

The Value of a Finance Journal Publication

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ABSTRACT

The empirical analysis examines the salary and publication records of 311 finance professors at public research universities to calculate the worth of a top finance journal article. Within rank, salary regressions provide measures of the direct returns of a journal publication, while probit models consider the indirect returns that result from promotion. Ultimately, the analysis uses a reduced form salary equation to measure both the direct and indirect effects of publishing a journal article. Depending on professorial rank, the present value of the first top finance journal article is between \$19,493 and \$33,754, with the additional result of large returns to subsequent publications.

“WHAT IS A JOURNAL publication worth?” has long been a question of interest to academics in the finance and economics profession. Perhaps it is the desire to value assets, the need to examine personal economic decisions, or simply intellectual curiosity that motivates the many studies that exist. Whatever the reason, economists continue to investigate the marginal contribution to a professor’s salary of publishing one more article in a refereed journal.

The extant empirical research typically uses multiple linear regression analysis to examine a publication’s marginal contribution to salary. Regression results in studies by Bertin and Zivney (1992) and DeLorme, Hill, and Wood (1979) support a positive relation between a professor’s salary and the number of publications. In an attempt to capture diminishing marginal returns, Tuckman and Leahey (1975) first estimated a salary regression model with dummy variables for different publication ranges (i.e., 1–2 publications, 3–4 publications, 5–10 publications, etc.). They fit an incremental salary curve to the estimated publication range coefficients and then used the non-linear function to evaluate average and marginal returns.

A second important contribution to the literature by Tuckman and Leahey is their observation that a journal publication has both a direct and indirect

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effect on salary.¹ The direct effect can be measured by examining the incremental annual salary increase that results from an additional publication. But in addition to merit increases that reflect research productivity, faculty at research universities must also publish to gain promotion to a higher rank (see, e.g., Skeels and Fairbanks (1968)). Because a higher salary typically accompanies a promotion, publications also raise salaries indirectly. Moreover, since promotion implies that the faculty member continues to receive a salary increase, the worth of a journal publication equals the present value of the annuity.

Our analysis examines finance faculty journal publication records and salaries at research-oriented universities. Earlier studies typically estimate faculty salary models across both teaching and research institutions, and the result is an average value estimate of a publication's worth. Because the focus of the analysis is to estimate the value of a published article to an individual professor, it is more efficient to restrict the sample to a homogeneous set of universities whose primary mission includes faculty research. Moreover, to include teaching universities in our sample would certainly lead to a substantial number of faculty with 0 publications and would make problematic the economic interpretation of the empirical work. A second difference from earlier studies is that the analysis divides publication records into top finance journal articles, top journals in business fields other than finance, and all other business publications. In this way, we are able to measure the relative rewards (i.e., marginal rate of substitution) among the three categories.

The remaining parts of this paper are organized as follows. Section I specifies the general functional relationships between faculty salaries, publication records, and other exogenous attributes, and it discusses the data used in the study. The section further describes a probit equation that considers the importance of journal articles in the promotion process. Section II presents the salary and promotion regression results, which are then used in Section III to estimate the lifetime returns to publishing a top finance journal article. Section IV summarizes the empirical findings and suggests some potential applications.

I. Modeling Considerations and Data

The analysis posits that finance faculty salaries (SAL) are a function of a professor's publication record as well as a set of exogenous characteristics of the faculty member and the university. The model is consistent with previous empirical work and economic theory that suggest a professor's marginal

¹ This point was further brought to our attention by the anonymous reviewer who noted in an earlier version of this paper the simultaneity problem of both salary and rank being determined by publication records. The revised paper addresses this issue by estimating salary equations both within and across professorial ranks and also considers the effect of publishing on promotion. While Tuckman and Leahey (1975) specify a linear regression model for promotion, the following analysis more appropriately estimates a probit regression.

product depends on both research and teaching. The first part of the study estimates the direct effect of a journal publication on faculty salaries. Direct returns to publishing measure only the incremental change in salary, and thus, the analysis estimates separate salary regressions for each of the three professorial ranks.

