

Journal Prestige and the Publication Frequency of Replication Research in the Finance Literature

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Several studies, all focusing on prestigious journals, have shown that little replication and extension research is published in business disciplines. This lack impedes the development of a cumulative body of knowledge in these areas. It has been suggested, but never formally tested, that the pressure to reserve finite journal space in top tier periodicals for original work could result in more replication research being published in lower tier journals. This paper empirically tests the merits of this trickle-down hypothesis from 1975 to 1994 for three tiers of finance journals. The results, which are robust with respect to alternative journal rankings/groupings, offer no support for the trickle-down hypothesis. The percentage of empirical research devoted to replications is 10.4 percent for first tier, 7.5 percent for second tier, and 12.5 percent for third tier journals. Furthermore, approximately 55 percent of these works conflict with (and an additional 29 percent offer only partial support for) the results of the original research. The goal of science is empirical generalization or knowledge development. Systematically conducted replications with extensions facilitate this goal. We therefore recommend that journals in all tiers establish a section for replication research.

INTRODUCTION

Concerned that the paucity of such work might have deleterious consequences for the development of a cumulative knowledge base, members of the editorial board of the *Quarterly Journal of Business and Economics* (QJBE) instituted a policy change in 1984 that gave priority to replication research. The policy change appears to have been successful. In a census of articles in QJBE from 1984 to 1994, Fuess (1996) finds that almost 23 percent (62 of 275) were replications. This figure is larger than those reported in other studies estimating the publication incidence of replication and extension research in the

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business disciplines, which typically vary between 2 percent and 10 percent (Brown and Coney, 1976; Hubbard and Armstrong, 1994; Hubbard and Vetter, 1991, 1992, 1996; Reid, Soley, and Wimmer, 1981; Zinkhan, *et al.*, 1990). The latter estimates are based on content analyses of the leading journals in accounting, economics, finance, management, and marketing and consequently may underestimate the occurrence of replication research in their literatures.

Hubbard and Armstrong (1994) speculate that a trickle-down effect may occur with replications. The limited space in leading journals is reserved primarily for original work, so replication research may be more likely to appear in lower tier journals. To date, however, this trickle-down hypothesis has not been examined. Our first goal is to empirically test the trickle-down hypothesis. The publication incidence of replication research is investigated across three tiers of journals in finance for the 20 year period from 1975 to 1994. Second, we ascertain whether the frequency of such work has increased or decreased over time. Third, we determine to what extent replications support, partially support, or conflict with the original work. Fourth, we assess the timeliness of the replication studies. Fifth, we estimate how much discussion occurs concerning the reliability of previously published research in the finance literature.

RESEARCH DESIGN

DEFINITIONS

We define replication and replication with extension similarly to other researchers (Brown and Coney, 1976; Hubbard and Armstrong, 1994; Hubbard and Vetter, 1991, 1992, 1996; Reid, Soley, and Wimmer, 1981). A replication is a substantial duplication of a previously published empirical research project that is principally concerned with increasing the internal validity of the research design. A replication focuses on establishing whether initial results can be reproduced. Replications attempt to duplicate all facets of the original work. An example is repeating the study with another sample drawn from the same population.

A replication with extension is a duplication of a previously published empirical research project that is concerned with increasing the external validity or generalizability of earlier research findings. An extension modifies various aspects of the research design used in the original study, such as the manipulated (independent) or measured (dependent) variables. The major goal of extensions is to assess whether earlier results are capable of being generalized to other populations, product categories, time periods, organizations, measurement instruments, geographical areas, investigators, and so on, as opposed to being idiosyncratic or localized in nature. Systematically conducted replications with extensions or "differentiated" replications (Lindsay and Ehrenberg, 1993) accomplish this. They facilitate empirical generalization or knowledge development and are instrumental in determining whether research results can be applied to practical problems (Hubbard and Lindsay, 1995).

