

Individuals and Institutions Publishing Research in Real Estate—1989–1998

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Abstract

This article ranks individuals and institutions according to their publications in eight academic journals from 1989 through 1998. The results imply that the most prolific individuals tend to extensively coauthor papers. The rankings vary significantly over each five-year subperiod, yet the results identify a fairly small group of individuals who consistently dominate the top ranks during the decade examined. The results also identify a small group of authors who continue to exhibit relatively high publishing performance in the individual journals over more than two decades. This article also ranks institutions using authors' contemporaneous and current affiliations. Surprisingly, most of the top fifty institutions are so ranked regardless of the affiliation method used, suggesting that they either enjoy long term stability in their research personnel or tend to replace departing faculty with equally productive individuals.

Introduction

Like their counterparts in other academic disciplines, real estate scholars are expected to publish research in academic or professional journals and many spend a significant part of their time to this end. Universities and colleges often explicitly state research as part of their missions; most require publications in academic journals for tenure, promotion and raises. It is therefore not surprising that there is a continuing interest in relative publication performance, both within and across institutions. This study examines the publication performance of both individuals and institutions in the major academic real estate journals from 1989 through 1998.

There is a steady stream of literature monitoring publishing performance of individuals and institutions in other fields. There also have been several studies of publishing performance in real estate. The existing studies in real estate, however, tend to focus on single journals.¹ And while useful for their intended purposes, they do not provide the broad perspective needed to encompass the wide variety of journals that regularly publish real estate research. This analysis of the profession takes these additional publishing outlets into account.

This study examines publishing performance in a broad range of academic journals identified by the profession as important outlets for real estate research. The analysis provides a comprehensive picture of real estate publishing performance over an extended period of time. In addition, the results reported for individual journals also provide useful updates to prior studies that are a decade or more old.

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This study does not purport to measure or rank the relative significance of contributions to the field. First, all published papers are not of equal quality or importance for extending the base of knowledge in real estate. Second, some important contributions to real estate are published in finance, economics or other field journals that are not in the set of real estate journals. Nonetheless, these rankings are offered in the same spirit as previous publication studies in finance and economics.² Publications are easily measured and—with the appropriate caveat—offer a rudimentary measure of scholarly activity, especially when modified to take into account co-authorship and the mobility of individuals among universities during the period studied.

Data and Methodology

All of the performance measures in this study are based on the total number of papers authored (both unadjusted and adjusted for the number of co-authors) and total published pages (normalized across journals and adjusted for the number of co-authors) in eight widely recognized academic journals. The "core" academic real estate journals specifically specialize in real estate topics: *Journal of Real Estate Finance and Economics (JREFE)*; *Journal of Real Estate Research (JRER)*; and *Real Estate Economics (REE)*.³ Five journals are included that publish a wider range of topics but also regularly publish a significant amount of real estate research: *Journal of Housing Economics (JHE)*; *Journal of Regional Science (JRS)*; *Journal of Urban Economics (JUE)*; *Land Economics (LE)*; and *Regional Science and Urban Economics (RSUE)*. The survey of academic real estate scholars reported by Diaz, Black and Rabianski (1996), especially those that were the most highly rated by tenured faculty, guided the choice of journals to use as the basis of this study. The eight journals used here are identified as the "Academic Group" by Diaz, et al. (1996), excluding the *Journal of Real Estate Literature (JREL)* but including *RSUE* (which was not included in that study). *JREL* is not included in the set of journals because of the special roles it plays in the real estate literature beyond that of a typical research journal. *RSUE* is included in the broadest group of real estate journals for several reasons. First, it is a widely regarded urban economics journal of long standing, and the blurring of broad areas of urban economics and real estate in the academic literature suggests that it is an appropriate outlet for a wide range of real estate research. Second, an examination of the content of the journal, in terms of both subject and methodology, reveals that it resembles other journals in the set that have an urban economics orientation in that it, too, dedicates a significant amount of space to papers dealing with mainstream real estate research. Therefore, given the presence of the closely related urban and regional journals in the wider set of journals, *RSUE* is included in the study.

This study calculates the publication performance rankings for the eight journals conveniently arranged by groups ranging from the most narrowly defined real estate journals to the entire set of eight journals. The rankings for the individual journals are reported as well. The journal groups are constructed as follows. The "core" journals are *JREFE*, *JRER* and *REE*. The "base" real estate journals comprise the three core journals plus *JHE* and *JUE*. The latter two journals are important outlets for real estate researchers, judging from the publishing patterns of individuals in the

various journals, and so belong in the set of primary real estate journals. Of course, the entire set of eight journals is also considered as a separate group.⁴

The measures include all papers, notes, comments and replies published from 1989 through 1998. Any choice of time period is to some extent arbitrary. The time period used here simply reflects a desire to examine a full decade of publishing; the last year in the period was the most recent available when data gathering began. Individuals' rankings are also examined for each of the five-year subperiods within the decade. Although not the sole intent, the entire 1989–1998 period is nonetheless a fortunate choice in that it readily updates the publishing rankings for *REE* and *JUE* by Sa-Aadu and Shilling (1988) and Allen and Kau (1991), respectively.

Following the procedures used in rankings applied in other fields, several different publication measures were employed, each of which arguably measures a different aspect of publication performance.⁵ One ranking method relies on *appearances*, which is simply the number of times that the author appears in the journal(s) as either a sole author or co-author. Appearances indicate to some extent the number of research projects in which individuals are involved, providing one measure of research productivity. At the very least, the total number of appearances reflects the visibility of an individual in the research community, a perspective, perhaps, that university administrators might find compelling. Raw appearances, however, do not reflect the role of an individual as a sole author versus one of several authors of a paper. Recognizing this, a second ranking method uses *adjusted appearances*, with each appearance deflated by the number of co-authors.

Measures based on appearances, whether or not adjusted for the presence of co-authors, treat as identical all papers—regardless of length—as well as comments and replies; a five-page paper is equivalent to a twenty-five-page paper. In order to capture these differences, the third ranking method is based on *total pages*, with page lengths normalized across journals and adjusted for the number of co-authors.⁶

Exhibit 1 summarizes the co-authorship patterns for pages published during the decade for the various journal groupings and individual journals under examination. The core real estate journals each show a greater percentage of pages published by multiple authors compared to the non-core journals. Sole authored articles represent the largest category for three of the journals but constitute less than 50% of the total number of articles for each individual journal. The proportions of single authored papers fall

Exhibit 1
Percentage of Pages Published by Number of Co-Authors

Authors	ALL	BASE	CORE	JREFE	JRER	REE	JHE	JUE	JRS	LE	RSUE
1	37.4	35.2	27.9	31.6	25.0	27.7	41.9	47.9	39.6	39.1	43.0
2	43.6	43.1	44.7	43.3	46.5	44.2	40.7	40.6	48.9	38.4	45.5
3 or more	19.0	21.7	27.3	25.0	28.5	28.1	17.5	11.5	11.5	22.6	11.5

between 25%–32% for the core journals and 39%–48% for the non-core journals.⁷ *JRER* exhibits the lowest proportion of single-authored pages (25%) and *JUE* the highest (48%) in the set of eight journals.

Exhibit 2 reports the average number of authors per article and the average article length for each of the individual journals. Additionally, though not reported, each journal exhibits slightly longer papers and more co-authorship in the second five year period when compared to the first five years of the decade under study. This pattern of increasing co-authorship continues the trend observed earlier for individual real estate journals (Allen and Kau, 1991) and is consistent with the trends observed in other fields as well (Leband and Piette, 1995; and Moore, Newman and Turnbull, 2001).

Finally, as a point of reference for what follows, note that 2,381 different authors published a total of 2,650 papers in these eight journals during the period examined. Seven hundred forty six different institutions contributed research during the period. The total number of published pages was 43,871, ranging from 2,645 pages for the *JHE* to 7,948 pages for the *JUE*.

Individual Author Rankings

Exhibit 3 reports the publication ranking of individuals for the three core real estate journals as a group. As explained, these journals are the most narrowly focused on real estate within the set of the eight journals. The exhibit lists individuals according to rank measured by adjusted pages. As often found in these types of rankings, the spread of pages between the top ranked individuals is considerably greater than the spread between lower ranked individuals. This tendency is seen even within the top fifty authors. The ranking by pages, appearances adjusted for co-authors and raw appearances are correlated, a relationship that is not at all surprising. J. R. Webb is ranked either first or second according to all three measures. In addition to J. R. Webb, C. F. Sirmans and P. F. Colwell are also ranked in the top five by all three

Exhibit 2
Average Number of Authors and Article Length by Journal

Journal	Average Number of Authors	Average Article Length
<i>JREFE</i>	1.92	15.50
<i>JRER</i>	2.03	14.30
<i>REE</i>	1.97	20.42
<i>JHE</i>	1.77	20.19
<i>JUE</i>	1.61	18.02
<i>JRS</i>	1.70	16.94
<i>LE</i>	1.77	11.83
<i>RSUE</i>	1.66	18.96

Exhibit 3
Top Fifty Authors for Core Real Estate Journals

Author	Rank	Weighted Pages	Rank	Weighted Appearances	Rank	Unweighted Appearances
Webb, J. R.	1	219.0	1	13.7	2	32
Geltner, D. M.	2	200.0	4	11.5	8	15
Sirmans, C. F.	3	169.6	2	13.5	1	36
Colwell, P. F.	4	136.4	3	11.6	5	19
Pace, R. K.	5	131.1	10	7.5	16	11
Roulac, S. E.	6	121.8	8	8.0	16	11
Jud, G. D.	7	119.3	13	6.8	7	16
Chinloy, P.	8	118.8	9	7.6	16	11
Benjamin, J. D.	9	112.0	5	9.1	3	23
Wang, K.	10	111.6	7	8.4	4	21
Vandell, K. D.	11	102.8	25	5.0	41	7
Goetzmann, W. N.	12	98.5	64	3.0	100	4
Turnbull, G. K.	13	97.6	12	7.0	26	10
Ambrose, B. W.	14	97.3	20	5.6	26	10
Clapp, J. M.	15	96.5	22	5.2	26	10
Springer, T. M.	16	95.6	14	6.6	10	14
Yang, T. L. T.	17	92.7	30	4.8	26	10
Ling, D. C.	18	91.4	26	5.0	41	7
Graff, R. A.	19	90.5	41	4.1	37	8
Miceli, T. J.	20	90.3	6	8.6	16	11
Yavas, A.	21	87.3	15	6.5	16	11
Clayton, J.	22	84.6	44	4.0	100	4
Mei, J.	23	84.2	34	4.5	30	9
Sirmans, G. S.	24	82.8	17	6.1	8	15
Rutherford, R. C.	25	82.2	11	7.4	6	18
Liu, C. H.	26	81.8	42	4.0	16	11
Shilton, L. G.	27	81.8	26	5.0	30	9
Goodman, J. L. Jr.	28	73.8	26	5.0	41	7
Capozza, D. R.	29	71.4	19	5.7	16	11
Myer, F. C. N.	30	69.3	30	4.8	13	12
VanderHoff, J. H.	31	65.5	33	4.6	30	9
Hendershott, P. H.	32	65.4	21	5.3	16	11
Shilling, J. D.	33	65.3	23	5.1	12	13
Young, M. S.	34	62.5	78	2.6	51	6
Nourse, H. O.	35	61.7	18	5.8	37	8
Glascock, J. L.	36	61.0	23	5.1	13	12
Pagliari, J. L. Jr.	37	59.6	136	1.7	100	4
Gat, D.	38	58.6	44	4.0	100	4

Exhibit 3 (continued)
Top Fifty Authors for Core Real Estate Journals

Author	Rank	Weighted Pages	Rank	Weighted Appearances	Rank	Unweighted Appearances
Asabere, P. K.	39	57.0	16	6.5	10	14
Thibodeau, T. G.	40	56.9	36	4.3	41	7
Guntermann, K. L.	41	56.1	44	4.0	70	5
Mills, E. S.	42	56.0	26	5.0	51	6
Worzala, E. M.	43	55.6	62	3.1	51	6
Hartzell, D. J.	44	55.0	72	2.8	30	9
Megbolugbe, I. F.	45	54.9	64	3.0	41	7
Ziobrowski, A. J.	46	53.7	86	2.5	51	6
Wallace, N. E.	47	53.6	97	2.3	70	5
McIntosh, W.	48	53.5	38	4.2	13	12
Liang, Y.	49	51.7	38	4.2	16	11
Fisher, J. D.	50	51.3	59	3.1	51	6

measures. There is a high degree of consistency in the groups of top fifty authors across all three measures. Only eight of the top fifty authors ranked by pages lie outside the top fifty ranked by appearances adjusted for co-authors while eleven lie outside the top fifty ranked by raw appearances.

As pointed out, real estate, like all other academic disciplines, has a significant proportion of co-authored research. Comparing the adjusted appearances to the raw appearances in Exhibit 3, twenty-three of the listed authors are found to have adjusted appearances that are less than half of raw appearances. For an individual to have adjusted appearances less than half of raw appearances, he or she must be either co-authoring all of his or her research or writing at least one paper with three or more co-authors for every single-authored paper. Thus, the group of top fifty authors is split roughly equally between those whose research is almost exclusively co-authored and those whose research includes a more significant number of single-authored papers. The top ranks are to some extent dominated by individuals who heavily co-author.

The author rankings for the set of base real estate journals, which comprises the three core journals plus *JHE* and *JUE*, are reported in Exhibit 4. Several of the patterns observed for the core journals extend to this set as well. In this case, C. F. Sirmans is ranked first according to all three measures, although C. F. Sirmans, D. M. Geltner and J. R. Webb are virtually tied for the top rank in terms of pages. Nine of the top fifty authors ranked by pages lie outside the top fifty ranked by appearances adjusted for co-authors while ten lie outside the top fifty ranked by raw appearances—proportions that are almost identical to the core journals.