The model assumes that salary is a function of the number of articles published in top tier finance journals (TOPFIN), the number of articles published in top tier journals in business fields other than finance (TOPOTH), and the number of articles published in any other business journal (ALLOTH).² Exogenous faculty characteristics include whether the professor is chair of the finance department (CHAIR) and whether the professor is a university administrator (ADMIN). The number of years since the professor received the Ph.D. (YRGRAD) and the number of years the professor has worked at the current university (YR@UNIV) serve as proxies for teaching productivity. Additional explanatory variables include whether the academic salary is budgeted for more than a 9-month period (9+MO), the sum of the relevant state's income tax and sales tax rates (TAXES) and whether the university has a faculty union and is in the state of California (CA).³ The salary equation can be interpreted as the faculty member's annual academic salary conditioned on the individual's professorial rank (i.e., assistant, associate, or full professor). In this way, the publication coefficients reflect only the direct returns from an article and not the indirect returns related to promotion and other possible career advancements.

The empirical work estimates the salary regression in three different functional forms: linear, logarithmic, and quadratic. Although all three specifications show positive and significant returns to a publication, the empirical section reports only the salary equations which include squared terms (SQ) for the research and teaching variables.⁴ The reason for choosing a quadratic form is based on goodness-of-fit criteria, and, like the logarithmic form, it enables a test of diminishing marginal returns to research productivity.

Journal publications also likely affect the probability that a faculty member will be promoted. The second part of the analysis examines the promotion process and estimates two separate probit regressions. The first considers promotion from assistant to associate professor and includes all faculty who

² This specification does not measure the quality of an individual publication. Thus, future work might examine a salary equation where the number of citations, rather than journal publications, is the exogenous variable. In such a framework, Diamond's (1986) empirical results suggest that academic departments value faculty research quantity and quality, which tend to be correlated with the number of citations.

³ California universities are the only schools in our sample with unionized faculty. For part of the 1993–1994 academic year, the University of California faculty were paid 5 percent less than their previous year's salary because of a fiscal emergency. The salaries used in the study do not reflect the temporary 5 percent pay cut as we assume that the full salaries more accurately reflect the value that the University of California placed on its faculty.

⁴ Output for the linear and logarithmic regressions may be obtained from the authors. The empirical work also estimates a set of free-form neural networks. Sensitivity analysis suggests qualitatively similar results to the reported regression work.

were assistant professors during the 1993–1994 academic year plus all associate professors who had been promoted since the 1991–1992 school year.⁵ Similarly, the second regression estimates the probability of promotion from associate to full professor and includes in the sample the 1993–1994 associate professors and full professors who had been promoted in the previous two years.

The promotion equations have as inputs the faculty member's publication record, the teaching and service variables, plus two inputs that adjust for the quality of the institution. The measures of university quality include whether the faculty member is at a top-rated finance department as rated by the Gourman Report (TGOUR) or whether the faculty member is at a middle-rated finance department as rated by the Gourman Report (MGOUR).⁶ By including the TGOUR and MGOUR variables, the promotion regressions examine whether schools of higher quality also have higher promotion standards.

The last part of the estimation section includes a reduced form salary equation based on the entire sample. Given that the data encompass professors of all ranks, the publication coefficients can be interpreted as capturing the direct returns to publishing journal articles as well as the indirect returns related to promotion and career advancement. The reduced form salary equation contains the independent variables from both the conditional salary equation and the promotion regression, and it is used to estimate the full value of a journal publication.

To estimate the salary and promotion regressions, the analysis examines salary data from state-supported institutions. We obtain detailed university budgets for the 1993–1994 academic year from publicly available sources.⁷ A complete list of the universities used in the sample appears in Table I—29 schools from 15 different states. All institutions have been designated by the Carnegie Foundation as either Research Universities (level I or II) or Doctoral Universities (level I), and, with a few exceptions, all have Ph.D. pro-

⁵ The two-year promotion window is identical to the one used by Tuckman and Leahey (1975). They observe that to include all assistant and associate professors in the sample would lead to a regression that captures the effects of *current* publications rather than the number of publications at the time of promotion. We should also note that a two-year window allows for the lead time between journal acceptance and publication.

