of Hospitality and Leisure Marketing	1	Technology Analysis and Strategic Management	1
J of Marketing Management	1	Women in Management Review	1
J of Nursing Management	1	Entrepreneurship and Regional Development	0.5
J of Productivity Analysis	1	J of Economics and Business	0.5
J of Selling & Major Account Management	1	Total number of publications	213.0
J of Sport Management	1		
Francisco (O)	•		•
Economics [n = 69]	No	E 'CPI '	No
Economics Letters	9	Economics of Planning	1
Applied Economics Letters	7	Economy and Society	1
J of Institutional and Theoretical Economics	5	Engineering Economist	1
J of Interdisciplinary Economics	5	European Economic Review	1
J of Macroeconomics	5	Fiscal Studies	1
Manchester School of Economic and Social Studies	5	Global Economic Review	1
Economic J	4	International Economic J	1
Ekonomia	4	International J of Economics of Business	1
J of Economic Dynamics and Control	4	International J of Social Economics	1
J of International Economics	3 2	International Review of Applied Economics	•
Agrekon	2	J of Economic Development	1
Annals of Public and Co-operative Economics	2	J of Economic Integration	1
Applied Economics		J of Economic Theory	-
Bulletin for International Fiscal Documentation	2	J of Economics	1
Economic Issues	2 2	J of Evolutionary Economics	1
Economics of Transition		J of Industrial Economics	1
J of Comparative Economics	2 2	J of International Development	1
J of Development Economics L of Economic Rehaviour and Organization	2	J of Mathematical Economics	1
J of Economic Behaviour and Organisation	2	J of Public Economics	1
New Economy Oxford Economic Popers	2	J of Regulatory Economics	1
Oxford Economic Papers World Davidonment	2	New Political Economy	1
World Development		Opec Review	1
Communist Economies and Economic Transformation	1	Oxford Review of Economic Policy	1
Competition and Change: J of Global Bus & Polit Economy	1	Policy Studies  Pand Lof Economics	1
Economic Inquiry	1	Rand J of Economics	•
Economic Notes	1	Review of International Economics	1 1
Economic Policy	1 1	Review of World Economics	•
Economic Policy Review	1	Scandinavian J of Economics	1
Economic Theory	1	Small Business Economics	1

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Economics (continued)	No		No
Spanish Economic Review	1	Entrepreneurship and Regional Development	0.5
Sustainable Development	1	J of Economics and Business	0.5
Taiwan J of Political Economy	1	J of Transforming Economics and Societies	0.5
World Economy	1	Oxford Bulletin of Economics and Statistics	0.5
Current Politics and Economics of Europe	0.5	Third World Quarterly	0.5
Economic and Social Review	0.5	Total number of publications	118.5
Sociology/politics/philosophy [n = 28]	No	Education [n = 14]	No
Business Ethics: A European Review	5	Education and Training	3
Parliamentary Affairs	3	J of Further and Higher Education	3
Capital & Class	2	J of Vocational Education and Training	2
J of Business Ethics	2	Teaching Business Ethics	2
J of Commonwealth and Comparative Politics	2	Educational Technology	1
Political Quarterly	2	Higher Education	1
Crime Law and Social Change	1	Innovations in Education and Training International	1
Economy and Society	1	J of Continuing Professional Development	1
Ethics and Society	1	J of European Business Education	1
Faith and Freedom	1	J of Graduate Education	1
Human Relations	1	J of Management Development	1
International J of the Sociology of Law	1	Perspectives: Policy and Practice in Higher Education	1
J of Law and Society	1	Research in Education	1
Local Governance	1	Scandinavian J of Educational Research	1
New Technology, Work and Employment	1	Total number of publications	20.0
Philosphical Transactions of the Royal Society	1	-	•
Politics	1		
Regional and Federal Studies	1	IT/communications [n = 16]	No
Sociological Review	1	Information Services and Use	3
Talking Politics	1	Decision Support Systems	2
Time and Society	1	European J of Information Systems	2
Current Politics and Economics of Europe	0.5	New Review of Applied Expert Systems	2
Economic and Social Review	0.5	British J of Healthcare Computing & IM	1
J of Social Welfare and Family Law	0.5	Economic and Financial Computing	1
J of the Statistical and Social Inquiry Society of Ireland	0.5	European J of Communication	1
J of Transforming Economics and Societies	0.5	Expert Systems: International J of Knowledge	1
Social Sciences and Medicine	0.5	Engineering and Neural Networks	
Third World Quarterly	0.5	Information Systems J	1
Total number of publications	34.5	Information Technology and People	1
		J of Information Technology	1
Y ( 44)	***	J of Logistics and Information Management	1
Law [n = 11]	No	J of Systems and Information Technology [Edith Cowan]	1
New Zealand Law J	4	Systemic Practice and Action Research	1
J of Business Law	2	Systems Practice	1
New Law J	2	J Of Mathematics And Computers In Simulation	0.5
Arab J of Administrative Sciences	1	Total number of publications	20.5
Business Law Review  Crima Law and Social Change	1 1		
Crime Law and Social Change	1		
Environmental Liability  J of Law and Society	1		
Law in Transition	1		
Legal Issues in Business [Curtin Uni]	1		
J of Social Welfare and Family Law	0.5		
Total number of publications	15.5	$\neg$	
Processor	10.0	<del></del>	