SAMPLES

This research examines the publication incidence of replications and extensions in three tiers of the finance literature from 1975 to 1994. Certain criteria must be met in order for journals to be eligible for inclusion in the three tier hierarchy. First, journals

must regularly feature empirical work. Second, they had to have been published for most of the 20 year time period. With the exception of the *Journal of Banking and Finance* (1977-1994) and the *Journal of Financial Research* (1978-1994), all other selected journals cover the 20 years. Third, the journals must focus on the finance discipline, which precludes the use of rankings involving finance and other fields (e.g., Laband and Piette, 1994; Liebowitz and Palmer, 1984). Fourth, the journal rankings must be comprehensive and current. For these reasons, Zivney and Reichenstein's (1994) classification of finance journals was chosen over some others (Alexander and Mabry, 1994; Coe and Weinstock, 1983; Cudd and Morris, 1988; Mabry and Sharplin, 1985).

Zivney and Reichenstein (1994) provide a citation-based ranking of core finance journals, where core finance journals are defined as those that primarily cite other finance journals. We established a three tier hierarchy based on their rankings, with each tier consisting of four journals. The first tier includes the *Journal of Financial Economics* (JFE), *Journal of Finance* (JF), *Journal of Business* (JB), and the *Journal of Financial and Quantitative Analysis* (JFQA). The second tier incorporates the *Financial Analysts Journal* (FAJ), *Financial Management* (FM), *Journal of Portfolio Management* (JPM), and the *Journal of Banking and Finance* (JBF). The third tier is comprised of the *Journal of Financial Research* (JFR), *Journal of Business Finance and Accounting* (JBFA), *Journal of Money, Credit and Banking* (JMCB), and the *Financial Review* (FR).

While listed in their lower rankings, Zivney and Reichenstein (1994) do not consider JMCB to be a core finance journal. Nevertheless, we include it in our sample because of its data storage and evaluation project. As part of this project, authors were asked to submit data and computer programs in order to encourage replication research (Dewald, Thursby, and Anderson, 1986).

The publication frequency of replications and extensions is estimated by content-analyzing a randomly selected issue from each of the 12 journals for every year from 1975 through 1994. (See the appendix for additional sample information.) This examination of 235 journal issues yields a total of some 2,256 research articles, notes, and commentaries, of which 1,423 (63.1 percent) are empirical.

Using Cohen's (1960) kappa (k) as a measure of rater agreement, both authors independently classified the 1,423 empirical papers. Any disagreements concerning an article's classification status were resolved by both authors. Typically, the article is retained in the analysis. Consequently, we may inflate the publication incidence of replication research. K values of .75 or above represent excellent agreement among reviewers. Assessments for the first ($k = .78$, $z = 6.5$, $p < .001$), second ($k = .80$, $z = 7.0$, $p < .001$), and third ($k = .81$, $z = 7.2$, $p < .001$) levels in the journal hierarchy indicate substantial agreement between the two judges.

RESULTS

PUBLISHED REPLICATION RESEARCH AND THE TRICKLE-DOWN HYPOTHESIS

There are no strict replications in our sample. Across all three levels some 144 of 1,423 empirical papers, or 10.1 percent, are replications with extensions. These extensions account for only 6.0 percent of total journal space in pages (Table 1).

Table 1—Published Replications With Extensions 1975-1994

Journals/Hierarchy ^a	Number of Empirical Studies	Replications with Extensions	Percentage ^b		95 Percent Confidence Interval ^c	
JFE	80	7	8.8	(5.9)	2.6	15.0
JF	206	25	12.1	(5.7)	7.6	16.6
JB	89	8	9.0	(4.2)	3.1	14.9
JFQA	106	10	9.4	(5.4)	3.8	15.0
1st Tier	481	50	10.4	(5.4)	7.7	13.1
FAJ	107	2	1.9	(1.5)	0.7	4.5
FM	93	17	18.3	(9.7)	10.4	26.2
JPM	167	8	4.8	(2.5)	1.6	8.0
JBF	111	9	8.1	(5.3)	3.0	13.2
2nd Tier	478	36	7.5	(5.0)	5.1	9.9
JFR	105	18	17.1	(12.6)	9.9	24.3
JBFA	117	15	12.8	(8.3)	6.7	18.9
JMCB	135	14	10.4	(5.0)	5.3	15.4
FR	107	11	10.3	(6.1)	4.5	16.1
3rd Tier	464	58	12.5	(7.6)	9.5	15.5
Totals	1,423	144	10.1	(6.0)	8.5	11.7