Exhibit 5 reports the rankings for the entire set of eight journals, the broadest definition of academic real estate journals. Once again, the rankings are correlated

Exhibit 4
Top Fifty Authors for Base Real Estate Journals

Author	Rank	Weighted Pages	Rank	Weighted Appearances	Rank	Unweighted Appearances
Sirmans, C. F.	1	222.9	1	18.0	1	49
Geltner, D. M.	2	222.1	4	12.6	8	18
Webb, J. R.	3	221.9	3	14.0	2	33
Turnbull, G. K.	4	199.9	2	15.1	4	22
Colwell, P. F.	5	150.2	5	12.6	6	21
Ling, D. C.	6	134.7	18	7.6	18	13
Pace, R. K.	7	131.1	20	7.5	28	11
Chinloy, P.	8	129.7	10	8.6	23	12
Jud, G. D.	9	129.4	16	7.8	8	18
Benjamin, J. D.	10	126.4	7	10.6	3	28
Roulac, S. E.	11	121.8	15	8.0	28	11
Miceli, T. J.	12	120.6	6	11.1	15	14
McMillen, D. P.	13	119.6	8	8.8	18	13
Clapp, J. M.	14	119.1	26	6.5	18	13
Yavas, A.	15	118.9	11	8.5	18	13
Brueckner, J. K.	16	117.8	11	8.5	46	9
Yinger, J.	17	117.7	33	6.0	76	6
Wang, K.	18	114.5	9	8.6	4	22
Vandell, K. D.	19	109.8	39	5.3	55	8
Goetzmann, W. N.	20	108.6	77	3.8	76	6
Gyourko, J.	21	104.3	27	6.5	23	12
Springer, T. M.	22	103.0	23	7.1	11	15
Ambrose, B. W.	23	101.9	31	6.1	28	11
Goodman, J. L. Jr.	24	101.0	24	7.0	37	10
Capozza, D. R.	25	97.9	17	7.7	11	15
Hendershott, P. H.	26	96.5	21	7.5	11	15
Riddiough, T. J.	27	94.4	49	4.8	46	9
Voith, R. P.	28	94.3	14	8.0	37	10
Yang, T. L. T.	29	92.7	49	4.8	37	10
Henderson, J. V.	30	92.5	38	5.5	67	7
Fujita, M.	31	90.9	98	3.3	76	6
Shilling, J. D.	32	90.6	19	7.6	7	20
Graff, R. A.	33	90.5	65	4.1	55	8
Goodman, A. C.	34	90.2	27	6.5	37	10
Wheaton, W. C.	35	89.9	13	8.3	18	13
Haurin, D. R.	36	88.1	25	6.8	15	14
Follain, J. R.	37	87.7	37	5.8	28	11
Jones, L. D.	38	87.6	42	5.0	106	5

Exhibit 4 (continued)
Top Fifty Authors for Base Real Estate Journals

Author	Rank	Weighted Pages	Rank	Weighted Appearances	Rank	Unweighted Appearances
Arnott, R.	39	86.3	60	4.3	67	7
Clayton, J.	40	84.6	68	4.0	144	4
Mei, J.	41	84.2	57	4.5	46	9
Sirmans, G. S.	42	82.8	32	6.1	11	15
Rutherford, R. C.	43	82.2	22	7.4	8	18
Liu, C. H.	44	81.9	67	4.1	28	11
Shilton, L. G.	45	81.8	42	5.0	46	9
McDonald, J. F.	46	81.6	33	6.0	37	10
Braid, R. M.	47	77.6	42	5.0	106	5
Rosenthal, S. S.	48	77.4	40	5.3	28	11
O'Flaherty, B.	49	77.1	108	3.0	192	3
Anas, A.	50	77.0	68	4.0	76	6

across measurement methods. Three of the authors are ranked in the top five regardless of the measurement basis. Only nine or thirteen of the top fifty authors ranked by pages fall out of the top fifty in terms of adjusted appearances or raw appearances, respectively—once again, proportions close to those for the narrower journal categories.

A quick glance at Exhibits 3–5 reveals differences in the mix of individuals across the journal categories. To make cross-group comparisons easier, Exhibit 6 summarizes the rankings by pages across the three categories, from the broadest to narrowest. Only twenty-five of the individuals who are ranked in the top one hundred for all journals are not so ranked for the five base real estate journals. In stark contrast, forty-six of the top one hundred authors for the eight journals fall out of the top one hundred for the three core real estate journals. On the other hand, thirty-one of the top one hundred overall did not publish in the core journals over the period studied. These observations, of course, reflect the wider scope of some of the journals in the broad set. Nonetheless, real estate scholars clearly have a significant presence in the broad set of journals; the top three authors in the core real estate journals, D. M. Geltner, C. F. Sirmans and J. R. Webb, are also ranked in the top four for the entire set of journals.

Exhibits 7, 8 and 9 break down the top ranked individuals by their ranking in each of the two five-year periods. For the core real estate journals, Exhibit 7 reveals much instability in the five-year rankings; only twenty out of the top fifty for the decade are in top fifty over both subperiods. The top four authors for the decade, however, all maintained high rates of output for the entire decade; J. R. Webb, D. M. Geltner,

Exhibit 5
Top Fifty Authors for Broad Real Estate Journals

Author	Rank	Weighted Pages	Rank	Weighted Pages	Rank	Weighted Pages
Turnbull, G. K.	1	302.0	1	23.1	2	33
Sirmans, C. F.	2	267.9	2	21.6	1	58
Geltner, D. M.	3	222.1	6	12.6	9	18
Webb, J. R.	4	221.9	3	14.0	2	33
Henderson, J. V.	5	200.1	11	11.0	21	14
Brueckner, J. K.	6	199.7	4	14.0	9	18
McMillen, D. P.	7	189.5	5	13.8	8	20
Fujita, M.	8	186.2	30	7.3	17	15
Braid, R. M.	9	175.3	9	12.5	28	13
Voith, R. P.	10	150.4	11	11.0	21	14
Colwell, P. F.	11	150.2	8	12.6	7	21
Ling, D. C.	12	147.5	22	8.3	17	15
Miceli, T. J.	13	143.1	6	12.6	15	16
Abdel-Rahman, H.	14	138.8	15	9.0	32	12
Anas, A.	15	135.0	34	7.0	49	10
Clapp, J. M.	16	132.2	33	7.0	21	14
Arnott, R.	17	132.1	40	6.6	38	11
Pace, R. K.	18	131.1	25	7.5	38	11
Yinger, J.	19	130.7	41	6.5	86	7
Chinloy, P.	20	129.7	19	8.6	32	12
Jud, G. D.	21	129.4	24	7.8	9	18
Benjamin, J. D.	22	128.6	10	11.0	4	29
Gyourko, J.	23	124.3	26	7.5	21	14
McDonald, J. F.	24	122.9	13	9.5	15	16
Roulac, S. E.	25	121.8	23	8.0	38	11
Hendershott, P. H.	26	121.5	13	9.5	9	18
Yavas, A.	27	118.9	20	8.5	28	13
Wang, K.	28	114.5	18	8.6	5	22
Capozza, D. R.	29	111.5	17	8.7	14	17
Green, R. K.	30	110.1	37	6.8	32	12
Vandell, K. D.	31	109.8	56	5.3	75	8
Jones, L. D.	32	109.3	45	6.0	105	6
Goetzmann, W. N.	33	108.6	113	3.8	105	6
Follain, J. R.	34	107.7	37	6.8	28	13
Goodman, A. C.	35	106.9	26	7.5	38	11
Springer, T. M.	36	103.0	32	7.1	17	15
Sasaki, K.	37	102.5	34	7.0	59	9
Ambrose, B. W.	38	101.9	43	6.1	38	11

Exhibit 5 (continued)
Top Fifty Authors for Broad Real Estate Journals

Author	Rank	Weighted Pages	Rank	Weighted Pages	Rank	Weighted Pages
Goodman, J. L. Jr.	39	101.0	34	7.0	49	10
Wildasin, D. E.	40	100.8	60	5.0	105	6
Dubin, R. A.	41	99.1	50	5.5	105	6
Shilling, J. D.	42	97.5	20	8.5	5	22
Strange, W.	43	96.5	50	5.5	59	9
Smith, T. E.	44	96.3	92	4.2	59	9
Riddiough, T. J.	45	94.4	67	4.8	59	9
Ihlanfeldt, K. R.	46	93.0	57	5.3	75	8
Yang, T. L. T.	47	92.7	70	4.8	49	10
Wheaton, W. C.	48	92.5	16	8.8	21	14
Graff, R. A.	49	90.6	90	4.2	75	8
O'Flaherty, B.	50	88.8	94	4.0	200	4

C. F. Sirmans and P. F. Colwell are all ranked well within the top twenty for both subperiods.

Similar patterns emerge for the narrow real estate journals reported in Exhibit 8 and the broad journals in Exhibit 9. Only twenty-one and twenty-three of the top fifty authors in the base and broad categories, respectively, remain in the top fifty over both subperiods. And once again the top few authors for the decade exhibit more stable rankings over the subperiods than do the top fifty as a whole. For the base journals in Exhibit 8, the top five ranked authors are all ranked in the top twenty for both subperiods. For the broad journals in Exhibit 9, eight of the top nine authors for the decade remain in the top twenty for both five-year periods.

The variation in rankings across the five-year periods is not all that surprising. Given the well known lifecycle for most academic research careers, it is possible that the last five-year period in the exhibits is picking up the waning productivity years of some researchers while at the same time picking up the initial high productivity years of other researchers who are just beginning their careers. Still, there is a remarkable durability for the most highly ranked; the five or six most prolific publishers in each journal category are all established researchers who enjoy the decade-based rankings largely by remaining in the top twenty across the subperiods.

In order to examine in more detail how the individuals rank across the separate journals, Exhibit 10 reports the individual journal rankings of the top authors for the entire set of eight journals. The pages reported for the entire set of eight journals are normalized and adjusted for coauthors; the pages reported for each individual journal are adjusted for coauthors but not normalized across journals. Several patterns emerge.

Exhibit 6
Summary of Authors Across Categories

Author	Rank	Broad Pages	Rank	Base Pages	Rank	Core Pages
Turnbull, G. K.	1	302.0	4	199.9	13	97.6
Sirmans, C. F.	2	267.9	1	222.9	3	169.6
Geltner, D. M.	3	222.1	2	222.1	2	200.0
Webb, J. R.	4	221.9	3	221.9	1	219.0
Henderson, J. V.	5	200.1	30	92.5	—	—
Brueckner, J. K.	6	199.7	16	117.8	52	50.3
McMillen, D. P.	7	189.5	13	119.6	289	14.0
Fujita, M.	8	186.2	31	90.9	78	41.0
Braid, R. M.	9	175.3	47	77.5	—	—
Voith, R. P.	10	150.4	28	94.3	164	24.0
Colwell, P. F.	11	150.2	5	150.2	4	136.4
Ling, D. C.	12	147.5	6	134.7	18	91.4
Miceli, T. J.	13	143.1	12	120.6	20	90.3
Abdel-Rahman, H.	14	138.8	142	37.6	—	—
Anas, A.	15	135.0	50	77.0	136	27.0
Clapp, J. M.	16	132.2	14	119.1	15	96.5
Arnott, R.	17	132.1	39	86.3	80	40.0
Pace, R. K.	18	131.1	7	131.1	5	131.1
Yinger, J.	19	130.7	17	117.7	—	—
Chinloy, P.	20	129.7	8	129.7	8	118.8
Jud, G. D.	21	129.4	9	129.4	7	119.3
Benjamin, J. D.	22	128.6	10	126.4	9	112.0
Gyourko, J.	23	124.3	21	104.3	58	49.8
McDonald, J. F.	24	122.9	46	81.6	212	19.0
Roulac, S. E.	25	121.8	11	121.8	6	121.8
Hendershott, P. H.	26	121.5	26	96.5	32	65.4
Yavas, A.	27	118.9	15	118.9	21	87.3
Wang, K.	28	114.5	18	114.5	10	111.6
Capozza, D. R.	29	111.5	25	97.9	29	71.4
Green, R. K.	30	110.1	53	71.4	61	48.6
Vandell, K. D.	31	109.8	19	109.8	11	102.8
Jones, L. D.	32	109.3	38	87.6	84	38.5
Goetzmann, W. N.	33	108.6	20	108.6	12	98.5
Follain, J. R.	34	107.7	37	87.7	91	36.0
Goodman, A. C.	35	106.9	34	90.2	93	35.6
Springer, T. M.	36	103.0	22	103.0	16	95.6
Sasaki, K.	37	102.5	65	63.7	—	—

Exhibit 6 (continued)
Summary of Authors Across Categories

Author	Rank	Broad Pages	Rank	Base Pages	Rank	Core Pages
Ambrose, B. W.	38	101.9	23	101.9	14	97.3
Goodman, J. L. Jr.	39	101.0	24	101.0	28	73.8
Wildasin, D. E.	40	100.8	390	15.3	—	—
Dubin, R. A.	41	99.0	59	66.3	143	26.0
Shilling, J. D.	42	97.5	32	90.6	33	65.3
Strange, W.	43	96.5	57	68.1	437	9.0
Smith, T. E.	44	96.3	—	—	—	—
Riddiough, T. J.	45	94.4	27	94.4	76	44.4
Ihlanfeldt, K. R.	46	92.9	51	75.1	—	—
Yang, T L T.	47	92.7	29	92.7	17	92.7
Wheaton, W. C.	48	92.4	35	89.9	120	29.6
Graff, R. A.	49	90.5	33	90.5	19	90.5
O'Flaherty, B.	50	88.8	49	77.1	—	—
Haurin, D. R.	51	88.1	36	88.1	132	27.9
Asami, Y.	52	87.6	313	18.4	—	—
Rosenthal, S. S.	53	86.6	48	77.4	271	15.0
Gatzlaff, D. H.	54	85.7	52	73.4	56	49.9
Clayton, J.	55	84.6	40	84.6	22	84.6
Mei, J.	56	84.2	41	84.2	23	84.2
Anselin, L.	57	84.2	850	6.9	—	—
Crihfield, J. B.	58	83.9	565	10.7	—	—
Hoyt, W. H.	59	82.9	132	39.5	—	—
Sirmans, G. S.	60	82.8	42	82.8	24	82.8
Tabuchi, T.	61	82.7	130	40.7	—	—
Rutherford, R. C.	62	82.2	43	82.2	25	82.2
Smith, V. K.	63	82.2	770	7.6	—	—
Liu, C. H	64	81.8	44	81.8	26	81.8
Shilton, L. G.	65	81.8	45	81.8	27	81.8
Coulson, N. E.	66	78.3	63	63.9	178	22.8
Quigley, J. M.	67	77.9	62	64.4	95	35.0
de Bartolome, C.	68	76.4	72	61.4	—	—
Mills, E. S.	69	75.6	54	70.9	42	56.0
Sivitanidou, R.	70	75.4	64	63.7	—	—
Wilson, J. D.	71	75.1	201	28.0	—	—
Ioannides, Y. M.	72	74.1	420	14.2	—	—
Nijkamp, P.	73	74.1	545	11.2	—	—
Thibodeau, T. G.	74	73.3	60	65.8	40	56.9