⁶ The Gourman Report (1993) ranks universities and graduate programs according to criteria that includes: programs offered and degrees conferred, faculty qualifications (experience, intellectual interests, and research productivity), quality of administration, student quality, quality of physical plant, and library size and access. The analysis in this paper codes a 1 for TGOUR if the Gourman Report rates the finance department as "very strong", and codes MGOUR equal to 1 if the Gourman Report rates the finance department as "strong" or "good." The remaining departments received either an "acceptable" rating or no ranking at all.

⁷ Compared to how the concept is used in finance, the idea of "publicly available information" takes on a whole new meaning when discussing faculty salaries. One administrator refused to forward faculty salaries for his university. When asked if this was public information, he replied yes, but only for residents of the state! This is but one of a number of humorous stories that resulted from our quest for data.

Table I
Universities Included in Study of Faculty Salaries

Arizona State University	University of Florida
Florida State University	University of Georgia
Georgia State University	University of Houston
Iowa State University	University of Illinois
Ohio State University	University of Maryland
SUNY at Buffalo	University of Memphis
Texas A&M University	University of North Texas
Texas Tech University	University of Oklahoma
University of Arizona	University of Texas at Arlington
University of California—Berkeley	University of Texas at Austin
University of California—Davis	University of Texas at Dallas
University of California—Irvine	University of Utah
University of California—Los Angeles	University of Wisconsin—Madison
University of California—Riverside	University of Wisconsin—Milwaukee
University of Connecticut	

grams in Business Administration. The sample population includes data on 311 faculty members.

In choosing the sample, we select a geographically diverse set of schools as well as universities of differing quality. Using the Gourman Report ratings as one measure of university quality, 25 percent of the faculty are at schools rated in the top category, 41 percent are at schools in the middle group, and the remaining 34 percent of the faculty teach at either lower ranked or unranked schools. In the Borokhovich et al. (1995) study which ranks departments according to 1989–1993 publication records, our sample includes schools rated between 5 and 169.⁸

To get a further idea of quality differences in our sample, per-faculty publication statistics appear in Table II. One important sample characteristic is that while the range in TOPFIN articles per faculty varies from 0 to 32, the median value is 0 for assistants, 2 for associates and fulls, and 5 for professors with endowed chairs. Thus, the typical professor in each rank has few, if any, publications in one of the top finance journals. Although the range for ALLOTH is larger, from 0 to 61, the median values for each rank only vary from 1 for an assistant to 12 for an endowed professor. Taken as a whole, the sample in our study mirrors the finding in Zivney and Bertin (1992) which shows how difficult it is to consistently publish professional journal articles. Finally, looking at the average number of publications per faculty by university, our sample includes universities where the average number of publications in TOPFIN and TOPOTH is near 0 as well as one school where the average number of TOPFIN and TOPOTH publications is an impressive 13.3 and 4.2 per faculty member.

⁸ It should be noted that our sample's top school is the second rated public institution in the Borokhovich et al. (1995) study.

Table II
Per Faculty Number of Publications by Rank and University

The summary statistics are for the 311 finance professors in the sample. The four Faculty Rank columns are per faculty publication records by rank for top finance journals (TOPFIN), top other business journals (TOPOTH), and all other business journals (ALLOTH). The last column displays summary statistics for the mean faculty publication record by university.

	Faculty Rank				University
	Assistant Professor	Associate Professor	Full Professor	Endowed Chair	
TOPFIN					
Average	0.87	2.32	3.57	7.41	3.20
Median	0	2	2	5	2.50
Maximum	5	12	25	32	13.27
Minimum	0	0	0	0	0.08
TOPOTH					
Average	0.11	0.57	1.22	3.02	1.01
Median	0	0	0	1	0.54
Maximum	3	6	10	19	4.18
Minimum	0	0	0	0	0
ALLOTH					
Average	1.54	5.83	10.14	14.67	7.03
Median	1	5	8	12	6.50
Maximum	9	30	51	61	13.11
Minimum	0	0	0	0	2