^aFirst tier journals: *Journal of Financial Economics* (JFE), *Journal of Finance* (JF), *Journal of Business* (JB), *Journal of Financial and Quantitative Analysis* (JFQA). Second tier journals: *Financial Analysts Journal* (FAJ), *Financial Management* (FM), *Journal of Portfolio Management* (JPM), *Journal of Banking and Finance* (JBF). Third tier journals: *Journal of Financial Research* (JFR), *Journal of Business Finance and Accounting* (JBFA), *Journal of Money, Credit and Banking* (JMCB), *Financial Review* (FR).

^bValues in parentheses refer to the percentage of journal space, in pages, allocated to replications.

^cRefers to the percentage of empirical studies that are replications with extensions.

Table 1 lists the 12 journals in terms of Zivney and Reichenstein's (1994) finance impact factor—JFE the highest and FR the lowest—and their corresponding percentages of published replication work. If the trickle-down hypothesis is operating, then an inverse relationship should exist between journal prestige and the publication incidence of replication research. A Spearman's rank-order correlation of -0.28 confirms this relationship, although it is not statistically significant at the .05 level.

Table 1 also shows the frequency of published replications for the three journal tiers. The trickle-down hypothesis holds that first tier journals (10.4 percent) will publish fewer replications or extensions than their second (7.5 percent) and third tier (12.5 percent) counterparts. These differences in publication frequencies are significant ($\chi^2_{(2)} = 6.46$, $p < .05$), but not in the anticipated direction. Capitalizing on the additivity of independent chi-squares, and partitioning the above chi-squared result (Fleiss, 1981), shows a significant contrast between the average publication frequency of replications in tiers one and three (11.4 percent) and the lower rate in tier two (7.5 percent) ($\chi^2_{(1)} = 5.31$, $p < .05$). The contrast between tiers one (10.4 percent) and three (12.5 percent) is not statistically significant ($\chi^2_{(1)} = 1.15$, $p > .05$).

Tier two journals publish significantly less replication research than those in tiers one and three (which publish similar totals), indicating an absence of support for the trickle-down hypothesis. Tier two contains the only practitioner-oriented journals, FAJ (1.9 percent) and JPM (4.8 percent), which publish the lowest percentage of extensions

Table 2—Stability of Results With Alternative Journal Groupings

Hierarchy	Authors' Study	Zivney/ Reichenstein (1994)	Alexander/ Mabry (1994) ^a	Mabry/ Sharplin (1985)	Coe/ Weinstock (1983)
			(1)	(2)	
	JFE	JFE	JFE	JFE	JF
	JF	JF	JF	JF	JFE
	JB	JB	JFQA	JFQA	JFQA
	JFQA	RFS ^c	FAJ	FAJ	JMCB
1st Tier ^b	10.4%	10.7%	8.8%	8.8%	10.4%
	FAJ	JFQA	FM	FM	JMCB
	FM	FAJ	RFS ^c	JPM	FAJ
	JPM	JFM ^c	JPM	JBF	FM
	JBF	FM	JBF	JFR	JFR
2nd Tier ^b	7.5%	9.5%	9.2%	10.9%	9.4%
	JFR	JPM	JFR	JMCB	JPM
	JBFA	JFSR ^c	JFM ^c	JFR	JFR
	JMCB	JBF	JMCB		
	JR	JFR	JACP ^c		
3rd Tier ^b	12.5%	9.1%	13.3%	10.3%	9.6%
Totals ^b	10.1%	9.8%	9.9%	9.9%	9.8%
	$\chi^2_{(2)} = 6.46$; p < .05	$\chi^2_{(2)} = 0.53$; p > .05	$\chi^2_{(2)} = 4.06$; p > .05	$\chi^2_{(2)} = 1.25$; p > .05	$\chi^2_{(2)} = 0.29$; p > .05
					$\chi^2_{(1)} = 0.15$; p > .05