Exhibit 6 (continued)
Summary of Authors Across Categories

Author	Rank	Broad Pages	Rank	Base Pages	Rank	Core Pages
Read, C.	75	72.9	70	62.1	85	38.0
Helsley, R. W.	76	72.0	154	34.9	—	—
Myer, F. C. N.	77	69.3	55	69.3	30	69.3
Dietzenbacher, E.	78	69.2	—	—	—	—
Wachter, S. M.	79	68.9	66	63.5	72	45.5
Kuo, C.-L.	80	68.4	56	68.4	51	50.5
Grenadier, S. R.	81	67.7	84	54.4	143	26.0
Malpezzi, S.	82	67.7	140	37.8	117	30.8
Kanemoto, Y.	83	67.4	274	20.7	—	—
Kau, J. B.	84	67.1	58	67.1	70	46.4
Lee, K.	85	66.8	107	47.6	—	—
ten Raa, T.	86	66.7	—	—	—	—
Pogodzinski, J. M.	87	66.3	171	32.6	163	24.0
Viton, P. A.	88	66.3	245	23.0	—	—
Glascott, J. L.	89	66.3	73	61.0	36	61.0
LeSage, J. P.	90	66.2	—	—	—	—
VanderHoff, J. H.	91	65.5	61	65.5	31	65.5
Rouwendal, J.	92	65.5	110	47.2	—	—
Thisse, J.-F.	93	64.5	254	22.6	—	—
Zax, J. S.	94	63.1	112	46.4	—	—
Mayer, C. J.	95	63.0	85	54.3	127	28.6
Wang, P.	96	62.8	709	8.4	—	—
Zorn, P. M.	97	62.7	67	62.7	146	25.8
Young, M. S.	98	62.5	68	62.5	34	62.5
Wallace, N. E.	99	62.1	69	62.1	47	53.6
Nourse, H. O.	100	61.7	71	61.7	35	61.7

First, Exhibit 10 shows a changing mix of top contributors across the individual journals. No author appears in the top one hundred in all eight journals. Second, although no small group of authors dominates the rankings in every one of the journals, the top forty do still exhibit significant overlap for the core journals. Three individuals, B. Ambrose, C. F. Sirms and D. M. Geltner, appear in the top forty in all of the core journals—*JREFE*, *JRER* and *REE*. Eleven of the top forty authors appear in the top ranks for two out of three core journals. Third, the top publishers exhibit some degree of concentration in their choice of outlets. For example, all of the authors who are ranked in the top five for the entire set of journals are also ranked in the top five in at least one of the individual journals.

Exhibit 7
Top Fifty Authors for Core Real Estate Journals

Author	Overall		1989–1993		1994–1998	
	Rank	Weighted Pages	Rank	Weighted Pages	Rank	Weighted Pages
Webb, J. R.	1	219.1	4	76.1	1	143.0
Geltner, D. M.	2	200.1	1	136.4	12	63.7
Sirmans, C. F.	3	169.6	5	72.2	4	97.4
Colwell, P. F.	4	136.4	11	50.2	6	86.2
Pace, R. K.	5	131.1	28	35.9	5	95.2
Roulac, S. E.	6	121.8	94	18.7	3	103.1
Jud, G. D.	7	119.3	186	10.0	2	109.3
Chinloy, P.	8	118.8	8	61.0	16	57.8
Benjamin, J. D.	9	112.1	22	39.6	10	72.5
Wang, K.	10	111.6	30	35.4	8	76.2
Vandell, K. D.	11	102.8	2	94.2	318	8.6
Goetzmann, W. N.	12	98.5	6	72.0	73	26.5
Turnbull, G. K.	13	97.6	13	47.7	24	49.9
Ambrose, B. W.	14	97.3	9	60.4	42	36.9
Clapp, J. M.	15	96.5	7	61.7	49	34.8
Springer, T. M.	16	95.6	17	42.5	19	53.1
Yang, T. L. T.	17	92.7	15	45.7	33	47.0
Ling, D. C.	18	91.4	3	78.4	203	13.0
Graff, R. A.	19	90.5	47	28.0	13	62.5
Miceli, T. J.	20	90.3	10	54.9	46	35.4
Yavas, A.	21	87.3	61	23.6	11	63.7
Clayton, J.	22	84.6	—	—	7	84.6
Mei, J.	23	84.2	208	9.0	9	75.2
Sirmans, G. S.	24	82.8	33	34.7	30	48.2
Rutherford, R. C.	25	82.2	16	42.9	40	39.3
Liu, C. H.	26	81.8	27	36.0	34	45.8
Shilton, L. G.	27	81.8	50	26.5	18	55.3
Goodman, J. L. Jr.	28	73.8	81	20.6	20	53.2
Capozza, D. R.	29	71.4	51	26.3	35	45.1
Myer, F. C. N.	30	69.3	77	20.9	29	48.4
VanderHoff, J. H.	31	65.5	43	30.5	48	35.0
Hendershott, P. H.	32	65.4	14	47.5	134	17.9
Shilling, J. D.	33	65.3	26	36.6	63	28.7
Young, M. S.	34	62.5	—	—	13	62.5
Nourse, H. O.	35	61.7	55	25.0	44	36.7
Glascock, J. L.	36	61.0	19	41.4	112	19.6

Exhibit 7 (continued)
Top Fifty Authors for Core Real Estate Journals

Author	Overall		1989–1993		1994–1998	
	Rank	Weighted Pages	Rank	Weighted Pages	Rank	Weighted Pages
Pagliari, J. L. Jr.	37	59.6	107	17.2	39	42.4
Gat, D.	38	58.6	—	—	15	58.6
Asabere, P. K.	39	57.0	25	37.1	110	19.9
Thibodeau, T. G.	40	56.9	45	29.7	70	27.2
Guntermann, K. L.	41	56.1	208	9.0	32	47.1
Mills, E. S.	42	56.0	36	34.0	101	22.0
Worzala, E. M.	43	55.6	—	—	17	55.6
Hartzell, D. J.	44	55.0	35	34.3	108	20.7
Megbolugbe, I. F.	45	54.9	405	4.2	21	50.7
Ziobrowski, A. J.	46	53.7	24	37.8	158	15.9
Wallace, N. E.	47	53.6	224	8.6	36	45.0
McIntosh, W.	48	53.5	78	20.9	55	32.6
Liang, Y.	49	51.7	450	2.9	26	48.8
Fisher, J. D.	50	51.3	18	42.0	287	9.3

Exhibit 11 lists the top twenty authors for each of the eight journals. The exhibit clearly shows the changing mix of top contributors across the individual journals, although with much overlap for the core journals. The overlap of the top ranked authors, however, diminishes considerably for journals outside the core. In addition, the five non-core journals as a group exhibit more variation in top authors than does the real estate core, which is expected given the greater breadth of topics outside real estate that are covered by these journals.

In addition, Exhibit 11 updates earlier rankings for *JUE* and *REE* and reveals some productivity longevity among top ranked publishers in these journals. Looking at the *JUE*, six of the top twenty authors identified here for 1989–1998 also appeared in the top twenty for 1974–1989 as reported by Allen and Kau (1991). These individuals are R. Braid, J. Brueckner, M. Fujita, J. V. Henderson, J. McDonald and W. Wheaton. For *REE*, on the other hand, three of the top twenty for 1989–1998 ranked according to adjusted pages are also in the top twenty ranked by adjusted appearances for 1973–1987 as reported by Sa-Aadu and Shilling (1988). These individuals are C. F. Sirmans, P. H. Hendershott and K. Vandell.

Exhibit 11 also reports the concentration ratios for the top twenty authors. The top twenty in the core real estate journals account for 20.4%–24.3% of the pages published in each journal. There is more variation for the non-core journals as a group, ranging from a low of 13.1% for *LE* to 27.2% for the *JHE*. The higher concentration

Exhibit 8
Top Fifty Authors for Base Real Estate Journals

Author	Overall		1989-1993		1994-1998	
	Rank	Weighted Pages	Rank	Weighted Pages	Rank	Weighted Pages
Sirmans, C. F.	1	222.9	2	102.2	2	120.6
Geltner, D. M.	2	222.1	1	141.6	12	80.5
Webb, J. R.	3	221.9	9	78.9	1	142.9
Turnbull, G. K.	4	199.9	7	85.1	3	114.7
Colwell, P. F.	5	150.2	20	57.8	8	92.3
Ling, D. C.	6	134.7	8	85.0	41	49.6
Pace, R. K.	7	131.1	53	35.8	7	95.2
Chinloy, P.	8	129.7	11	71.8	24	57.8
Jud, G. D.	9	129.4	186	15.0	4	114.3
Benjamin, J. D.	10	126.4	23	53.9	15	72.5
Roulac, S. E.	11	121.8	140	18.6	5	103.1
Miceli, T. J.	12	120.6	6	85.2	80	35.4
McMillen, D. P.	13	119.6	15	62.6	26	57.0
Clapp, J. M.	14	119.1	16	61.7	25	57.4
Yavas, A.	15	118.9	103	23.5	6	95.4
Brueckner, J. K.	16	117.8	63	33.9	10	83.8
Yinger, J.	17	117.7	3	97.0	167	20.7
Wang, K.	18	114.5	46	38.2	13	76.2
Vandell, K. D.	19	109.8	4	94.2	248	15.6
Goetzmann, W. N.	20	108.6	10	72.0	75	36.6
Gyourko, J.	21	104.3	12	66.4	70	37.8
Springer, T. M.	22	103.0	25	49.8	36	53.2
Ambrose, B. W.	23	101.9	17	60.4	60	41.5
Goodman, J. L. Jr.	24	101.0	44	40.4	22	60.5
Capozza, D. R.	25	97.9	34	43.9	33	54.0
Hendershott, P. H.	26	96.5	21	56.8	65	39.6
Riddiough, T. J.	27	94.4	277	10.7	11	83.6
Voith, R. P.	28	94.3	14	65.1	106	29.1
Yang, T. L. T.	29	92.7	31	45.6	51	47.0
Henderson, J. V.	30	92.5	18	58.7	88	33.7
Fujita, M.	31	90.9	5	85.5	685	5.3
Shilling, J. D.	32	90.6	29	48.3	59	42.2
Graff, R. A.	33	90.5	81	28.0	19	62.5
Goodman, A. C.	34	90.2	48	37.6	37	52.5
Wheaton, W. C.	35	89.9	27	48.4	61	41.5
Haurin, D. R.	36	88.1	50	36.5	39	51.6

Exhibit 8 (continued)
Top Fifty Authors for Base Real Estate Journals

Author	Overall		1989-1993		1994-1998	
	Rank	Weighted Pages	Rank	Weighted Pages	Rank	Weighted Pages
Follain, J. R.	37	87.7	37	42.5	55	45.1
Jones, L. D.	38	87.6	71	31.1	27	56.5
Arnott, R.	39	86.3	13	65.2	161	21.1
Clayton, J.	40	84.6	—	—	9	84.6
Mei, J.	41	84.2	324	9.0	14	75.2
Sirmans, G. S.	42	82.8	58	34.6	46	48.2
Rutherford, R. C.	43	82.2	36	42.9	67	39.3
Liu, C. H.	44	81.8	52	36.0	54	45.8
Shilton, L. G.	45	81.8	88	26.5	29	55.2
McDonald, J. F.	46	81.6	19	58.6	145	22.9
Braid, R. M.	47	77.5	45	39.9	72	37.6
Rosenthal, S. S.	48	77.4	51	36.4	62	41.0
O'Flaherty, B.	49	77.1	28	48.3	107	28.7
Anas, A.	50	77.0	43	40.4	76	36.6

for *JHE*, however, likely reflects to some extent the relatively fewer total pages published in that journal during the period studied.

Institution Rankings by Contemporaneous Author Affiliation

Following the usual approach, the first set of institution rankings is calculated using the authors' contemporaneous affiliations, that is, their institutional affiliation listed at the time of the publication. When more than one affiliation is given, the institution that is listed first by the author was used. This approach to institutional attribution provides one measure of institutional visibility in the real estate research community. It also provides some indication of an institution's support for research, and therefore is one measure of its contribution to real estate research.

Exhibit 12 reports the percentage of pages published by the various types of institutions represented by the author's affiliation at time of publication.⁸ Universities in the United States and Canada are responsible for three quarters of the published research in the core and base journals. Other foreign universities exhibit a strong presence in these journals, accounting for up to 10% of the pages. This group is most strongly represented outside the base journals, with approximately one-quarter of the pages published in *JRS* and *RSUE* during the decade. Private firms as a group contribute about 5% of the total pages in the entire set of eight journals, ranging widely from a high of 16% in *JRER* to a low of less than 0.5% in *RSUE*.

Exhibit 9
Top Fifty Authors for Broad Real Estate Journals

Author	Overall		1989–1993		1994–1998	
	Rank	Weighted Pages	Rank	Weighted Pages	Rank	Weighted Pages
Turnbull, G. K.	1	302.0	1	155.5	1	146.4
Sirmans, C. F.	2	267.9	4	134.7	3	133.1
Geltner, D. M.	3	222.1	2	141.6	16	80.5
Webb, J. R.	4	221.9	15	78.9	2	142.9
Henderson, J. V.	5	200.1	14	82.5	5	117.6
Brueckner, J. K.	6	199.7	19	72.5	4	127.1
McMillen, D. P.	7	189.5	5	103.5	12	86.0
Fujita, M.	8	186.2	3	140.8	77	45.4
Braid, R. M.	9	175.3	11	91.6	14	83.6
Voith, R. P.	10	150.4	6	102.5	64	47.9
Colwell, P. F.	11	150.2	32	57.8	11	92.3
Ling, D. C.	12	147.5	13	85.0	32	62.5
Miceli, T. J.	13	143.1	7	100.2	81	42.9
Abdel-Rahman, H.	14	138.8	27	63.4	19	75.3
Anas, A.	15	135.0	29	60.8	21	74.1
Clapp, J. M.	16	132.2	28	61.7	24	70.5
Arnott, R.	17	132.1	18	74.1	37	58.0
Pace, R. K.	18	131.1	79	35.8	10	95.2
Yinger, J.	19	130.7	8	97.0	127	33.6
Chinloy, P.	20	129.7	21	71.8	38	57.8
Jud, G. D.	21	129.4	318	15.0	6	114.3
Benjamin, J. D.	22	128.6	34	56.1	23	72.5
Gyourko, J.	23	124.3	12	86.5	106	37.8
McDonald, J. F.	24	122.9	16	77.8	78	45.0
Roulac, S. E.	25	121.8	235	18.6	8	103.1
Hendershott, P. H.	26	121.5	17	75.1	71	46.3
Yavas, A.	27	118.9	151	23.5	9	95.4
Wang, K.	28	114.5	68	38.2	18	76.2
Capozza, D. R.	29	111.5	42	50.0	33	61.5
Green, R. K.	30	110.1	—	—	7	110.1
Vandell, K. D.	31	109.8	9	94.2	406	15.6
Jones, L. D.	32	109.3	104	31.1	17	78.2
Goetzmann, W. N.	33	108.6	20	72.0	112	36.6
Follain, J. R.	34	107.7	38	53.0	43	54.7
Goodman, A. C.	35	106.9	37	54.3	47	52.5
Springer, T. M.	36	103.0	43	49.8	46	53.2

Exhibit 9 (continued)
Top Fifty Authors for Broad Real Estate Journals

Author	Overall		1989–1993		1994–1998	
	Rank	Weighted Pages	Rank	Weighted Pages	Rank	Weighted Pages
Sasaki, K.	37	102.5	26	64.0	103	38.4
Ambrose, B. W.	38	101.9	31	60.4	87	41.5
Goodman, J. L. Jr.	39	101.0	64	40.4	35	60.5
Wildasin, D. E.	40	100.8	10	94.1	1059	6.6
Dubin, R. A.	41	99.0	69	38.0	34	60.9
Shilling, J. D.	42	97.5	40	51.5	74	46.0
Strange, W.	43	96.5	36	55.4	92	41.0
Smith, T. E.	44	96.3	51	44.3	51	51.9
Riddiough, T. J.	45	94.4	480	10.7	15	83.6
Ihlanfeldt, K. R.	46	92.9	22	67.1	184	25.8
Yang, T. L. T.	47	92.7	49	45.6	69	47.0
Wheaton, W. C.	48	92.4	41	50.9	88	41.5
Graff, R. A.	49	90.5	119	28.0	30	62.5
O'Flaherty, B.	50	88.8	44	48.3	93	40.4

Exhibit 13 lists the top forty institutions responsible for the research published in the three core real estate journals. The rank in the first column reflects adjusted pages, the actual number of which is reported in the second column. Once again, the spread of pages between the top ranked institutions is greater than the spread between those at lower ranks. The ranking by pages, appearances adjusted for co-authors and raw appearances are very highly correlated. There is a high degree of consistency in the rankings across the three measures; eight appear in the top ten and thirty-six of the institutions are in the top forty regardless of how publication performance is measured.