The data source for faculty publications is Heck’s 1994 *Economic Literature Database*, which includes 264 finance, economic, accounting, real estate, and insurance journals. We use the 1994 literature database in conjunction with 1993 budget data to allow for publication lags. The top finance journals (TOPFIN) include the *Journal of Finance*, the *Journal of Financial and Quantitative Analysis*, the *Journal of Financial Economics*, and the *Review of Financial Studies*. These journals correspond to the top four finance journals as ranked by a citations-based “finance impact factor” in Zivney and Reichenstein (1994). Other top business journals (TOPOTH) are the *American Economic Review*, the *Journal of Political Economy*, *Accounting Review*, the *Journal of Accounting Research*, the *Journal of Business*, and the *Journal of the American Real Estate and Urban Economics Association (AREUEA)*.⁹ All other journals fall into the third publication category, ALLOTH.

⁹ The list of TOPOTH journals is somewhat arbitrary. Future research might follow Borokhov-ich et al. (1995) and use a more quantitative approach based on citation ranking of journals. One particular concern is whether it is appropriate to include AREUEA in the TOPOTH category. When AREUEA is included in the ALLOTH category, the ALLOTH coefficient increases more than 50 percent; however, the important TOPFIN coefficients remain virtually unchanged. Because AREUEA is the leading academic real estate journal in number of citations (see Redman, Manakyan, and Tanner (1996)), we include it in the TOPOTH category. Given that a number of finance departments also house the real estate faculty, future research should examine the value of real estate publications more explicitly.

In addition to salary data, the detailed budgets also provide information for faculty rank and the CHAIR and ADMIN variables. The *Wiley Guide to Finance Faculty* (Hasselback (1993, 1995)) is a further source for rank and provides information on YRGRAD and YR@UNIV. Tax information comes from the *All States Tax Handbook* and the *1994 World Almanac*.

II. Salary and Promotion Regression Results

The first three columns in Table III estimate the salary relationship conditioned on the rank of the faculty member. Overall, independent variables explain approximately 60 percent of the variance in salary. The coefficients are generally of the expected sign and significant publication variables display positive, but diminishing marginal returns to an article. Interestingly, the constant terms of assistant professors (\$65,665) and associate professors (\$63,684) reflect a pay inversion phenomenon among finance faculty.

For assistant professors, the TOPFIN coefficient equals \$3,674 and is significant at the 0.05 level. The negative TOPFINSQ coefficient suggests diminishing marginal returns to publishing, but only a one-tailed test yields significance at the 0.10 level. Publishing in other top business journals and all other journals does not appear to affect an assistant professor's salary. The remaining significant variables in equation 1 include a \$15,905 stipend for an additional summer salary and -\$4,887 for California universities. The positive and significant coefficient for TAXES suggests that taxes are either a proxy for the cost of living or that taxes are positively related to a state's support of its public universities.

For associate professors, it is also the case that only TOPFIN publications affect salary. TOPFIN (\$3,698) and TOPFINSQ (-\$228) are the same magnitude as the respective assistant professor coefficients, and similarly imply diminishing marginal returns to publishing a top finance journal article. Being a department chair increases salary \$8,610, but each year at the university decreases an associate's salary by \$949. For associates, a summer stipend boosts pay \$6,199.

The TOPFIN coefficient of \$1,747 for full professors is smaller than it is for assistants and associates, but marginal returns are nearly constant. After only a few TOPFIN publications, the direct returns of a top finance article would be larger for full professors than for assistants or associates. The first publication in top tier business journals is worth \$3,401, but drops for additional TOPOTH articles. Full professors receive \$7,748 for being chair and \$25,296 for summer stipends. The coefficients for YR@UNIV (-\$2,427) and YR@UNIVSQ (\$66) imply that a professor with enough time and service at a university will eventually be rewarded.