Statistics/econometrics [n = 14]	No	Medicine/health [n = 8]	No
Cambridge Econometrics	5	British Medical J	2
J of the Operational Research Society	3	Family Practice	1
Bulletin of the International Statistical Institute	1	Health and Hygiene	1
Communication in Statistics Theory and Methods	1	Health and Social Care in the Community	1
IMA J of Mathematics Applied in Business and Industry	1	Infusions-therapie	1
J of Applied Econometrics	1	J of the Royal Society of Health	1
Management Science	1	Lancet	1
Mathematical Thought	1	Social Sciences and Medicine	0.5
Statistica Neerlandica	1	Total number of publications	8.5
Statistician	1	Total number of publications	OIC
Studies in Nonlinear Dynamics and Econometrics	1		
J Of Mathematics And Computers In Simulation	0.5	Psychology $[n = 5]$	No
J of the Statistical and Social Inquiry Society of Ireland	0.5	Philosophical Psychology	1
Oxford Bulletin of Economics and Statistics	0.5	Humour	1
Total number of publications	18.5	Occupational Psychologist	1
Total number of publications	10.5	J of Psychology: Interdisciplinary and Applied	1
		J of Management Psychology	1
History $[n = 13]$	No	Total number of publications	5
History [n = 13] Business History	No 3	rotal number of publications	3
-		Faurian language (n = 21)	N.
Economic History Review	2	Foreign language [n = 31]	No
J of Industrial History	2	Revista Portuguesa de Gestao	2
Business History Review	1	Tecnica Contable	2
Cheshire History	1	Zeszyty Naukowe Akademii Ekonomicznej W Krakowie	2
European Review of Economic History	1	Actualidad Financiera	1
Explorations in Economic History	1	Analisis Financerio	1
History of European Ideas	1	Banca & Finanzas: Revista Prof de la Gestion Financiera en Esp	1
International J of Maritime History	1	Banque et Marches	1
International Review of Social History	1	Bedrifskunde: Tijdschrift voor Modern Management	1
J of European Economic History	1	Bogazici J	1
J of Transport History	1	Boletin Economico de Ice	1
Scottish Economic and Social History	1	Cahiers du Laboratoire de Recherche en Sciences de Gestion	1
Total number of publications	17.0	Dissonanz	1
		Enterprises et Histoire	1
		Espanola de Financiacion y Contabilidad	1
Other $[n = 16]$	No	Etika Podnikani a Vereine Spravy	1
Advances in Concurrent Engineering	1	Finanzas Contabilidad	1
Contemporary Wales	1	J of Accounting and Auditing (Finland)	1
European Environment	1	Keizai Seminar	1
International J of Modern Physics	1	Maandblad voor Accountancy en Bedrifseconomie	1
J of Contemporary China	1	New Issues of St Petersburg Univ of Finance & Economics	1
J of Scientific and Industrial Research	1	Organization Studies	1
J of Southern Europe and the Balkans	1	Politi Eka Economie	1
J of Sustainable Tourism	1	Revista de Historia Economica	1
J of Transport Geography	1	Revista del Instituto Mexincano de Ejecutivos de Finanzas	1
J of Wine Research	1	Revista do Administracção Contemporanea (Brazil)	1
Manufacturing Engineer	1	Revista do Conselho Regional de Contabilidade	1
Prometheus	1	do Rio Grand do Sul	
Regional Studies	1	Revista Espanola de Financiacion y Contabilidad	1
Security J	1	Revue d'Economie Financiere	1
Voluntas	1	Revue d'Deconomie Industrielle	1
Water International	1	Revue d'Economie Politique	1
Total number of publications	16.0	Soziale Systeme	1
	•	Total number of publications	34.0