^aDoes not consider the *Journal of Business* to be a finance journal

^bItalicized numbers show the publication frequency of replication research

^cThese journals were omitted by the present authors because of their relative newness and/or specialized focus, and no calculations are based on them: *Journal of Applied Corporate Finance* (JACF), *Journal of Financial Services Research* (JFSR), *Journal of Futures Markets* (JFM), and *Review of Financial Studies* (RFS). Omitting these journals from the original Zivney and Reichenstein ranking yields the listing used by the authors. Omitting them from the Alexander and Mabry (1) ranking yields their (2) listing

found in our sample of 12 finance periodicals. Perhaps practitioners are less interested in reading studies that evaluate the generality of previously published results.¹

ROBUSTNESS OF EMPIRICAL RESULTS

Would our findings hold under alternative rankings/groupings of journals? Because of their different time periods, sampling frames, methods of analysis, and the like, other studies ranking finance journals such as Alexander and Mabry (1994), Mabry and Sharplin (1985), and Coe and Weinstock (1983), are unlikely to yield the same rankings as those for Zivney and Reichenstein (1994) that are used in the current paper.²

Table 2 lists the various journal rankings found in these studies. Zivney and Reichenstein's (1994) original ranking includes three journals omitted by the present authors because of these journals' relative newness and/or specialized focus. These journals, with their inaugural publication dates in parentheses, are the *Journal of Futures Markets* (1981), *Journal of Financial Services Research* (1987), and *Review of Financial Studies* (1988). Similarly, Alexander and Mabry's (1994) study includes the JFM and RFS as well as the *Journal of Applied Corporate Finance* (1988). Surprisingly, Alexander

¹ Omitting FAJ and JPM from the calculations produces a higher replication estimate of 12.7 percent for second tier journals. This new estimate, however, is not statistically significantly different from those of the first and third tiers ($\chi^2_{(2)} = 1.30$, p > .05). This result again indicates no evidence of a trickle-down effect.

² Cudd and Morris (1988) simply adopt Coe and Weinstock's (1983) classification of journals and appended JF.

and Mabry do not classify the *Journal of Business* as a finance periodical, even though it ranks third among 41 finance and affiliated (mostly economics) journals.

Despite considerable variety in the individual journal rankings, the results are robust with regard to a lack of evidence for the trickle-down effect over the three tiers of the journal hierarchy. Table 2 reveals that those studies ranking finance journals show no statistically significant differences between the proportion of published replication research appearing in the first, second, and third tiers. For example, Zivney and Reichenstein's (1994) original ranking (the one incorporating JFM, JFSR, and RFS) shows that 10.7 percent of work published in first tier journals consists of replications, with 9.5 percent and 9.1 percent, respectively, for the second and third tiers ($\chi^2_{(2)} = 0.53$, $p > .05$). Alexander and Mabry's (1994) original ranking (the one including JFM, RFS, and JACF) shows corresponding figures of 8.8 percent, 9.2 percent, and 13.3 percent ($\chi^2_{(2)} = 4.06$, $p > .05$), while values of 8.8 percent, 10.9 percent, and 10.3 percent ($\chi^2_{(2)} = 1.25$, $p > .05$) are obtained after omitting these same journals. First, second, and third tier figures for the Mabry and Sharplin (1985) study are 10.4 percent, 9.4 percent, and 9.6 percent ($\chi^2_{(2)} = 0.29$, $p > .05$). Finally, percentages for Coe and Weinstock's (1983) two tier hierarchy are 10.6 percent and 11.4 percent ($\chi^2_{(1)} = 0.15$, $p > .05$). Thus, Table 2 demonstrates no evidence for the existence of a trickle-down effect in the publication frequency of replication research in the finance discipline, even with alternative journal rankings.³

PUBLISHED REPLICATIONS OVER TIME: 1975-1984 VS. 1985-1994

Over the years some editors and authors alike have championed the role of replication research (Ashenfelter, 1986; Fuess, 1996; Kane, 1984; Mittelstaedt and Zorn, 1984; Stout and Heck, 1995). We therefore split the sample to see if replications were more visible between 1985 and 1994 than between 1975 and 1984. Table 3 reveals this to be the case, with the first (9.6 percent to 11.1 percent), second (6.5 percent to 8.3 percent), and third (10.1 percent to 14.3 percent) tiers all registering increases over time. Overall, the percentage of replications rose from 8.7 percent to 11.2 percent, but this increase is not statistically significant ($z = 1.56$, $p > .05$).