The institution rankings for the other sets of journals, the base real estate journals and the entire set of eight, are in Exhibits 14 and 15. As in the individual author's case, the general patterns observed in the institutional rankings for the core journals tend to apply to the base and complete set of journals, too.

Exhibit 16 summarizes the rankings by pages across the three categories of journals, from the broadest to narrowest. The exhibit clearly shows the consistency in the composition of the top institutions across the various journals; twenty-six institutions appear in the top forty no matter how broadly or narrowly the set of real estate journals is defined.

A summary of how the top institutions for the entire set of journals rank across the separate journals is presented in Exhibit 17. The pages reported for the entire set of eight journals are normalized and adjusted for coauthors while the pages reported for

Exhibit 10
Authors by Journal

Author	Overall Rank	Pages	JREFE Rank	JRER Pages	JRER Rank	REE Pages	REE Rank	JHE Pages	JHE Rank	JUE Pages	JUE Rank	JRS Pages	JRS Rank	LE Pages	LE Rank	RSUE Pages	RSUE Rank
Turnbull, G. K.	1	302	3	69	274	6	54	28	21	38	4	104	11	28	22	43	
Sirmans, C. F.	2	267	26	30	6	73	3	87	31	24	31	45	57	21	350	5	70
Geltner, D. M.	3	222	4	65	40	26	1	150	50	18	238	10	—	—	—	—	23
Webb, J. R.	4	221	19	36	1	179	234	8	—	—	449	3	—	—	—	—	—
Henderson, J. V.	5	200	—	—	—	—	—	—	—	3	120	—	—	—	—	1	129
Brueckner, J. K.	6	199	14	40	—	—	151	13	39	22	16	65	68	19	110	12	7
McMillen, D. R.	7	189	104	14	—	—	—	—	—	1	137	8	45	36	19	282	9
Fujita, M.	8	186	12	41	—	—	—	—	—	16	65	53	21	—	—	3	90
Braid, R. M.	9	175	—	—	—	—	—	—	—	5	101	4	59	—	—	16	51
Voith, R. P.	10	150	—	—	—	—	36	33	127	7	84	5	50	—	—	—	238
Colwell, P. F.	11	150	5	64	14	50	48	29	—	—	123	18	—	—	—	—	10
Ling, D. C.	12	147	117	13	89	16	5	80	53	17	40	38	—	—	364	5	282
Miceli, T. J.	13	143	53	22	356	4	4	87	—	—	39	39	—	—	—	50	27
Abdel-Rahman, H.	14	138	—	—	—	—	—	—	—	—	29	49	9	43	—	—	5
Anas, A.	15	135	36	27	—	—	—	—	58	15	28	49	15	32	—	—	37
Clapp, J. M.	16	132	9	43	149	11	11	57	144	6	84	23	119	14	—	—	33
Arnett, R.	17	132	14	40	—	—	—	—	58	15	32	44	193	10	—	—	21
Pace, R. K.	18	131	2	81	22	44	217	8	—	—	—	—	—	—	—	—	43
Yinger, J.	19	130	—	—	—	—	—	—	18	29	2	124	—	—	—	—	—
Chinloy, P.	20	129	11	42	60	21	6	73	67	14	—	—	—	—	—	—	140
Jud, G. D.	21	129	74	18	3	100	330	4	75	13	—	—	—	—	—	—	—
Benjamin, J. D.	22	128	100	14	4	77	55	27	181	3	164	15	—	—	—	—	431
Gyourko, J.	23	124	—	—	188	9	13	52	—	—	15	71	—	—	—	—	2
McDonald, J. F.	24	122	69	19	—	2	124	—	—	—	10	81	172	11	74	15	115
Roulac, S. E.	25	121	—	—	10	60	81	12	67	28	—	—	—	—	—	—	18
Hendershot, P. H.	26	121	56	21	—	—	—	—	—	—	—	—	—	—	—	43	30

Exhibit 10 (continued)
Authors by Journal

Author	Overall Rank	JREFE Pages	JREFE Rank	JREF Pages	JREF Rank	JHE Pages	JHE Rank	JUE Pages	JUE Rank	JRS Pages	JRS Rank	LE Pages	LE Rank	RSUE Pages	RSUE Rank	Pages
Yavas, A.	27	118	23	33	104	14	51	44	20	96	21	—	—	—	—	—
Wang, K.	28	114	197	8	12	51	7	69	—	449	3	—	—	—	—	—
Capozza, D. R.	29	111	45	25	200	8	17	49	—	50	34	301	6	—	—	282
Green, R. K.	30	110	125	12	—	—	18	45	49	19	233	10	—	364	5	26
Vandell, K. D.	31	109	101	14	—	—	2	116	109	9	—	—	—	—	—	40
Jones, L. D.	32	109	53	22	—	—	67	24	—	18	64	—	—	—	—	53
Goetzmann, W. N.	33	108	1	83	—	—	86	20	75	13	—	—	—	—	—	—
Follain, J. R.	34	107	84	17	—	—	59	26	7	37	66	29	—	—	—	62
Goodman, A. C.	35	106	268	6	—	—	21	40	1	50	103	20	—	—	—	94
Springer, T. M.	36	103	7	46	28	36	113	16	106	9	—	—	—	—	—	20
Sasaki, K.	37	102	—	—	—	—	—	—	—	—	8	83	—	—	—	17
Ambrose, B. W.	38	101	18	38	33	31	28	36	151	6	—	—	—	—	—	46
Goodman, J. L. Jr.	39	101	75	18	26	37	67	24	10	35	—	—	—	—	—	—
Wildasin, D. E.	40	100	—	—	—	—	—	—	—	—	103	20	—	—	—	2
Dubin, R. A.	41	99	39	26	—	—	—	—	3	45	345	7	—	74	15	102
Shilling, J. D.	42	97	31	28	129	12	35	33	60	15	129	17	392	3	—	20
Strange, W.	43	96	169	9	—	—	—	—	—	—	14	77	—	—	—	35
Smith, T. E.	44	96	—	—	—	—	—	—	—	—	—	2	72	—	—	34
Riddough, T. J.	45	94	34	27	—	—	80	21	138	6	22	58	—	—	—	—
Ilianfieldt, K. R.	46	92	—	—	—	—	—	—	71	13	6	84	—	196	8	238
Yang, T. L. T.	47	92	33	27	125	12	8	66	—	—	—	—	—	—	—	10
Wheaton, W. C.	48	92	292	5	—	—	36	33	—	—	13	78	—	—	—	3
Graff, R. A.	49	90	29	29	9	63	—	—	—	—	—	—	—	—	—	14
O'Flaherty, B.	50	88	—	—	—	—	—	—	8	37	19	63	—	—	—	165
Haurin, D. R.	51	88	169	9	—	—	58	26	4	42	48	35	—	—	—	—
Asami, Y.	52	87	—	—	—	—	—	—	79	24	40	23	—	—	8	57

Exhibit 10 (continued)
Authors by Journal

Author	Overall Rank	Pages	JREFE Rank	Pages	JERR Rank	Pages	REE Rank	Pages	JHE Rank	Pages	JRS Rank	Pages	JLE Rank	Pages	RSUE Rank	Pages	Pages
Rosenthal, S. S.	53	86	96	15	—	—	—	—	—	11	81	—	—	—	—	216	11
Gatzlaff, D. H.	54	85	104	14	115	13	50	29	—	—	58	30	—	—	130	11	—
Clayton, J.	55	84	48	24	25	38	46	30	—	—	—	—	—	—	—	—	—
Mei, J.	56	84	5	64	274	6	101	18	—	—	—	—	—	—	—	—	—
Anselin, L.	57	84	—	—	—	—	—	—	—	279	9	14	34	—	—	13	54
Cribfield, J. B.	58	83	—	—	—	—	—	—	—	168	14	6	47	—	—	32	35
Hoyt, W. H.	59	82	—	—	—	—	—	—	—	26	51	—	—	—	—	14	52
Sirmans, G. S.	60	82	151	10	5	73	—	—	—	—	—	—	—	—	—	—	—
Tabuchi, T.	61	82	—	—	—	—	—	—	—	25	53	—	—	110	12	32	35
Rutherford, R. C.	62	82	197	8	19	45	24	39	—	—	—	—	—	—	—	—	—
Smith, V. K.	63	82	—	—	—	—	—	—	—	240	10	—	—	1	69	—	—
Liu, C. H.	64	81	13	40	384	4	16	49	—	—	—	—	—	—	—	—	—
Shilton, L. G.	65	81	91	16	7	67	—	—	—	—	—	—	—	—	—	—	—
Couison, N. E.	66	78	89	16	—	—	234	8	—	—	24	53	—	—	174	9	382
Quigley, J. M.	67	77	62	20	—	—	85	20	81	12	72	26	—	—	—	—	5
de Bartolome, C.	68	76	—	—	—	—	—	—	—	12	80	—	—	—	—	115	16
Mills, E. S.	69	75	24	32	—	—	40	32	—	—	108	19	341	5	—	—	—
Sivitanidou, R.	70	75	—	—	—	—	—	—	—	8	83	142	12	—	—	131	18
Wilson, J. D.	71	75	—	—	—	—	—	—	—	44	36	—	—	—	—	9	56
Ioannides, Y. M.	72	74	—	—	—	—	—	—	109	9	257	9	116	14	—	—	11
Nijkamp, P.	73	74	—	—	—	—	—	—	—	165	14	31	26	—	—	19	45
Thibodeau, T. G.	74	73	36	27	321	5	31	34	83	11	—	—	—	265	7	—	—
Read, C.	75	72	91	16	—	—	41	32	15	31	—	—	—	—	—	186	13
Helsley, R. W.	76	72	—	—	—	—	—	—	—	30	45	—	—	—	—	20	44
Myer, F. C. N.	77	69	85	17	18	46	234	8	—	—	—	—	—	—	—	—	—
Dietzenbacher, E.	78	69	—	—	—	—	—	—	—	—	1	74	—	—	—	—	—