Results for the promotion probit regressions appear in columns 4 and 5 of Table III. For promotion to associate professor, the coefficients for TOPFIN and ALLOTH are positive and, if a one-tailed test is used, significant at the 0.10 level. The positive coefficients for TOPFIN and ALLOTH support the hypothesis that additional journal articles increase the probability of promotion. Given that many assistant professors stay at one school for their

Table III
Annual Salary and Promotion Regression Results

Columns 1-3 are OLS regressions that illustrate the direct effect on academic salary (SAL) of a publication in a top finance journal (TOPFIN), top other business journal (TOPOTH), and all other business journals (ALLOTH). Columns 4 and 5 are probit regressions that show the effect of publications on promotion. The reduced form in column 6 illustrates both the direct and indirect salary effects of publishing. Other exogenous variables include number of years since the faculty member received their Ph.D. (YRGRAD), number of years the professor has been at the university (YR@UNIV), and state income and sales tax rates (TAXES). Regression dummy variables are: if the professor chairs the department (CHAIR), is an administrator (ADMIN), receives a summer stipend (9+MO), teaches in a California school (CA), or is at a university with a top Gourman Report ranking (TGOUR). SQ denotes a squared term. *t*-statistics appear in parentheses, where * denotes significance at the 0.05 level (two-tailed test) and ** denotes significance at the 0.10 level (two-tailed test).

Dependent Variables:	Assistant Professor Annual Salary	Associate Professor Annual Salary	Full Professor Annual Salary	Promotion to Associate Prof. Regression Coefficient (<i>t</i> -stat.)	Promotion to Full Prof. Regression Coefficient (<i>t</i> -stat.)	All Ranks Annual Salary Regression Coefficient (<i>t</i> -stat.)
Independent Variables	(1)	(2)	(3)	(4)	(5)	(6)
TOPFIN	3,674 (2.61*)	3,698 (3.81*)	1,747 (3.20*)	1.39 (1.43)	-0.03 (0.11)	1,979 (5.45*)
TOPFINSQ	-499 (-1.50)	228 (-2.22*)	-19 (-0.89)	-0.18 (-0.75)	0.00 (0.22)	-27 (-1.77**)
TOPOTH	-994 (-0.23)	2,455 (1.24)	3,535 (3.55*)	-1.51 (-0.53)	0.20 (0.50)	2,799 (3.89*)
TOPOTHSQ	253 (0.09)	106 (-0.24)	-134 (-1.82**)	1.77 (0.69)	-0.01 (-0.13)	-120 (-2.15*)
ALLOTH	-31 (-0.03)	559 (1.28)	168 (0.54)	1.07 (1.46)	0.16 (1.25)	435 (2.12*)
ALLOTHSQ	-27 (-0.25)	19 (-1.07)	5 (0.74)	-0.03 (-0.48)	-0.01 (-0.96)	3 (0.55)
CHAIR		8,610 (2.80*)	7,748 (1.99*)			7,616 (3.00*)
ADMIN			778 (0.12)			8,466 (1.69**)
YRGRAD	-152 (-0.32)	187 (0.22)	1,443 (1.02)	-0.04 (-0.10)	0.94 (1.77**)	860 (2.17*)
YRGRADSQ	2 (0.17)	-19 (-0.69)	36 (-1.18)	0.00 (0.25)	0.03 (-1.66**)	-11 (-1.04)
YR@UNIV	-1,410 (-1.62)	949 (-2.04*)	-2,427 (-3.68*)	3.02 (2.10 [†])	-0.05 (-0.28)	-1,807 (-4.69*)
YR@UNIVSQ	5 (0.10)	16 (1.13)	66 (3.07*)	0.12 (2.05*)	0.00 (-0.10)	38 (3.13*)
9+MO	15,905 (6.25*)	6,199 (1.74**)	25,296 (7.20*)			23,330 (10.04*)
TAXES	640 (2.78 [†])	396 (1.15)	193 (0.37)			260 (0.97)
CA	-4,887 (-1.81**)	3,098 (-0.64)	6,422 (-1.07)			-6,245 (-1.86**)
TGOUR				0.65 (-0.53)	0.73 (1.39)	9,177 (4.65*)
MGOUR				-2.88 (-2.10 [†])	0.33 (0.69)	1,826 (1.10)
CONSTANT	65,665 (21.22*)	63,684 (8.78 [†])	72,814 (4.62*)	-18.95 (-2.39*)	-9.06 (-2.21*)	61,937 (17.78*)
No. obs.	79	90	142	97	104	311
R ² adj.	0.6298	0.5681	0.6210			0.6762
Madalla R ²				0.5080	0.1488	

first six years and then go up for tenure, it is not surprising that YR@UNIV positively affects promotion. Also, the negative TGOUR and MGOUR coefficients suggest that tenure standards are higher at the top universities. Overall, the probit regression correctly classifies 76 of 79 assistant professors and 14 of 18 recently promoted associates.