There are other signs pointing to a waning interest in replication research. Consider the JMCB's data storage and evaluation project. This project, begun in 1982, asked authors to submit copies of their data and computer programs so that they could be made available to other researchers wishing to conduct replications. Notwithstanding this initiative, JMCB's publication of replications increased only marginally between 1975 and 1984 (10.0 percent) and between 1985 and 1994 (10.6 percent). Disenchantment with the failure of authors to comply with requests for (accurate) data and computer programs, coupled with a dwindling interest from would-be replicators for these materials, led the JMCB editors to discontinue such requests in 1993 (Anderson and Dewald, 1994; Fuess, 1996).

³ In response to an anonymous reviewer's suggestion, we also calculated the publication frequency of replications using another set of journal rankings. First tier journals: JFE, JF, JMCB. Second tier journals: JB, JFQA, JBF. Third tier journals: FAJ, FM, JPM, JFR, JBFA, FR. The percentage of replications across these three tiers was 10.2 percent, 8.8 percent, and 10.2 percent, respectively ($\chi^2_{(2)} = 0.88$, $p > .05$). Once again, there is no support for the trickle-down hypothesis.

Table 3—Replications With Extensions: 1975-1984 Versus 1985-1994

Journal Hierarchy	1975-1984				1985-1994			
	Number of Empirical Studies	Replications with Extensions	Percentage	95% Confidence Interval	Number of Empirical Studies	Replications with Extensions	Percentage	95% Confidence Interval
1st Tier	219	21	9.6 (4.5)	5.7 - 13.5	262	29	11.1 (6.2)	7.3 - 14.9
2nd Tier	201	13	6.5 (4.5)	3.1 - 5.9	277	23	8.3 (5.3)	5.1 - 11.5
3rd Tier	199	20	10.1 (5.2)	5.9 - 14.3	265	38	14.3 (9.4)	10.1 - 18.5
Totals	619	54	8.7 (4.6)	6.5 - 10.9	804	90	11.2 (6.8)	9.0 - 13.4

*Values in parentheses refer to the percentage of journal space, in pages, allocated to replications

DO REPLICATION RESULTS CONFIRM PRIOR FINDINGS?

The results from a replication study either support, partially support, or conflict with prior findings. The higher the frequency of confirming results, the easier is the task of building a cumulative knowledge base. There is, however, no compelling *a priori* rationale to suggest differences in the proportion of these three outcomes across the three tiers of the finance journal hierarchy. This is the case for data presented in Table 4 ($\chi^2_{(4)} = 2.25$, $p > .05$).

Fuess (1996) notes that Feigenbaum and Levy's (1993) model of citation-maximizing editors and authors predicts that published replications will tend to contradict original research. He further acknowledges that Hubbard and Vetter's (1991, 1992) work on the outcomes of replications in top tier finance and economics journals is generally consistent with this prediction, with about 60 percent to 65 percent of findings conflicting with the initial work. The current results across three tiers of finance journals show that a somewhat lower incidence (55 percent) of conflicting outcomes occurs (Table 4). Nevertheless, this figure is substantially higher than the corresponding value of 19 percent of conflicting findings Fuess discovered for QJBE. The reason for these discrepant results is unclear, although QJBE editorial policy nowhere states a preference for publishing (partially) supportive replications.⁴

In contrast, a clearly expressed editorial policy at the QJBE is for replications to be performed by independent researchers. Researchers replicating their own work may be more likely to corroborate the findings of their earlier endeavors than would independent researchers. Evidence supporting this bias is provided by Hubbard and Vetter (1996). In this study, however, this bias is absent. There is no statistically significant difference in replication outcomes—support, partially support, or conflict—by investigator