Exhibit 10 (continued) Authors by Journal

Exhibit 11

Top Twenty Authors for Each Journal

<i>JREFE</i>	Pages	<i>JRER</i>	Pages	<i>RREE</i>	Pages	<i>JHE</i>	Pages	<i>JRE</i>	Pages	<i>JRS</i>	Pages	<i>LE</i>	Pages	<i>RSUE</i>	Pages	Pages
Gostmann, W. N.	83.0	Webb, J. R.	179.2	Geitner, D. M.	150.0	Goodman, A. C.	50.5	McMillen, D. P.	137.5	Dietzenbacher, E.	74.0	Smith, V. K.	69.8	Henderson, J. V.	129.0	
Pace, R. K.	81.3	Rouiac, S. E.	124.0	Vandell, K. D.	118.0	Boehm, T. P.	47.5	Yinger, J.	124.0	Smith, T. E.	72.0	Kling, C. L.	49.0	Wildasin, D. E.	102.5	
Turnbull, G. K.	69.3	Jud, G. D.	100.2	Sirmans, C. F.	87.5	Dubin, R. A.	45.0	Henderson, J. V.	120.5	Le Sage, J. P.	61.0	Barbier, E. B.	43.0	Fujita, M.	90.1	
Geitner, D. M.	65.3	Benjamin, J. D.	77.5	Miceli, T. J.	87.0	Haurin, D. R.	42.5	Turbill, G. K.	104.5	Braidi, R. M.	59.0	Parsons, G. R.	38.0	ten Raa, T.	80.0	
Colewell, P. F.	64.0	Sirmans, G. S.	73.8	Ling, D. C.	80.0	Rouwendal, J.	39.0	Braidi, R. M.	101.0	Voith, R. P.	50.5	Larson, D. M.	36.5	Abdel-Rahman, H.	72.5	
Mei, J.	64.0	Sirmans, C. F.	73.5	Chinloy, P.	72.3	Zorn, P. M.	38.0	Ihlanfeldt, K. R.	84.2	Criffield, J. B.	47.0	Beaton, W. P.	33.0	Wang, P.	65.1	
Springer, T. M.	46.6	Shilton, L. G.	67.0	Wang, K.	68.8	Follain, J. R.	37.8	Voith, R. P.	84.0	Duffy-Deno, K. T.	46.0	Howard, R. B.	30.5	Brueckner, J. K.	61.5	
Kuo, C.-L.	44.0	Nourse, H. O.	62.8	Yang, T. L. T.	66.1	O'Flaherty, B.	37.0	Sasaki, K.	83.0	McMillen, D. P.	45.0	Rendall, A.	30.0	Asami, Y.	57.1	
Clapp, J. M.	43.0	Graff, R. A.	62.7	Deutsch, E.	61.0	Plaut, S. E.	36.0	Sivitanidou, R.	83.0	Abdel-Rahman, H.	43.5	Deacon, R. T.	29.0	Wilson, J. D.	56.5	
Glascock, J. L.	42.6	Pagliari, J. L. Jr.	60.7	Hendershott, P. H.	60.5	Goodman, J. L. Jr.	35.0	McDonald, J. F.	81.5	Claycombe, R. J.	43.0	Turnbull, G. K.	28.3	Kanemoto, Y.	56.0	
Chintoy, P.	42.0	Worza, E. M.	56.7	Clapp, J. M.	57.3	Onder, Z.	34.0	Rosenthal, S. S.	81.3	Turnbull, G. K.	38.0	Toman, M. A.	27.5	Iannides, Y. M.	55.5	
Fujita, M.	41.0	Wang, K.	51.5	Wallace, N. E.	54.8	Wilcox, J. A.	33.5	de Bartolome, C.	80.0	Clark, D. E.	37.0	Townsend, R. E.	27.5	Holt-Eakin, D.	55.0	
Liu, C. H.	40.5	De Wit, D. P. M.	51.0	Gyurko, J.	52.0	Bourassa, S. C.	32.0	Wharton, W. C.	78.5	Parf, J. B.	37.0	Conrad, J. M.	27.0	Ansell, L.	54.0	
Arnott, R.	40.0	Cohwell, P. F.	50.2	Yavas, A.	51.5	Roistacher, E. A.	32.0	Strange, W.	77.0	Ansellin, L.	34.5	Brown, T. C.	26.8	Epplie, D.	52.0	
Brueckner, J. K.	40.0	Epley, D. R.	48.3	Cole, R. A.	50.3	Brusewitz, U. H.	31.0	Gyurko, J.	71.0	Anas, A.	32.5	Tietenberg, T. H.	26.5	Hoyt, W. H.	52.0	
Quan, D. C.	40.0	Guntermann, K. L.	48.0	Liu, C. H.	49.9	Read, C.	31.0	Brueckner, J. K.	65.0	Wren, C.	32.0	Loomis, J.	25.7	Braid, R. M.	51.0	
Gat, D.	39.0	Malizia, E. E.	46.5	Cappozzo, D. R.	49.0	Truonglu, D.	31.0	Fujita, M.	65.0	Hughes, M.	31.0	Sandler, T.	25.5	Sasaki, K.	46.5	
Ambrose, B. W.	38.0	Myer, F. C. N.	46.2	Green, R. K.	45.8	Painter, G.	29.0	Jones, L. D.	64.0	Sorenson, D. J.	31.0	Cameron, T. A.	25.0	Wolff, E. N.	46.0	
Webb, J. R.	36.6	Rutherford, R. C.	45.0	Wachter, S. M.	41.6	Yinger, J.	29.0	O'Flaherty, B.	63.0	Sen, A.	30.5	Chichilnitsky, G.	25.0	Nijkamp, P.	45.2	
Meiburgbe, I. F.	36.0	Liang, Y.	44.5	Eichholtz, P. M. A.	41.2	Kiel, K. A.	28.5	Lee, K.	62.0	de Mesnard, L.	29.5	Bjornstad, T.	24.0	Heisley, R. W.	44.5	

Notes: *JREFE*: Top 20 = 20.4% of pages; *JRER*: Top 20 = 24.3% of pages; *RREE*: Top 20 = 23.3% of pages; *JHE*: Top 20 = 27.2% of pages; *JRE*: Top 20 = 21.5% of pages; *JRS*: Top 20 = 16.9% of pages; *LE*: Top 20 = 13.1% of pages; and *RSUE*: Top 20 = 18.6% of pages.

Exhibit 12
Percentage of Pages by Type of Institution

Institutional Type	JREFE	JRER	REE	JHE	JUE	JRS	LE	RSUE	CORE	BASE	ALL
U.S. universities	72.41	73.42	76.52	62.01	69.04	55.40	67.34	62.32	73.92	71.56	67.61
Canadian universities	3.38	0.85	2.62	4.86	6.70	7.41	4.19	5.65	2.21	3.64	4.48
All other universities	8.79	7.43	5.11	10.89	14.36	24.36	9.21	24.28	7.23	9.45	13.46
Non-government agencies & groups	1.34	0.13	0.93	6.24	1.50	2.21	3.69	2.31	0.76	1.44	1.97
U.S. government	4.35	0.95	5.30	9.00	5.49	5.86	8.51	2.31	3.38	4.44	4.86
Mortgage entities	3.05	1.41	4.05	4.35	0.34	0.32	0.00	0.70	2.75	2.25	1.47
Private firms	6.68	15.72	4.95	2.66	0.81	2.54	3.80	0.45	9.57	6.63	4.82
Unknown	0.00	0.09	0.52	0.00	1.76	1.89	3.27	1.99	0.19	0.59	1.32

Exhibit 13
Top Forty Contemporaneous Affiliations for Core Real Estate Journals

Institution	Rank	Weighted Pages	Rank	Weighted Appearances	Rank	Unweighted Appearances
University of Connecticut	1	527.3	1	36.5	1	76
Cleveland State University	2	442.2	2	29.3	2	67
Louisiana State University	3	336.6	3	25.7	3	48
University of Cincinnati	4	313.8	6	18.8	8	31
University of California-Berkeley	5	312.7	9	15.0	11	30
Fed	6	291.1	5	19.0	5	37
University of Illinois	7	289.3	4	22.8	4	38
University of Wisconsin	8	282.7	8	17.4	6	34
University of Georgia	9	216.5	12	13.8	17	26
Pennsylvania State University	10	213.3	7	18.0	7	33
University of Florida	11	205.3	16	11.9	18	24
University of Pennsylvania	12	205.0	19	10.2	25	20
Florida Atlantic University	13	199.9	11	14.4	8	31
Fannie Mae	14	196.0	18	10.6	22	22
New York University	15	195.7	20	10.1	18	24
American University	16	194.3	10	14.5	8	31
Florida State University	17	193.9	14	13.0	13	28
University of North Carolina	18	189.0	15	12.0	13	28
University North Carolina-Greensboro	19	166.1	17	10.8	15	27
Freddie Mac	20	150.7	26	9.3	27	19
Ohio State University	21	129.8	22	9.8	22	22
University of Michigan	22	127.5	27	9.0	29	16
University of Alaska	23	122.2	31	7.5	44	10
University of Wisconsin-Milwaukee	24	121.2	35	6.8	35	13
Massachusetts Institute of Technology	25	120.6	28	8.5	31	14
California State University-Fullerton	26	117.0	23	9.7	15	27
University of British Columbia	27	114.1	37	6.5	48	9
George Washington University	28	113.9	34	6.8	31	14
Temple University	29	113.4	13	13.3	11	30
Georgia State University	30	113.0	25	9.4	21	23
University of Texas-Arlington	31	105.9	24	9.4	22	22
Louisiana Tech University	32	104.7	29	8.1	25	20
Texas A&M	33	104.1	30	8.0	28	18
Columbia University	34	101.2	65	3.5	93	4
University of Nevada-Las Vegas	35	97.6	21	10.0	18	24
University of Alabama	36	96.3	32	7.3	29	16
Indiana University	37	96.0	44	5.6	39	12
University of California-Los Angeles	38	95.5	33	7.1	35	13
Chinese University of Hong Kong	39	93.3	40	6.3	31	14
Southern Methodist University	40	91.5	39	6.3	39	12

Exhibit 14**Top Forty Contemporaneous Affiliations for Base Real Estate Journals**

Institution	Rank	Weighted Pages	Rank	Weighted Appearances	Rank	Unweighted Appearances
University of Connecticut	1	706.2	1	48.5	1	101
Fed	2	574.5	2	40.5	3	70
Louisiana State University	3	471.9	3	37.1	3	70
Cleveland State University	4	465.8	4	31.5	2	71
University of California-Berkeley	5	420.3	8	22.1	9	42
University of Illinois	6	417.0	5	31.3	5	50
University of Cincinnati	7	374.6	7	22.6	9	42
University of Pennsylvania	8	369.2	11	21.0	7	43
University of British Columbia	9	341.5	9	21.3	16	33
University of Wisconsin	10	340.4	10	21.3	6	44
Pennsylvania State University	11	314.5	6	25.0	7	43
University of Florida	12	288.5	14	16.9	12	36
University of Georgia	13	280.3	13	18.5	12	36
Ohio State University	14	260.8	12	19.0	11	39
Syracuse University	15	246.2	20	14.1	29	24
Massachusetts Institute of Technology	16	235.5	15	16.5	25	26
Fannie Mae	17	233.1	24	12.9	27	25
Columbia University	18	229.4	32	10.5	48	13
Florida State University	19	228.3	18	15.3	16	33
Freddie Mac	20	223.7	22	13.9	20	30
Georgia State University	21	216.4	17	15.5	15	34
American University	22	215.0	16	16.4	14	35
New York University	23	213.6	29	11.4	25	26
University of Michigan	24	207.4	21	14.0	27	25
Florida Atlantic University	25	207.2	19	14.9	18	32
University of North Carolina	26	189.0	26	12.0	23	28
University of North Carolina-Greensboro	27	181.3	25	12.3	20	30
Wayne State University	28	180.5	27	11.7	38	17
University of Colorado	29	177.4	31	11.0	35	18
University of Southern California	30	174.3	29	11.4	32	20
Boston College	31	172.4	33	10.3	35	18
Harvard University	32	151.7	43	8.6	35	18
Indiana University	33	150.9	40	9.1	38	17
University of Wisconsin-Milwaukee	34	147.5	42	8.8	41	16
University of Alaska	35	146.3	37	9.5	51	12
Northwestern University	36	134.9	34	10.1	44	15
George Washington University	37	125.7	45	7.6	41	16
University of Alabama	38	124.7	38	9.5	32	20
University of California-Los Angeles	39	120.7	41	9.0	41	16
California State University-Fullerton	40	119.9	35	10.0	23	28

Exhibit 15**Top Forty Contemporaneous Affiliations for Broad Real Estate Journals**

Institution	Rank	Weighted Pages	Rank	Weighted Appearances	Rank	Unweighted Appearances
University of Connecticut	1	894.9	1	60.5	1	124
Fed	2	754.5	2	50.4	3	88
University of Pennsylvania	3	646.5	7	34.7	8	68
Louisiana State University	4	631.2	3	49.3	2	91
University of Illinois	5	623.3	4	43.7	4	75
University of Wisconsin	6	620.5	6	38.0	4	75
University of California-Berkeley	7	535.7	10	30.7	9	58
Pennsylvania State University	8	523.6	5	39.5	7	70
Cleveland State University	9	477.5	8	33.5	6	74
University of British Columbia	10	476.6	11	30.1	14	48
Ohio State University	11	432.7	9	32.1	9	58
University of Florida	12	420.4	13	25.7	12	57
University of Cincinnati	13	391.2	15	24.1	15	46
USDA	14	375.4	12	29.5	9	58
University of Georgia	15	367.1	14	25.6	13	49
Syracuse University	16	362.1	19	20.1	24	33
Columbia University	17	353.4	22	18.8	44	23
New York University	18	341.6	23	18.5	20	36
University of Southern California	19	336.2	18	21.4	17	40
Wayne State University	20	324.2	17	21.7	38	28
Massachusetts Institute of Technology	21	310.7	16	21.8	22	34
Indiana University	22	307.6	27	17.0	34	29
Harvard University	23	284.9	24	18.1	28	32
Georgia State University	24	284.0	20	19.7	16	42
University of Michigan	25	282.0	21	19.5	24	33
University of Colorado	26	272.5	25	17.3	34	29
Florida State University	27	264.3	26	17.1	18	37
University of North Carolina	28	261.3	29	16.7	18	37
Fannie Mae	29	253.3	40	13.9	40	27
Brown University	30	249.6	34	15.0	55	20
Freddie Mac	31	245.3	32	15.2	24	33
Cornell University	32	232.8	38	14.5	41	26
University of California-Irvine	33	223.0	37	14.5	51	21
University of Illinois-Chicago	34	222.6	28	16.8	31	30
American University	35	218.5	30	16.6	20	36
Boston College	36	218.1	50	12.6	46	22
Free University Amsterdam	37	211.6	46	13.1	31	30
University of New Orleans	38	209.9	41	13.8	55	20
Florida Atlantic University	39	207.2	35	14.9	28	32
Northwestern University	40	201.8	31	15.3	42	24

Exhibit 16
Summary of Contemporaneous Affiliation Across Categories

Institution	Rank	Broad Pages	Rank	Base Pages	Rank	Core Pages
University of Connecticut	1	894.9	1	706.2	1	527.3
Fed	2	754.5	2	574.5	6	291.1
University of Pennsylvania	3	646.5	8	369.2	12	205.0
Louisiana State University	4	631.2	3	471.9	3	336.6
University of Illinois	5	623.3	6	417.0	7	289.3
University of Wisconsin	6	620.5	10	340.4	8	282.7
University of California-Berkeley	7	535.7	5	420.3	5	312.7
Pennsylvania State University	8	523.6	11	314.5	10	213.3
Cleveland State University	9	477.5	6	465.8	2	442.2
University of British Columbia	10	476.6	9	341.5	27	114.1
Ohio State University	11	432.7	14	260.8	21	129.8
University of Florida	12	420.4	12	288.5	11	205.3
University of Cincinnati	13	391.2	7	374.6	4	313.8
USDA	14	375.4	124	41.4	94	35.3
University of Georgia	15	367.1	13	280.3	9	216.5
Syracuse University	16	362.1	15	246.2	90	36.0
Columbia University	17	353.4	18	229.4	34	101.2
New York University	18	341.6	23	213.6	15	195.7
University of Southern California	19	336.2	30	174.3	78	42.4
Wayne State University	20	324.2	28	180.5	91	35.6
Massachusetts Institute of Technology	21	310.7	16	235.5	25	120.6
Indiana University	22	307.6	33	150.9	37	96.0
Harvard University	23	284.9	32	151.7	57	62.0
Georgia State University	24	284.0	21	216.4	30	113.0
University of Michigan	25	282.0	24	207.4	22	127.5
University of Colorado	26	272.5	29	177.4	187	13.6
Florida State University	27	264.3	19	228.3	17	193.9
University of North Carolina	28	261.3	26	189.0	18	189.0
Fannie Mae	29	253.3	17	233.1	14	196.0
Brown University	30	249.6	52	101.4	—	—
Freddie Mac	31	245.3	20	223.7	20	150.7
Cornell University	32	232.8	43	113.1	53	65.4
University of California-Irvine	33	223.0	47	105.3	—	—
University of Illinois-Chicago	34	222.6	57	90.1	150	19.0
American University	35	218.5	22	215.0	16	194.3
Boston College	36	218.1	31	172.4	42	87.2
Free University Amsterdam	37	211.6	148	33.8	—	—
University of New Orleans	38	209.9	55	92.8	67	55.2
Florida Atlantic University	39	207.2	25	207.2	13	199.9
Northwestern University	40	201.8	36	134.9	48	69.3