At first glance, the probit results for promotion to full professor may appear enigmatic. None of the publication variables are significant; only the number of years since receiving the Ph.D. seems important in explaining promotion to full. Closer inspection of the data reveals that the median professor is promoted to full 14 years after earning a doctorate. Comparing the median TOPFIN publication records of just-promoted full professors to associate professors out 13 years or less from their doctorate finds that the median value is smaller for fulls (2) than it is for young associates (3). Recently promoted fulls have a slightly higher TOPFIN mean (3.214 versus 2.958), but the difference is not significant ($t = 0.2957$). One interpretation is that for the universities in this study, there is a critical number of TOPFIN articles necessary for promotion to full (2–3). Many of the faculty satisfy this criteria in their early associate years but they must serve enough time at the associate rank (approximately 6–8 years) before they are considered for promotion.

Results for the reduced form salary regression appear in column 6. TOPFIN publications positively affect annual salary and display diminishing marginal returns. The reduced form equation reveals the intuitive result that the direct and indirect returns measured by the TOPFIN coefficient are slightly larger than the direct return to full professors displayed in column 3 (\$1,979 versus \$1,747). This suggests that for full professors there are few career advancement opportunities such as being named an endowed chair or moving to another university, and the indirect effect of a TOPFIN publication is relatively small.

Remaining publication coefficients imply that TOPOTH articles positively affect annual salary, and now ALLOTH journal publications also significantly impact wages. The latter result coupled with regressions 1–4 suggest that although the direct returns to ALLOTH publications are small or non-existent, the market indirectly values their worth in the tenure and promotion process. Thus, in considering promotion and other career advancement opportunities, ALLOTH publications serve as important support material to TOPFIN journal articles.

Most of the other variables are significant and enter the reduced form equation with the hypothesized sign. Of particular note, YRGRAD and YRGRADSQ imply that human capital increases at a diminishing rate, while YR@UNIV coefficients suggest that the university extracts rents mainly during the early years of the professor's tenure.¹⁰ Although not statistically significant, the positive TAXES coefficient suggests that individuals focus on

¹⁰ Farragher and Woerheide (1990) also find an inverse relation between faculty salaries and number of years spent at a university. Their estimate is of a similar magnitude, but they offer no explanation for their finding.

after-tax income. Teaching at a California university decreases salary \$6,245. The lower pay may be a function of faculty unionization, indirect compensation through world class resources and unique consulting opportunities, or faculty consumption preferences for living in California. Finally, it appears that if a professor can pass the higher tenure and promotion standards of a top ranked institution (column 4), the university is willing to compensate faculty an additional \$9,177.

III. Estimating the Lifetime Returns of a TOPFIN Publication

Direct returns of publishing in a top finance journal can be estimated from the within rank salary regressions. In Panel A, Table IV, initial TOPFIN publications result in larger salary increments for assistant and associate professors than for full professors, although direct returns to additional articles decline at a faster rate. Marginal returns for the most productive assistant and associate professors appear to be negative, but that result is somewhat misleading because the TOPFIN medians for these two ranks are 0 and 2, while the 95th percentiles are 3 and 8 publications. Moreover, even if direct returns to the productive young faculty are negative, there is strong evidence that indirect returns from publishing top finance journal articles are positive.

Direct returns measure only the increment to next year's annual salary from an additional publication. By definition, it is assumed that the faculty member stays at the same professorial rank. However, over time, promotion and career advancement opportunities tend to smooth out the annual contribution of a journal publication.¹¹ Thus, it is appropriate to use the reduced form salary equation to estimate the present value of the future stream of benefits that results from another article. It is the present value of this lifetime annuity that captures the full worth of publishing an additional journal publication.