**Table 1: Demographic data (%)** 

		Aca	demic rank <sup>1</sup>				
	Professor	Reader	Senior Lecturer	Lecturer	Other	Total at Dec 99	Total at Dec 91 <sup>2</sup>
Old universities:	25 [18]	4 [2]	16 [12]	45 [56]	10 [12]	100	100
0/ 11 PLP	<b>7</b> 0	=0		4.5	2.4	(n=668)	(n=599)
% with PhD	70	79	54	45	34	53	32
% with prof. qual.	49	33	53	45	37	46	66
New universities:	5 [6]	17 [14]	57 [60]	15 [16]	6 [3]	100	100
						(n=824)	(n=772)
% with PhD	41	13	9	8	20	12	4
% with prof. qual.	64	70	71	64	47	58	92
Combined:	14 [11]	11 [9]	38 [39]	29 [34]	8 [7]	100	100
						(n=1,492)	(n=1,371)
% with PhD	64	23	17	34	28	30	16
% with prof. qual.	52	65	68	51	41	58	81

#### Notes:

- 1. Figures in square brackets are taken from Gray & Helliar (1994) and relate to December 1991 (8 years prior to the present study).
- 2. Derived from Gray & Helliar (1994, Table 3). It has been assumed that faculty do not possess more than one professional qualification. To the extent that they do, the figures will be overstated.

Table 2: Distribution of total outputs of community across publication media

	Tota	ıl
	popula	tion
	No. of	
Publication media	items	%
Book (non-textbook)	100	4.6
Book chapter	301	13.8
Editor of book	36	1.7
Text book*	58	2.7
Textbook instructors' manual	11	0.5
Research report for	49	2.2
professional accountancy body		
Research report for other body	28	1.3
Proceedings	90	4.1
Editorial note	<u>9</u>	0.4
Total non-serial	682	31.3
Professional journal, including	355	16.3
newspapers		
Academic journal	1141	52.4
Total	2178	100

<sup>\*</sup> It proved very difficult to distinguish the nature of book publications. Items were classed as books unless we were confident that the item was a textbook. It is likely therefore, that the reported proportion of textbooks is understated and the proportion of books (non-textbook) is overstated.

Table 3: Per capita number of publications across output categories over 2-year period (full credit for joint publications)

	В	By												By faculty qualification				By faculty qualification			
	instit	ution												- (	old		– new				
	ty	pe	В	By academic rank - old				B	y acade	emic ra	nk - ne	ew	PhD Prof.qual.			qual.	PhD Prof.qual			qual.	
Output category	Old	New	Prof	R	SL	L	Oth	Prof	R	SL	L	Oth	Yes	No	Yes	No	Yes	No	Yes	No	Total
Top30 A&F	0.47	0.05	0.99	0.50	0.52	0.22	0.19	0.46	0.07	0.02	0.00	0.06	0.53	0.40	0.51	0.42	0.25	0.02	0.05	0.06	0.24
Top30 Oth	0.11	0.01	0.25	0.21	0.06	0.06	0.01	0.15	0.00	0.00	0.00	0.00	0.19	0.02	0.02	0.18	0.03	0.01	0.00	0.02	0.05
Top60	0.57	0.06	1.24	0.71	0.58	0.28	0.20	0.62	0.07	0.03	0.00	0.06	0.72	0.41	0.53	0.60	0.28	0.03	0.05	0.08	0.29
Non-top60	0.98	0.37	1.66	1.29	1.07	0.71	0.33	3.15	0.48	0.17	0.06	0.53	1.19	0.75	0.92	1.04	1.19	0.26	0.27	0.58	0.64
Total academic journal	1.55	0.43	2.91	2.00	1.64	0.99	0.53	3.77	0.55	0.19	0.06	0.59	1.91	1.16	1.45	1.64	1.46	0.29	0.31	0.66	0.93
Professional journal	0.36	0.22	0.70	0.38	0.29	0.25	0.17	1.10	0.34	0.13	0.12	0.26	0.36	0.37	0.61	0.14	0.22	0.22	0.23	0.20	0.28
Total non-serial	0.85	0.30	1.74	0.67	0.78	0.50	0.46	2.05	0.49	0.13	0.15	0.43	1.02	0.67	0.83	0.87	0.58	0.26	0.33	0.24	0.55
Total	2.77	0.94	5.34	3.04	2.71	1.74	1.16	6.92	1.38	0.45	0.33	1.28	3.29	2.20	2.90	2.66	2.26	0.77	0.87	1.10	1.76