* Moreover, there is no difference in the frequency of the three replication outcomes and whether they are published in the same journal as the original work ($\chi^2_{(2)} = 0.20$, $p > .05$). All told, 47 (32.6 percent) of the 144 extensions are published in the same journal as the original article, while 97 (67.4 percent) are not. In addition, there is a statistically significant difference in the publication incidence of replications appearing in the same journal as the initial research across the three tiers of the journal hierarchy ($\chi^2_{(2)} = 10.54$, $p < .01$). Partitioning this chi-squared result demonstrates that third tier journals have a significantly lower proportion of replications (17.2 percent) published in the same journal as the original work ($\chi^2_{(1)} = 10.49$, $p < .01$) than the average (43.0 percent) of their tier one and two counterparts. The contrast between tiers one (44.0 percent) and two (41.7 percent) is not statistically significant ($\chi^2_{(1)} = 0.05$, $p > .05$).

Table 4—Outcomes of Replications With Extensions by Journal Hierarchy: 1975-1994

Journal Hierarchy	Support*	Partial Support*	Conflict*	Total
1st Tier	7 (14.0)	17 (34.0)	26 (52.0)	50
2nd Tier	8 (22.2)	8 (22.2)	20 (55.6)	36
3rd Tier	8 (13.8)	17 (29.3)	33 (56.9)	58
Totals	23 (16.0)	42 (29.2)	79 (54.9)	144

*Values in parentheses are percentages

(independent versus same authors) status ($\chi^2_{(2)} = 1.77$, $p > .05$). This result should be interpreted with caution, however, because only 9.7 percent (14 of 144) of replications are conducted by the same author(s).

TIMELINESS OF REPLICATION RESEARCH

Hubbard and Vetter (1996) note that, *ceteris paribus*, rapid attempts to replicate and extend the findings of original studies are more valuable than those conducted at later dates. Yet there is no reason to presuppose that the timeliness of such work should vary between the three tiers of the finance journal hierarchy. The time lags between the publication of the original and extension studies for the first (5.1 years), second (6.1 years), and third (5.2 years) tier journals is not statistically significant ($F = .63$, $p > .05$). Still, the five year delay for replications to appear in print is not timely.

Replications either supporting or conflicting with original research are important and warrant efficient dissemination. Timely confirmation of prior research, as when Levis (1993) showed that Ritter's (1991) results concerning the long-run underperformance of initial public offerings in the U.S. market also apply to the U.K. market, helps to promote empirical generalization. Timely refutations, on the other hand, such as Gosnell, Keown, and Pinkerton's (1992) demonstration that Loderer and Sheehan's (1989) findings on insider activity of listed firms prior to bankruptcy cannot be generalized to the OTC market, are also useful, and may signal the need for additional research in the area. Because of the equivocal nature of their results, however, replications partially supporting earlier findings may take longer to reach print. The timeliness of results supporting (5.1 years), partially supporting (5.9 years), and conflicting (5.1 years) with previous work ($F = .45$; $p > .05$) shows that this is not the case. There are no statistically significant differences in the time lags of supporting, partially supporting, and conflicting replication research outcomes.

The above results are consistent with Feigenbaum and Levy's (1993) claims. They argue that authors will attempt to forestall others' replication of their work because they cannot know *a priori* whether the results will be confirmatory or contradictory. Therefore, *ex post*, confirmations and contradictions will be equally delayed.⁵

⁵ We are grateful to an anonymous reviewer for this observation.

Table 5—Research Commentaries by Journal Hierarchy: 1975-1994

Journal Hierarchy	Total Number of Studies	Number of Comments/Rejoinders	Percentage ^a	95% Confidence Interval
1st Tier	798	52	6.5 (1.5)	4.8 – 8.2
2nd Tier	742	46	6.2 (2.4)	4.5 – 7.9
3rd Tier	716	76	10.6 (5.0)	8.3 – 12.9
Totals	2,256	174	7.7 (2.8)	6.6 – 8.8

^aValues in parentheses refer to the percentage of journal space, in pages, allocated to commentary

THE PUBLICATION FREQUENCY OF COMMENTS AND REJOINDERS

Although replication and extension research provides the most direct route for evaluating the authenticity of published findings, other avenues should not be ignored. Critical among these is the role played by research comment and rejoinder. By permitting a scholarly dialogue, exchange of ideas, and differences of opinions and perspectives, the comment and rejoinder help to ensure that the conduct of science remains a public enterprise (Hubbard and Vetter, 1991, 1992). Again, however, we did not anticipate any differences in the publication frequencies of such work throughout the journal hierarchy.