Table IV, Panel B displays the present value of the annuity resulting from a TOPFIN journal publication assuming a real discount rate of 4 percent. The results in Panel B suggest that the lifetime returns to a TOPFIN publication can be quite substantial. The first TOPFIN journal article is worth \$33,754 to the assistant professor, \$28,208 to the associate professor, and \$19,493 to the full professor—the different values reflecting only the variation in years of the three annuities.

Examining the publication profiles of the faculty in this study, a typical career research path might be 1 TOPFIN publication as an assistant, 1–2 more TOPFIN articles as an associate, and the remaining TOPFIN publications as a full professor. Under this scenario, diminishing marginal returns

¹¹ Put another way, the average annual contribution to salary for an additional publication is likely to be less than the initial marginal return. This life cycle smoothing effect also explains why the direct effect of the first few TOPFIN articles for assistant and associate professors may exceed the direct and indirect effects measured in the reduced form equation. Young professors may receive a nice salary bump for publishing their first TOPFIN articles, but they cannot expect to continually capture the entire raise over their remaining career.

Table IV
The Value of a Top Finance Journal Publication

Panel A reports the annual salary increment for a publication based on the top finance journal (TOPFIN) and top finance journal squared (TOPFINSQ) coefficient estimates in columns 1–3 of Table III. The TOPFIN and TOPFINSQ coefficients respectively are: column 1, (3,674, –499); column 2, (3,698, –228); and column 3, (1,747, –19). Panel B reports the present value of an annuity resulting from a top finance journal publication based on the TOPFIN and TOPFINSQ coefficients (1,979, –27) in column 6, Table III. The annuities assume a 4 percent discount rate and also assume a 35-year professional life less the median number of years out of school for each rank.

Rank	Number of TOPFIN Articles																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	20	25	32
Panel A: Annual Salary Increment for a Top Finance Journal Publication (TOPFIN)																		
Assistant	3,175	2,177	1,179	181	-817													
Associate	3,470	3,014	2,558	2,102	1,646	1,190	734	278	-178	-634	-1,090	-1,546						
Full	1,728	1,690	1,652	1,614	1,576	1,538	1,500	1,462	1,424	1,386	1,348	1,310	1,272	1,234	1,196	1,006	816	550
Panel B: Present Value of Annuity Resulting from a Top Finance Journal Publication																		
Assistant	33,754	32,820	31,886	30,953	30,019													
Associate	28,208	27,428	26,648	25,867	25,087	24,307	23,526	22,746	21,966	21,185	20,405	19,624						
Full	19,493	18,953	18,414	17,875	17,336	16,796	16,257	15,718	15,179	14,639	14,100	13,561	13,022	12,483	11,943	9,247	6,551	2,776

occur as more articles are published and also because each additional article is written later in a professor's career. However, Panel B suggests that the returns to later TOPFIN publications can still be rewarding. For example, in our sample a full professor publishing at the 75th percentile would have 8 TOPFIN publications, with the marginal article worth \$15,718.

IV. Conclusion

The empirical analysis provides a number of insights concerning the value of a finance journal publication. Top finance journal articles display diminishing marginal returns for assistant and associate professors, but returns are constant for full professors. To some extent, the decline in direct returns for the more junior faculty may be partly offset by the indirect returns related to promotion. For full professors, there are fewer career advancement opportunities.

The probit regressions imply that additional publications in top finance journals increase the probability of promotion to associate professor, but do little to affect a professor's promotion to full. This suggests that once a threshold number of top finance journal articles has been reached, the faculty member must serve a minimum time in grade before being promoted to full professor. The probit results may also reflect other factors not easily measured (e.g., collegiality) that contribute to the promotion decision.

The reduced form salary regression exhibits diminishing marginal returns to publishing in top finance journals. Since it is an annuity of future benefits resulting from a journal article, diminishing marginal returns also obtain because additional publications occur later in a professor's lifetime. Nevertheless, full professors continue to reap rewards in the thousands of dollars for publishing in a top finance journal.

Although university administrators are likely to be interested in the above results, the salary regressions are probably of greatest benefit to finance professors themselves. Individuals can substitute their own set of attributes into the equations to estimate the worth of their next TOPFIN article. Armed with this information, the professor can make more informed decisions when trying to determine, for example, whether time should be spent consulting or working on another top finance journal article.

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