Table 4: Frequency distribution (%) of outputs (full credit for joint publications)

	ļ		Panel A						Panel I	3		Panel C			Panel D			
			puts	Ac	ademi	ademic journal outputs				Top60 <sup>2</sup>			30 A&	$:F^2$				
	No	0	1-5	6-10	11-15	>15	0	1-5	6-10	11-15	>15	0	1-2	3-6	0	1-2	3-6	
Old universities																		
Professor	166	14.5	50.0	24.1	7.2	4.2	16.9	68.1	13.9	0.6	0.6	42.2	40.4	17.5	52.4	32.5	15.1	
Reader	24	8.3	79.2	12.5	0.0	0.0	25.0	70.8	4.2	0.0	0.0	58.3	29.2	12.5	70.8	20.8	8.3	
Senior lecturer	104	19.2	68.3	10.6	1.9	0.0	33.7	64.4	1.9	0.0	0.0	64.4	29.8	5.8	68.3	26.9	4.8	
Lecturer	304	39.1	54.3	5.6	0.7	0.3	51.0	47.7	1.0	0.3	0.0	78.9	20.1	1.0	81.9	17.1	1.0	
Other	70	62.9	34.3	1.4	1.4	0.0	72.9	25.7	1.4	0.0	0.0	88.6	8.6	2.9	90.0	7.1	2.9	
Total	668	31.3	54.2	10.8	2.5	1.2	41.2	53.9	4.5	0.3	0.1	67.8	25.7	6.4	72.9	21.6	5.5	
New universities																		
Professor	39	15.4	33.3	33.3	5.1	12.8	20.5	53.8	17.9	2.6	5.2	53.8	43.6	2.6	64.1	33.3	2.6	
Reader	138	66.7	25.4	3.6	3.6	0.7	76.8	20.3	2.9	0.0	0.0	94.9	4.3	0.7	94.9	4.3	0.7	
Senior lecturer	467	81.8	16.5	1.5	0.2	0.0	89.3	10.3	0.4	0.0	0.0	98.1	1.7	0.2	98.3	1.5	0.2	
Lecturer	129	84.5	14.7	0.8	0.0	0.0	93.8	6.2	0.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	
Other	51	68.6	21.6	9.8	0.0	0.0	72.5	27.5	0.0	0.0	0.0	96.1	3.9	0.0	96.1	3.9	0.0	
Total	824	75.7	18.8	3.8	1.0	0.7	83.6	14.4	1.6	0.1	0.2	95.6	4.0	0.4	96.2	3.4	0.4	
Combined universities																		
Professor	205	14.6	46.8	25.9	6.8	5.9	17.6	65.4	14.6	1.0	1.5	44.4	41.0	14.6	54.6	32.7	12.7	
Reader	162	58.0	33.3	4.9	3.1	0.6	69.1	27.8	3.1	0.0	0.0	89.5	8.0	2.5	91.4	6.8	1.9	
Senior lecturer	571	70.4	25.9	3.2	0.5	0.0	79.2	20.1	0.7	0.0	0.0	91.9	6.8	1.2	92.8	6.1	1.1	
Lecturer	433	52.7	42.5	4.2	0.5	0.2	63.7	35.3	0.7	0.2	0.0	85.2	14.1	0.7	87.3	12.0	0.7	
Other	121	65.3	28.9	5.0	0.8	0.0	72.7	26.4	0.8	0.0	0.0	91.7	6.6	1.7	92.6	5.8	1.7	
Combined total	1492	55.8	34.7	6.9	1.7	0.9	64.6	32.1	2.9	0.2	0.2	83.2	13.7	3.1	85.8	11.5	2.7	