Exhibit 17
Contemporaneous Affiliation by Journal

Institution	Overall Rank	Pages	JREFE Rank	JFER Pages	JFER Rank	REE Pages	REE Rank	JHE Pages	JHE Rank	JRS Pages	JRS Rank	LE Pages	LE Rank	RSUE Pages	RSUE Rank	Pages
University of Connecticut	1	894	1	184	11	78	1	348	18	40	4	191	6	76	36	30
Fed	2	754	6	114	51	30	5	188	1	116	2	250	3	110	—	15
University of Pennsylvania	3	646	16	64	132	9	6	172	36	23	5	190	1	128	194	5
Louisiana State University	4	631	2	152	8	84	7	136	23	33	9	142	12	61	26	46
University of Illinois	5	623	3	142	20	57	8	117	39	22	7	143	24	48	50	25
University of Wisconsin	6	620	18	58	61	24	2	261	11	52	90	22	59	26	2	167
University of California-Berkeley	7	535	5	123	44	33	4	206	6	64	26	74	183	8	13	62
Pennsylvania State University	8	523	10	88	23	56	16	88	45	20	17	111	28	45	11	70
Cleveland State University	9	477	14	76	1	332	27	50	—	—	69	30	—	—	126	11
University of British Columbia	10	476	13	80	—	—	30	47	53	17	1	278	—	—	27	45
Ohio State University	11	432	21	51	—	—	12	109	7	63	19	106	50	28	16	61
University of Florida	12	420	26	45	13	71	10	115	14	50	35	57	48	29	18	56
University of Cincinnati	13	391	7	107	25	54	3	210	9	57	97	20	194	7	—	—
USDA	14	375	33	35	—	—	—	—	—	—	195	8	4	84	1	239
University of Georgia	15	367	17	59	5	89	17	88	42	21	34	61	23	48	58	23
Syracuse University	16	362	85	17	—	—	59	26	2	89	6	183	—	—	—	6
Columbia University	17	353	12	81	—	—	60	26	19	37	11	129	185	8	35	31

Exhibit 17(continued)
Contemporaneous Affiliation by Journal

Institution	Overall Rank	Pages	JREFE Rank	JRER Pages	REE Rank	JHE Pages	JUE Rank	JRS Pages	LE Rank	RSUE Pages	Rank	Pages
New York University	18	341	4	124	120	10	19	80	101	4	102	19
University of Southern California	19	336	56	25	—	—	63	22	17	41	12	129
Wayne State University	20	324	148	6	—	—	35	40	5	74	16	113
Massachusetts Institute of Technology	21	310	37	33	26	52	29	48	92	6	8	142
Indiana University	22	307	63	23	81	17	21	72	—	—	28	71
Harvard University	23	284	148	6	72	20	28	48	53	17	21	99
Georgia State University	24	284	112	10	12	75	39	37	51	17	13	116
University of Michigan	25	282	22	48	89	14	18	87	—	—	20	104
University of Colorado	26	272	—	—	—	—	74	19	—	—	3	213
Florida State University	27	264	20	54	3	118	52	29	74	11	59	33
University of North Carolina	28	261	71	20	6	85	9	116	—	—	—	—
Fannie Mae	29	253	11	87	65	22	11	110	24	32	124	16
Brown University	30	249	—	—	—	—	—	—	—	10	132	237
Freddie Mac	31	245	27	43	40	35	14	96	3	83	161	11
Cornell University	32	232	—	—	90	14	20	72	33	25	54	36
University of California-Irvine	33	223	—	—	—	—	—	—	13	51	24	85
University of Illinois-Chicago	34	222	75	19	—	—	—	—	—	22	92	7
American University	35	218	66	22	4	95	13	100	52	17	185	9
Boston College	36	218	24	45	—	—	26	55	26	31	25	79

Exhibit 17 (continued)
Contemporaneous Affiliation by Journal

Institution	Overall Rank	Pages	Rank	JREFE	Pages	Rank	JRER	Pages	Rank	REE	Pages	Rank	JHE	Pages	Rank	JUE	Pages	Rank	JRS	Pages	Rank	LE	Pages	Rank	RSUE	Pages	Rank	Pages		
Free University Amsterdam	37	211	—	—	—	—	—	—	—	—	—	—	44	44	18	53	—	—	—	—	4	153	—	—	—	—	—			
University of New Orleans	38	209	37	33	72	20	154	3	—	—	—	40	49	14	60	—	—	—	—	26	72	—	—	—	—	—	—			
Florida Atlantic University	39	207	9	90	10	79	34	41	85	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Northwestern University	40	201	24	45	—	—	42	32	57	15	29	69	48	29	—	—	—	—	—	—	41	47	—	—	—	—	—	—	—	
University of Maryland	41	199	65	23	118	10	128	7	—	—	48	40	—	—	—	—	—	—	5	87	45	43	—	—	—	—	—	—		
University of Alaska	42	194	8	93	152	7	44	32	26	31	—	—	—	131	13	131	10	62	30	—	—	—	—	—	—	—	—	—		
University of Tokyo	43	193	—	—	—	—	—	—	—	—	—	23	92	70	23	—	—	—	—	—	—	7	121	—	—	—	—	—		
Texas A&M	44	189	50	26	24	54	43	32	—	—	118	17	46	30	58	23	89	21	—	—	—	—	—	—	—	—	—	—		
Virginia Tech	45	188	—	—	—	—	—	—	—	—	49	39	171	9	9	75	20	83	—	—	—	—	—	—	—	—	—	—		
University of California-Los Angeles	46	182	34	34	159	6	22	70	—	—	61	32	179	8	22	50	—	—	—	—	—	—	—	—	—	—	—	—	—	
University of Kentucky	47	182	40	30	69	21	90	14	37	23	102	19	—	—	—	—	—	—	49	25	25	73	—	—	—	—	—	—		
University of North Carolina-Greensboro	48	181	34	34	2	134	—	—	50	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
University of Tennessee	49	176	—	—	152	7	64	22	15	47	100	20	8	73	38	29	—	—	—	—	—	—	—	—	—	—	—	—	—	
Carnegie Mellon University	50	175	177	4	88	15	—	—	45	20	31	65	80	20	—	—	—	—	—	—	19	86	—	—	—	—	—	—	—	—

each individual journal are adjusted for coauthors but are not normalized across journals. Only five institutions are ranked in the top fifty in all eight individual journals: University of Connecticut, Louisiana State University, University of Illinois, Pennsylvania State University and University of Florida. Several institutions, however, do dominate the real estate core. In particular, four universities are ranked in the top twenty for all of the core journals: University of Connecticut, Louisiana State University, University of Georgia and University of Illinois.

The top twenty institutions for each of the eight journals appear in Exhibit 18. The pattern found in the exhibits resembles that found for individuals. There is considerable overlap in the top institutions identified for the core journals, but it diminishes when outside the core journals.

Exhibit 18 also updates earlier institutional rankings for *JUE* and *REE*. For the *JUE*, 5 of the top twenty institutions for 1989–1998 were also in the top twenty for 1974–1989 reported by Allen and Kau (1991): University of Pennsylvania, University of Illinois, Massachusetts Institute of Technology, University of Southern California and Ohio State University. The top ranked institutions for *REE* exhibit much more stability than observed earlier for individuals. Seven of the top twenty for 1989–1998 are also in the top twenty for 1973–1987 (Sa-Aadu and Shilling, 1988): University of Connecticut, the Fed (including both the Federal Reserve System and the individual Federal Reserve Banks), Louisiana State University, University of Illinois, Ohio State University, Pennsylvania State University and University of Georgia.

The exhibit also reports the concentration indices for the top twenty contributing institutions. The core and base real estate journals exhibit concentration indices from 33% to 49%. The non-base journals, though, exhibit somewhat less concentration, ranging from 28% to 36%. These indices suggest that there are relatively fewer institutions with strong real estate research output than institutions with strong output of research in urban, regional economics and related topics that are also covered in the non-core journals.

Institution Rankings by Current Author Affiliation

The contemporaneous affiliation based rankings give one measure of institutions' relative contributions to the field. On the other hand, part of a university's reputation is directly derived from the record of accomplishments of its current faculty. Given the mobility of real estate researchers across institutions, it is relevant to consider institution rankings based on current author affiliation instead of the author's listed affiliation at the time that specific papers were published.

This section reports the institution rankings base on current affiliation (as of July, 2000). The current affiliation of each individual author publishing in the set of eight journals over the time period is determined using the Prentice Hall Guides to economics and finance faculty, the American Real Estate and Urban Economics Association and the American Real Estate Society membership directories, ECONLIT and the websites of institutions. Using these sources, in terms of the percentage of

Exhibit 18
Top Twenty Contemporaneous Affiliations by Journal

JREFE	Pages	JREFR	Pages	REE	Pages	JHE	Pages	Pages	Pages
University of Connecticut	184.3	Cleveland State University	332.5	University of Connecticut	348.5	Fed	116.6		
Louisiana State University	152.3	University of North Carolina-Greensboro	134.5	University of Wisconsin	261.3	Syracuse University	89.5		
University of Illinois	142.8	Florida State University	118.1	University of Cincinnati	210.5	Freddie Mac	83.0		
New York University	124.5	American University	95.8	University of California-Berkeley	206.8	Urban Institute	77.0		
University of California-Berkeley	123.3	University of Georgia	89.8	Fed	188.9	Wayne State University	74.7		
Fed	114.3	University of North Carolina	85.5	University of Pennsylvania	172.9	University of California-Berkeley	64.5		
University of Cincinnati	107.3	Colorado State University	85.0	Louisiana State University	136.0	Ohio State University	63.5		
University of Alaska	93.3	Louisiana State University	84.3	University of Illinois	117.5	University of Toronto	58.3		
Florida Atlantic University	90.6	Wichita State University	83.0	University of North Carolina	116.1	University of Cincinnati	57.8		
Pennsylvania State University	88.8	Florida Atlantic University	79.0	University of Florida	115.5	Yale University	53.0		
Fannie Mae	87.8	University of Connecticut	78.5	Fannie Mae	110.6	University of Wisconsin	52.3		
Columbia University	81.0	Georgia State University	75.0	Ohio State University	109.1	U.S. Government Accounting	51.5		
University of British Columbia	80.0	University of Florida	71.4	American University	100.6	University of California-Irvine	51.0		
Cleveland State University	76.3	Fordham University	67.0	Freddie Mac	96.6	University of Florida	50.3		
Temple University	66.0	University of Hong Kong	65.3	California State University-Fullerton	92.1	University of Tennessee	47.5		
University of Pennsylvania	64.3	George Washington	64.0	Pennsylvania State University	88.5	Case Western Reserve University	45.0		
University of Georgia	59.3	Louisiana Tech University	60.5	University of Georgia	88.1	University of Southern California	41.8		
University of Wisconsin	58.1	University of Texas-Arlington	59.5	University of Michigan	87.8	University of Connecticut	40.5		
University of Texas	56.0	Mississippi State University	58.5	New York University	80.7	Columbia University	37.0		
Florida State University	54.6	University of Illinois	57.8	Cornell University	72.8	Uppsala University	37.0		

Exhibit 18 (continued)
Top Twenty Contemporaneous Affiliations by Journal

JUE	Pages	JRS	Pages	LE	Pages	RSUE	Pages
University of British Columbia Fed	278.3	Groningen University Fed	128.5	USDA	239.1	University of Pennsylvania Indiana University	181.8 163.5
University of Colorado	250.8	University of Pennsylvania	112.9	University of Wisconsin	167.4	University of Illinois	161.0
University of Connecticut	213.1	Groningen University Fed	110.0	University of California-Davis	108.6	Free University-Amsterdam	153.0
University of Pennsylvania	191.9	USDA	84.0	University of Rhode Island	101.0	Brown University	152.0
Syracuse University	190.0	University of West Virginia	84.0	University of Maryland	87.3	Syracuse University	139.0
University of Illinois	183.0	University of Connecticut	76.8	Resources for the Future	86.8	University of Tokyo	121.6
Massachusetts Institute of Technology	143.5	University of Illinois-Chicago	75.0	Cornell University	86.5	New York University	116.5
Louisiana State University	142.4	University of Tennessee	73.6	University of Maine	80.6		
Brown University	132.0	Marquette University	68.0	Virginia Tech	75.0	Pennsylvania State University	108.5
Columbia University	129.5	University of Southern California	63.7	University of Delaware	73.0	Tilburg University	105.5
University of Southern California	129.3	University of Saskatchewan	62.5	Pennsylvania State University	70.9	University of British Columbia	103.5
Georgia State University	116.6	Louisiana State University	61.0	Iowa State University	65.8	University of Connecticut	101.0
University of Oregon	115.0	University of Toledo	61.0	University of California-Berkeley	62.3	Columbia University	100.0
Tohoku University	114.0	University of New Orleans	60.5	North Carolina State University	62.3	Ohio State University	95.0
Wayne State	113.0	Wayne State University	59.0	University of Minnesota	61.8	Fed	92.3
Pennsylvania State University	111.5	Academia Sinica	57.5	Ohio State University	61.8	University of Wisconsin	92.0
University of California-San Diego	110.5	University of Northern Illinois	57.0	World Bank	60.0	University of California-Irvine	89.5
Ohio State University	106.1	Free University-Amsterdam	53.6	University of Florida	56.8	Harvard University	87.5
University of Michigan	104.0	London School of Economics	53.0	York University	56.0	Carnegie Mellon University	86.1
		University of Quebec-Montreal	53.0	University of Colorado	52.0	Virginia Tech	83.6
				Norwegian School of Economics	52.0		

Notes: *JREFE*: Top 20 = 38.9% of pages; *JREF*: Top 20 = 32.8% of pages; *JEE*: Top 20 = 48.5% of pages; *JHE*: Top 20 = 45.1% of pages; *JUE*: Top 20 = 38.0% of pages; *JRS*: Top 20 = 35.7% of pages; *LE*: Top 20 = 28.2% of pages; and *RSUE*: Top 20 = 34.1% of pages.

published pages, the current affiliation for the authors in each of the journals can be traced as follows: *JREFE* = 94.9%, *JRER* = 91.4%, *REE* = 90.9%, *JHE* = 93.2%, *JUE* = 85.6%, *JRS* = 71.8%, *LE* = 64.8% and *RSUE* = 76.5%. The lower percentage of pages for *LE* reflects the large component in that journal of authors affiliated with foreign institutions, who were more difficult to trace.

The analysis for current affiliation was conducted in two separate ways. The first method ranks the institutions using only the authors for whom a current affiliation could be identified. The second ranking method uses all of the authors, but substitutes the affiliation listed on the most recent published paper for the authors that could not be traced from other sources. In any event, it turns out that the institution rankings reported here are identical regardless of the two methods used.⁹

Exhibit 19 lists the top forty institutions responsible for the research published in the core real estate journals according to current affiliation. As for the earlier ranking methods, the rankings by pages, appearances adjusted for co-authors and raw appearances are highly correlated. The University of Connecticut and Cleveland State University are ranked first and second by all three measures: pages, adjusted appearances and appearances. There is a high degree of consistency across the three measures, slightly higher than observed for contemporaneous affiliations; thirty-seven of these institutions are in the top forty regardless of how publication performance is measured.

Exhibits 20 and 21 report the institution rankings for the five base real estate and the entire set of eight journals, respectively. Much like the contemporaneous affiliation rankings, the patterns observed in the institutional rankings for the core journals extend to the base and complete sets of journals.

Exhibit 22 gives the rankings by pages across the three categories of journals. The composition of the top institutions across the various journals according to current author affiliation shows a consistency that resembles that found in the earlier rankings; twenty-six institutions appear in the top forty no matter how broadly or narrowly the set of real estate journals is defined. The publication rankings tend to be dominated by a relatively small group of institutions.

The summary of rankings across the separate journals is presented in Exhibit 23. Once again, the top ranked institutions for the set of eight journals attain their rank largely on the strength of strong publication records in only a few of the journals in the set. Only the University of Connecticut, Louisiana State University, University of Florida and Pennsylvania State University are ranked in the top fifty in all eight individual journals. Nonetheless, five institutions dominate the real estate core according to current affiliation: University of Connecticut, University of Illinois, Louisiana State University, University of Cincinnati and Ohio State University. This is a subset of the schools that dominate the real estate core journals according to contemporaneous affiliation.

Exhibit 24 presents the top twenty institutions for each of the eight journals. Roughly, the same patterns observed for the contemporaneous affiliation based rankings are

Exhibit 19
Top Forty Current Affiliations for Core Real Estate Journals

Institution	Rank	Weighted Pages	Rank	Weighted Appearances	Rank	Unweighted Appearances
University of Connecticut	1	506.0	1	36.0	1	74
Cleveland State University	2	405.9	2	26.4	2	59
University of Cincinnati	3	366.7	3	21.0	8	32
Freddie Mac	4	326.4	5	20.5	3	39
University of California-Berkeley	5	288.0	12	14.2	10	30
University of Wisconsin	6	268.8	7	16.3	8	32
University of Illinois	7	265.7	4	20.7	7	34
Louisiana State University	8	246.6	9	15.2	22	23
American University	9	238.8	6	17.5	5	36
Fed	10	211.8	10	15.0	13	28
Fannie Mae	11	204.1	20	11.1	19	24
New York University	12	197.7	23	10.1	19	24
California State University-Fullerton	13	197.3	11	14.3	4	38
Georgia State University	14	196.5	14	13.6	6	35
University of Georgia	15	194.4	15	12.8	18	25
Florida Atlantic University	16	193.7	13	13.9	10	30
University of Florida	17	191.1	21	10.9	25	21
Florida State University	18	185.5	17	12.5	15	27
Pennsylvania State University	19	180.4	8	15.8	15	27
George Washington University	20	175.0	18	12.0	17	26
University of North Carolina-Greensboro	21	172.2	19	11.6	12	29
University of North Carolina	22	171.2	22	10.7	19	24
University of Pennsylvania	23	140.5	33	7.7	30	17
University of Kentucky	24	138.1	30	8.3	28	18
Massachusetts Institute of Technology	25	127.9	27	8.6	28	18
Ohio State University	26	126.5	26	9.5	25	21
University of Michigan	27	121.6	29	8.5	31	15
University of Texas-San Antonio	28	118.0	25	9.5	22	23
Yale University	29	113.7	52	4.0	69	6
Temple University	30	108.5	16	12.6	13	28
Louisiana Tech University	31	102.7	31	7.8	27	19
Washington State University	32	94.5	28	8.5	31	15
University of Nevada-Las Vegas	33	91.7	24	9.7	22	23
Southern Methodist University	34	91.5	36	6.3	37	12
University of Alabama	35	89.9	34	6.8	31	15
Texas A&M	36	89.9	32	7.7	35	14
Fordham University	37	89.8	38	5.5	39	10
UCLA	38	89.5	34	6.8	37	12
Colorado State University	39	83.5	44	4.7	39	10
Boston College	40	78.1	57	3.7	56	7

Exhibit 20
Top Forty Current Affiliations for Base Real Estate Journals

Institution	Rank	Weighted Pages	Rank	Weighted Appearances	Rank	Unweighted Appearances
University of Connecticut	1	674.5	1	47.6	1	98
Freddie Mac	2	482.4	3	29.6	3	59
Fed	3	444.3	2	33.0	4	55
Cleveland State University	4	429.5	4	28.6	2	63
University of Cincinnati	5	422.3	6	24.5	8	42
University of California-Berkeley	6	380.8	10	20.4	10	41
University of Illinois	7	371.9	5	28.2	6	44
Louisiana State University	8	363.3	7	24.4	12	38
University of Wisconsin	9	331.0	9	20.8	6	44
Georgia State University	10	302.8	11	20.0	5	47
Pennsylvania State University	11	281.6	8	22.8	14	37
University of Florida	12	274.3	18	15.9	17	33
American University	13	264.0	12	20.0	8	42
University of Pennsylvania	14	260.2	17	16.5	15	36
Ohio State University	15	257.4	13	18.6	12	38
University of Georgia	16	253.6	16	17.0	16	34
Massachusetts Institute of Technology	17	250.5	14	17.1	21	31
Fannie Mae	18	244.4	26	13.6	25	28
University of British Columbia	19	234.8	22	14.0	34	20
Syracuse University	20	233.2	24	13.8	30	24
University of Illinois-Chicago	21	227.1	15	17.0	22	29
Florida State University	22	219.9	20	14.8	18	32
University of Kentucky	23	214.8	24	13.8	27	26
University of Michigan	24	206.1	22	14.0	28	25
Florida Atlantic University	25	205.7	19	14.9	18	32
University of Southern California	26	201.2	31	12.0	33	22
New York University	27	201.0	35	10.4	28	25
California State University-Fullerton	28	200.2	21	14.5	11	39
Columbia University	29	195.8	37	10.0	46	12
George Washington University	30	192.5	27	13.3	22	29
University of North Carolina-Greensboro	31	187.3	28	13.1	18	32
Wayne State University	32	186.4	30	12.7	37	17
University of Colorado	33	172.1	33	10.8	39	16
University of North Carolina	34	171.2	34	10.7	30	24
Boston College	35	168.3	36	10.0	37	17
Yale University	36	152.8	49	6.8	48	11
University of California-Los Angeles	37	125.5	38	9.6	39	16
University of Alabama	38	118.3	41	9.0	35	19
University of Texas-San Antonio	39	118.0	39	9.5	32	23
Indiana University	40	113.5	46	7.1	46	12

Exhibit 21
Top Forty Current Affiliations for Broad Real Estate Journals

Institution	Rank	Weighted Pages	Rank	Weighted Appearances	Rank	Unweighted Appearances
University of Connecticut	1	873.4	1	60.8	1	124
University of Wisconsin	2	614.0	4	38.6	2	76
Fed	3	577.7	2	40.5	3	68
University of Illinois	4	542.3	3	39.1	4	66
Freddie Mac	5	524.0	7	32.0	6	64
University of California-Berkeley	6	492.5	11	29.0	8	57
Louisiana State University	7	489.0	6	33.7	14	52
Pennsylvania State University	8	488.5	5	37.0	7	63
University of Pennsylvania	9	468.3	12	28.2	10	55
Cleveland State University	10	441.2	10	30.6	4	66
University of Cincinnati	11	438.9	14	26.0	18	46
Ohio State University	12	429.3	8	31.7	8	57
University of Illinois-Chicago	13	406.0	9	30.8	14	52
University of Florida	14	401.9	16	24.4	12	53
University of British Columbia	15	378.8	18	23.3	23	36
Georgia State University	16	370.5	17	24.2	10	55
University of Southern California	17	355.5	22	20.4	20	41
University of Georgia	18	350.5	15	24.8	16	49
USDA	19	347.7	13	26.8	12	53
Massachusetts Institute of Technology	20	337.7	19	23.0	21	40
New York University	21	330.3	27	18.0	23	36
Syracuse University	22	328.3	26	18.8	28	32
University of Kentucky	23	313.7	23	20.3	22	38
Columbia University	24	312.7	28	17.3	43	21
Wayne State University	25	307.3	20	21.7	36	27
University of Colorado	26	296.2	25	19.0	34	29
Fannie Mae	27	282.9	33	15.6	32	31
American University	28	269.7	21	20.5	19	44
Indiana University	29	268.3	36	15.1	39	24
Brown University	30	259.6	34	15.5	43	21
University of Tokyo	31	259.1	32	16.0	42	22
Florida State University	32	256.0	30	16.6	23	36
California State University-Fullerton	33	253.5	24	19.7	17	47
University of Michigan	34	252.9	29	17.0	33	30
University of North Carolina	35	243.5	35	15.3	27	33
George Washington University	36	243.1	30	16.6	23	36
Kyoto University	37	242.5	60	9.8	59	18
Boston College	38	214.1	47	12.4	43	21
University of New Orleans	39	209.9	40	13.8	49	20
Cornell University	40	209.5	44	13.0	39	24

Exhibit 22
Summary of Current Affiliation Across Categories

Institution	Rank	Broad Pages	Rank	Base Pages	Rank	Core Pages
University of Connecticut	1	873.4	1	674.5	1	506.0
University of Wisconsin	2	614.0	9	331.0	6	268.8
Fed	3	577.7	3	444.3	10	211.8
University of Illinois	4	542.3	7	371.9	7	265.7
Freddie Mac	5	524.0	2	482.4	4	326.4
University of California-Berkeley	6	492.5	6	380.8	5	288.0
Louisiana State University	7	489.0	8	363.3	8	246.6
Pennsylvania State University	8	488.5	11	281.6	19	180.4
University of Pennsylvania	9	468.3	14	260.2	23	140.5
Cleveland State University	10	441.2	4	429.5	2	405.9
University of Cincinnati	11	438.9	5	422.3	3	366.7
Ohio State University	12	429.3	15	257.4	26	126.5
University of Illinois-Chicago	13	406.0	21	227.1	80	42.5
University of Florida	14	401.9	12	274.3	17	191.1
University of British Columbia	15	378.8	19	234.8	49	60.3
Georgia State University	16	370.5	10	302.8	14	196.5
University of Southern California	17	355.5	26	201.2	41	77.8
University of Georgia	18	350.5	16	253.6	15	194.4
USDA	19	347.7	124	41.4	92	35.3
Massachusetts Institute of Technology	20	337.7	17	250.5	25	127.9
New York University	21	330.3	27	201.0	12	197.7
Syracuse University	22	328.3	20	233.2	174	15.0
University of Kentucky	23	313.7	23	214.8	24	138.1
Columbia University	24	312.7	29	195.8	77	45.3
Wayne State University	25	307.3	32	186.4	89	35.6
University of Colorado	26	296.2	33	172.1	—	—
Fannie Mae	27	282.9	18	244.4	11	204.1
American University	28	269.7	13	264.0	9	238.8
Indiana University	29	268.3	40	113.5	59	56.3
Brown University	30	259.6	46	101.4	—	—
University of Tokyo	31	259.1	54	88.3	—	—
Florida State University	32	256.0	22	219.9	18	185.5
California State University-Fullerton	33	253.5	28	200.2	13	197.3
University of Michigan	34	252.9	24	206.1	27	121.6
University of North Carolina	35	243.5	34	171.2	22	171.2
George Washington University	36	243.1	30	192.5	20	175.0
Kyoto University	37	242.5	42	110.1	82	41.0
Boston College	38	214.1	35	168.3	40	78.1
University of New Orleans	39	209.9	51	92.8	61	55.2
Cornell University	40	209.5	50	96.8	42	75.8

Exhibit 23
Current Affiliation by Journal

Institution	Overall Rank	Pages	JREFE	JRER		REE		JHE		JUE		JRS		LE		RSUE		
				Pages	Rank													
University of Connecticut	1	873	1	155	8	93	1	341	30	30	6	188	7	74	31	35	8	108
University of Wisconsin	2	614	17	60	97	12	2	255	7	52	71	28	61	26	2	172	15	89
Fed	3	577	7	107	—	—	7	135	2	91	4	210	3	100	—	—	37	47
University of Illinois	4	542	3	132	20	57	13	100	43	22	16	115	23	48	52	25	4	118
Freddie Mac	5	524	6	118	27	47	4	214	1	145	37	55	200	6	—	—	44	42
University of California-Berkeley	6	492	8	96	39	35	5	207	11	45	24	74	182	8	19	58	36	49
Louisiana State University	7	489	2	150	25	50	22	59	23	33	15	118	34	38	27	40	32	56
Pennsylvania State University	8	488	12	80	33	37	19	80	49	20	18	111	27	45	12	70	9	105
University of Pennsylvania	9	468	90	14	129	9	6	151	40	23	10	132	1	122	195	5	10	105
Cleveland State University	10	441	13	73	1	304	32	43	—	—	63	30	—	—	129	11	—	—
University of Cincinnati	11	438	4	131	14	71	3	227	8	51	97	20	193	7	—	—	160	12
Ohio State University	12	429	22	48	—	—	11	109	5	63	20	106	52	28	17	61	13	95
University of Illinois-Chicago	13	406	30	37	—	—	138	6	81	10	2	230	4	94	34	34	27	64
University of Florida	14	401	35	16	66	10	115	9	50	34	57	51	29	21	52	33	52	
University of British Columbia	15	378	40	31	—	—	35	40	56	17	5	209	—	—	20	53	12	104
Georgia State University	16	370	61	23	2	134	24	54	17	12	120	—	—	58	23	35	51	
University of Southern California	17	355	18	60	—	—	58	22	13	41	14	118	8	72	48	25	22	71
University of Georgia	18	350	38	32	6	95	16	88	46	21	38	55	19	55	45	26	104	20
USDA	19	347	35	35	—	—	—	—	—	188	8	152	102	16	73	20	28	—
Massachusetts Institute of Technology	20	337	29	38	62	22	15	89	94	6	8	—	—	—	—	—	61	