### Notes

- 1. The category 'reader' for new universities is a heterogeneous grouping that includes Principal Lecturers and Heads of Department/School. The publication record of Readers significantly exceeds that of the other individuals in this category.
- 2. Panels C and D are curtailed at 6 outputs as no-one in the community produced more than 6 publications in these categories of output. Indeed, only a very small number of professors at old universities produced more than 4 outputs: just 3(2) professor produced 5(6) *Top60* outputs and 2(0) produced 5(6) *Top30 A&F* outputs.

Table 5: Distribution of academic articles across disciplines

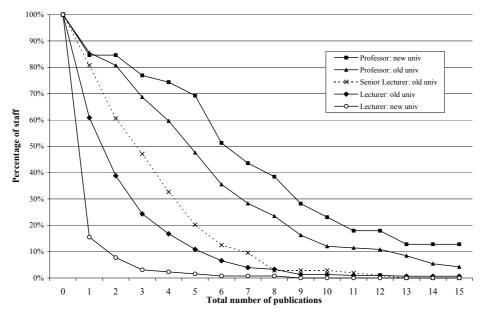
Discipline	No. of items	%	
Accounting	399.5	35.0	
Taxation	24.0	2.1	
Finance	<u>196.5</u>	<u>17.2</u>	
Sub-total for core discipline	620.0	54.3	
Management	213.0	18.7	
Economics	118.5	10.4	
Sociology/politics/philosophy	34.5	3.0	
Education	20.0	1.8	
IT/communications	20.5	1.8	
Statistics/econometrics	18.5	1.6	
History	17.0	1.5	
Law	15.5	1.4	
Medicine/health	8.5	0.7	
Psychology	5.0	0.4	
Other	16.0	1.4	
Foreign language	34.0	3.0	
Total	1141.0	100	

**Table 6: Patterns of co-authorship** 

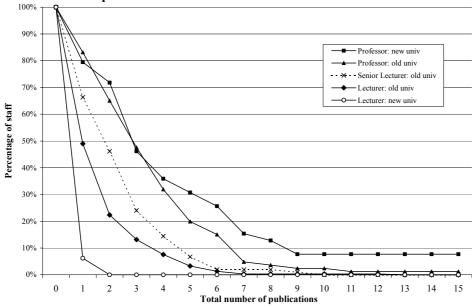
	% of publication outputs									
	Top30 A&F	Top30 Oth	Top60	Non-top60	Academic	Professional	Non-serial	Total		
Number of outputs	264	68	332	809	1141	355	682	2178		
No of authors										
1	47.7	25.0	43.1	36.8	38.7	65.1	41.4	43.8		
2	30.3	42.6	32.8	39.2	37.3	24.2	35.0	34.5		
3	15.5	26.5	17.8	17.8	17.8	7.6	15.8	15.5		
4	4.9	5.9	5.1	4.9	5.0	1.7	5.9	4.7		
>4	1.5	0.0	1.2	1.2	1.2	1.4	1.9	1.5		
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
Total % co-authored	52.3	75.0	56.9	63.2	61.3	34.9	58.6	56.2		
Ave no of authors	1.82	2.13	1.89	1.95	1.93	1.50	1.92	1.87		
Co-authored outputs										
Number of outputs	138	51	189	511	700	124	400	1224		
Ave no of authors for co- authored outputs	2.57	2.51	2.56	2.50	2.51	2.44	2.57	2.52		
No authored exclusively intra-department	18	1	19	72	91	37	86	214		
% authored exclusively intra-department	13.0	2.0	10.1	14.1	13.0	29.8	21.5	17.5		

Figure 1: Percentage of staff having at least a given number of publications

Panel A: Total publications



Panel B: Academic publications



Panel C: Top 60 publications