Exhibit 23 (continued)
Current Affiliation by Journal

Institution	Overall Rank	JREFE Pages	JREFE Rank	JRER Pages	JRER Rank	REE Pages	REE Rank	JHE Pages	JHE Rank	JLE Pages	JLE Rank	JRS Pages	JRS Rank	LE Pages	LE Rank	RSUE Pages	RSUE Rank	Pages
New York University	21	330	5	126	117	10	18	80	108	4	—	41	33	—	—	4	118	
Syracuse University	22	328	86	15	—	—	—	14	40	1	243	—	—	—	—	6	114	
University of Kentucky	23	313	16	63	36	25	50	33	29	26	70	—	—	50	25	16	86	
Columbia University	24	312	—	—	76	17	40	36	16	37	7	158	185	8	37	31	14	91
Wayne State University	25	307	154	6	—	—	35	40	6	56	9	139	15	59	184	6	23	71
University of Colorado	26	296	—	—	—	—	—	—	—	3	224	66	24	15	65	51	51	38
Fannie Mae	27	282	11	82	45	29	9	119	18	36	124	16	155	10	—	—	56	35
American University	28	269	19	56	5	106	12	100	55	17	140	15	—	—	219	3	238	2
Indiana University	29	268	89	14	106	11	35	40	—	—	25	74	—	—	129	11	1	171
Brown University	30	259	—	—	—	—	—	—	—	10	132	231	3	84	17	2	164	—
University of Tokyo	31	259	—	—	—	—	—	—	—	17	115	72	23	119	12	3	163	—
Florida State University	32	256	20	54	4	109	47	29	75	11	58	33	—	—	66	22	135	15
California State University-Fullerton	33	253	127	8	7	93	8	126	—	—	251	3	16	57	—	—	—	—
University of Michigan	34	252	21	48	135	8	17	87	—	—	19	110	200	6	77	19	82	24
University of North Carolina	35	243	50	27	12	73	14	97	—	—	—	—	110	15	49	25	53	37
George Washington University	36	243	14	71	13	71	30	44	—	—	86	22	144	11	68	21	104	20
Kyoto University	37	242	23	41	—	—	—	—	—	—	22	90	31	41	—	—	7	112
Boston College	38	214	24	40	—	—	26	50	26	31	23	86	155	10	—	—	42	43
University of New Orleans	39	209	37	33	65	20	158	3	—	—	42	49	13	60	—	—	21	72
Cornell University	40	209	24	40	87	14	46	29	—	—	72	27	182	8	5	86	135	15
Florida Atlantic University	41	205	10	90	11	79	42	32	88	9	232	6	—	—	—	—	—	—

Exhibit 23 (continued)
Current Affiliation by Journal

Institution	Overall Rank	Pages	JREFE Pages	JRER Pages	REE Pages	JHE Pages	JUE Pages	JRS Pages	LE Pages	RSUE Pages
Yale University	42	201	9	91	—	45	30	31	30	98
University of Maryland	43	193	62	23	114	10	130	7	—	20
University of California—Los Angeles	44	191	49	28	159	6	20	70	—	33
University of North Carolina—Greensboro	45	187	32	37	2	134	154	4	53	19
Harvard University	46	186	154	6	143	7	88	13	—	—
University of California—Irvine	47	185	—	—	—	—	67	12	21	28
Texas A&M	48	171	91	14	17	63	75	17	—	66
University of Tennessee	49	164	—	—	150	7	61	22	10	99
Tufts University	50	163	142	7	143	7	—	—	48	17
								20	48	41
								100	25	46
								21	100	99
								14	144	17
								47	100	100
								20	20	20
								14	60	60
								14	39	39
								12	12	12
								18	18	18
								78	78	78

Exhibit 24
Top Twenty Current Institutions for Each Journal

JREFE	Pages	JRER	Pages	REE	Pages	JHE	Pages
University of Connecticut	185.6	Cleveland State University	304.9	University of Connecticut	341.5	Freddie Mac	145.8
Louisiana State University	180.6	Georgia State University	134.5	University of Wisconsin	255.3	Fed	91.1
University of Illinois	132.5	University of North Carolina—Greensboro	134.5	University of Cincinnati	227.0	University of Toronto	84.3
University of Cincinnati	131.3	Florida State University	109.6	Freddie Mac	214.8	Urban Institute	77.0
New York University	126.5	American University	106.5	University of California—Berkeley	207.8	Ohio State University	63.5
Freddie Mac	118.0	University of Georgia	95.1	University of Pennsylvania	151.9	Wayne State University	56.7
Fed	107.0	California State University—Fullerton	93.4	Fed	135.0	University of Wisconsin	52.3
University of California—Berkeley	96.3	University of Connecticut	93.1	California State University—Fullerton	126.6	University of Cincinnati	51.1
Yale University	91.0	Colorado State University	85.0	Fannie Mae	119.3	University of Florida	50.3
Florida Atlantic University	90.6	Washington State University	81.3	University of Florida	115.5	University of Tennessee	47.5
Fannie Mae	82.3	Florida Atlantic University	79.0	Ohio State University	109.1	University of California—Berkeley	45.5
Pennsylvania State University	80.1	University of North Carolina	73.5	American University	100.6	Case Western Reserve University	45.0
Cleveland State University	73.3	George Washington University	71.6	University of Illinois	100.0	University of Southern California	41.8
George Washington University	71.3	University of Cincinnati	71.0	University of North Carolina	97.0	Syracuse University	40.3
Temple University	66.0	Fordham University	67.0	Massachusetts Institute of Technology	89.5	Wageningen University	39.0
Kentucky	63.0	University of Florida	66.6	University of Georgia	88.1	Columbia University	37.0
University of Wisconsin	60.8	Texas A&M	63.8	University of Michigan	87.8	Uppsala University	37.0
University of Southern California	60.3	Wichita State University	60.0	New York University	80.7	University of Haifa	36.0
American University	56.8	Louisiana Tech University	58.5	Pennsylvania State University	80.5	Fannie Mae	36.0
Florida State University	54.6	University of Illinois	57.8	University of California—Los Angeles	70.1	National Multifamily Housing Council	35.0

Exhibit 24 (continued)
Top Twenty Current Institutions for Each Journal

JUE	Pages	JRS	Pages	LE	Pages	USDA	Pages	RSUE	Pages
Syracuse University	243.3	University of Pennsylvania	122.5				205.3	Indiana University	171.5
University of Illinois-Chicago	230.1	Groningen University	112.9	University of Wisconsin			172.4	Brown University	164.0
University of Colorado	224.1	Fed	100.0	Iowa State University			87.8	University of Tokyo	163.6
Fed	210.3	University of Illinois-Chicago	94.8	University of Maryland			87.3	University of Illinois	118.0
University of British Columbia	209.5	USDA	93.0	Cornell University			86.5	New York University	118.0
University of Connecticut	188.5	Maryquette University	77.0	University of Rhode Island			86.5	Syracuse University	114.0
Columbia University	158.5	University of Connecticut	74.8	University of Delaware			85.5	Kyoto University	112.1
Massachusetts Institute of Technology	152.8	USC	72.2	Duke University			84.3	University of Connecticut	108.6
Wayne State University	139.0	Academia Sinica	69.3	University of Maine			80.6	Pennsylvania State University	105.8
Brown University	132.0	University of Saskatchewan	62.5	Virginia Tech			79.0	University of Pennsylvania	105.6
University of Pennsylvania	132.0	University of Toledo	61.0	Resources for the Future			73.8	Tilburg University	105.5
Georgia State University	120.4	University of Strathclyde	60.6	Pennsylvania State University			70.9	University of British Columbia	104.5
Tohoku University	119.0	University of New Orleans	60.5	University of California-Davis			69.8	Ohio State University	95.0
University of Southern California	118.3	University of Tennessee	60.0	University of York			69.0	Columbia University	91.5
Louisiana State University	118.1	Wayne State University	59.0	University of Colorado			65.0	University of Wisconsin	89.0
University of Illinois	115.5	California State University-Fullerton	57.0	University of Minnesota			61.8	University of Kentucky	86.0
University of Tokyo	115.0	University of Northern Illinois	57.0	Ohio State University			61.8	Free University Amsterdam	85.7
Pennsylvania State University	111.5	State University of New York-Buffalo	56.5	World Bank			60.0	Tufts University	78.5
University of Michigan	110.0	University of Georgia	55.6	University of California-Berkeley			53.8	Harvard University	75.5
Ohio State University	106.1	London School of Economics	53.0	University of British Columbia			53.1	Carnegie Mellon University	74.8

Notes: JREFE: Top 20 = 38.2% of pages; JRER: Top 20 = 33.9% of pages; REE: Top 20 = 48.4% of pages; JHE: Top 20 = 42.1% of pages; JUE: Top 20 = 38.4% of pages; JRS: Top 20 = 28.3% of pages; LE: Top 20 = 34.3% of pages; and RSUE: Top 20 = 31.7% of pages.

found here as well, although the specific institutions differ somewhat. In particular, there is much overlap in the top ranked institutions for the core journals, the overlap diminishes as the set of journals is expanded. Also, the five non-core journals as a group exhibit more variation in top institutions than does the set of core journals.

Exhibit 24 also reports the concentration indices for the top twenty institutions in each of the individual journals. Although the percentages differ from the concentration indices calculated using the contemporaneous attribution method, the general pattern observed earlier pertains here, too. The core real estate journals exhibit concentrations ranging from 34% to 48%. The base real estate journals also fall within that band. On the other hand, the non-base journals—*JRS*, *LE* and *RSUE*, have lower concentrations ranging from 28% to 34%. The greater breadth of topics embraced by the latter journals tends to spread journal space across the wider range of institutions contributing to related fields.

Finally, the rankings based on current affiliation are compared with those based on contemporaneous affiliation. Looking at Exhibits 17 and 23, forty-five of these institutions are in the top fifty regardless of which affiliation method is used. The specific rankings, however, do differ within this group depending on the affiliation method. In any case, the broad consistency in the institution rankings for the two methods suggests that the top-ranked institutions tend to replace departing top ranked individuals with similarly productive individuals.

Conclusion

This study uses several methods to rank individuals and institutions according to their publications in eight academic journals from 1989 through 1998. It offers a broad picture of one segment of the real estate research community. Previous studies illustrate that such rankings over short time periods can vary widely. Not surprisingly, a wide variation in individuals' rankings across the two five year subperiods for the journals in the sample was found. Therefore, these results should not be inferred to hold outside the specific time period examined. Nonetheless, this article is the first to offer such a broad perspective on an important aspect of the academic real estate profession.

Several general conclusions are evident from the results. There is a fairly small consistent group of individuals dominating the top ranks of authors in the core and base sets of real estate journals, regardless of whether ranked according to published pages or appearances. The most productive scholars identified here also tend to engage heavily in multiple co-authorship. The results for individual journals identify a small group of authors who continue to exhibit relatively high publishing performance over more than two decades.

This study also ranks institutions using authors' contemporaneous affiliations (those listed at the time of publication) and current affiliations. Although some rank differences arise across these two attribution methods, most of the top fifty institutions are so ranked regardless of the affiliation method used. This suggests that the top

ranked institutions either have enjoyed stability in their research personnel or have tended to replace those authors who leave with equally productive individuals.

This study analyses one dimension of real estate publishing during a specific time period. The results are based strictly on numbers of publications and pages published. As stated, this study does not purport to measure the relative contributions or quality of papers in different journals or—an even more challenging task—to measure the relative contributions or quality of individual papers. Any scheme used to weigh relative quality, whether based on citations or other factors, raises other measurement issues that lie outside the intended scope of this study.¹⁰ Still, rankings that incorporate explicit quality measures can lend additional insight into the structure of the academic real estate profession. That task, however, is left for future research. Nonetheless, interested readers can use the rankings reported for the separate journals in this study with their own preferred quality adjustment across journals to construct rudimentary quality-adjusted rankings.

In closing, these publishing rankings are offered in the same spirit as similar summaries readily available in related disciplines, including the numerous studies in finance and economics. Although individual readers may find both surprises and confirmations in the results, both should be interpreted while keeping in mind the limitations inherent in this type of study.

Endnotes

1. See Allen and Kau (1991) for the *Journal of Urban Economics*, Sa-Aadu and Shilling (1988) for the *Journal of the American Real Estate and Urban Economics Association* and Dombrow and Turnbull (2000) for the *Journal of Real Estate Finance and Economics*.
2. The publication summary reported here provides a broad picture of an important part of the academic real estate profession in terms of one measured dimension. Although quality is not assessed, publication summaries can still provide some useful benchmark information to faculty and administration when establishing reasonable tenure or promotion standards in real estate or for cross-departmental performance rankings within institutions.
3. *Real Estate Economics* is formerly the *Journal of the American Real Estate and Urban Economics Association (AREUEA Journal)*.
4. Rankings for each of the eight journals are reported individually in Exhibits 10, 11, 17, 18, 23 and 24. Interested readers can use these to construct alternative rankings based on journal groupings that differ from those used in this study.
5. Possible “editor effects” from publishing in one’s own journal (or avoiding publishing in one’s own journal) or other institutional biases in publishing were not controlled for. To the extent that these are important effects, the measured output can be biased for those individuals who served as editors during the period studied.
6. Two different page normalization methods, one based on the equivalent word count and the other based on the equivalent character count were used. It turns out that the rankings for the top authors and institutions reported here are unaffected by the normalization method, so only the measure based on equivalent character counts are reported. The normalization process takes into account format changes in journal styles over the decade; for example, *REE* went through three different formats during the period. The pages are

normalized to *JREFE*-equivalent pages, with the choice of the base journal being simply by alphabetical order in the set of core journals. The normalization factors are: *JRER* = 0.9825; *REE* = 0.6878 through 1991, 0.7989 for 1992 through 1994, and 0.7774 for 1995 through 1998; *JHE* = 0.7774; *JRS* = 0.9360; *JUE* = 0.7682; *LE* = 1.0678; and *RSUE* = 0.8341.

7. In comparison, Moore, Newman and Turnbull (2001) find that the faculty in nine Ph.D. economics departments (outside of the top twenty programs) sole author approximately 35% of their level 1 general economics journal articles.
8. The mortgage entities include Fannie Mae, Freddie Mac, OFHEO, RTC and the Office of Thrift Supervision. The U.S. Government category includes among others, USDA, Government Accounting Office, Bureau of the Census and the various departments. Although technically not part of the U.S. government, the Federal Reserve was included in this category as well. Affiliations for 1.3% of the pages published were unidentifiable.
9. None of the individuals for whom a "current affiliation" could not be identified was from the top ranked institutions.
10. See, for example, Moore, Newman and Turnbull (2001) and the references therein for a discussion of quality measurement issues recognized in the rankings and performance literature in economics.

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