Table 5 shows that for 1975 to 1994 6.5 percent of all studies published in first tier journals are devoted to comments and rejoinders. Corresponding figures for second and third tier journals are 6.2 percent and 10.6 percent, respectively. Contrary to expectations, third tier journals publish statistically significantly more comments than those in the first and second tiers ($\chi^2_{(2)} = 12.46$, $p < .01$). Higher quality prepublication review may exist at top tier journals, resulting in fewer errors. Alternatively, the author of the initial paper may be the principal reviewer at the original journal, but excuse himself or herself from reviewing subsequent submissions to lower tier journals.⁶

A comparison of the average publication incidence of comments across all tiers of the hierarchy for 1975 to 1984 (11.3 percent) and 1985 to 1994 (4.2 percent) reveals a downward trend ($z = 6.45$, $p < .001$). Moreover, this slide is apparent in each of the three tiers of the hierarchy: first tier (11.4 percent to 1.3 percent), second tier (10.0 percent to 2.6 percent), third tier (12.6 percent to 8.8 percent). For whatever reasons, public discussion of research in finance has decreased precipitously, especially in the first two tiers.

SUMMARY AND CONCLUSIONS

Fuess (1996) reports that about 23 percent of articles published in the QJBE from 1984 to 1994 are replications. He believes that this figure should be higher, as the QJBE is committed to publication of replications and extensions. The present study, covering the period from 1975 to 1994, shows that 10.4 percent of articles published in top tier finance journals are replications with extensions. Moreover, we demonstrate that this figure is not compensated for by substantially higher incidences of published replications in less prestigious finance journals. Second tier journals (7.5 percent) publish statistically

⁶ We thank an anonymous reviewer for these possible explanations for this finding.

significantly less replication research [and third tier journals (12.4 percent) no more] than their first tier counterparts. Thus, we find no support for a trickle-down effect with regard to the publication of replications. Furthermore, this finding is robust with respect to alternative journal rankings/groupings in finance.

We also show that replication frequencies are not increasing over time, are not especially timely in appearance, consume small amounts of journal space, and tend to conflict with the original results. Public discourse about the merits of published works is modest and diminishing.

We believe that top tier journals should publish replication research to increase the cumulative body of knowledge in finance. Replications appearing in journals of lower prestige are less likely to attract attention (Sterling, Rosenbaum, and Weinkam, 1995). We recommend that journals at all levels establish a section for replication and extension research.

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APPENDIX 1—JOURNAL ISSUES INCLUDED IN THE SAMPLE

JBF was first published in 1977, thus the period 1977-1994 was covered for this journal. JFR was first published in 1978, thus the period 1978-1994 was covered for this journal. The particular journal issues included in the sample are:

JFE: Sept. 1975; Oct. 1976; March 1977; Dec. 1978; March 1979; March 1980; March 1981; Dec. 1982; Dec. 1983; March 1984; Dec. 1985; Dec. 1986; Dec. 1987; Sept. 1988; Sept. 1989; Oct. 1990; Nov. 1991; April 1992; Dec. 1993; Feb. 1994.

JF: Dec. 1975; Dec. 1976; June 1977; Dec. 1978; June 1979; Sept. 1980; Dec. 1981; March 1982; June 1983; March 1984; Sept. 1985; June 1986; March 1987; June 1988; Sept. 1989; June 1990; Dec. 1991; March 1992; Sept. 1993; Sept. 1994.

JB: April 1975; July 1976; Jan. 1977; July 1978; Oct. 1979; April 1980; Oct. 1981; Jan. 1982; April 1983; Oct. 1984; April 1985; July 1986; July 1987; Jan. 1988; Oct. 1989; Jan. 1990; April 1991; April 1992; Jan. 1993; July 1994.

JFQA: Sept. 1975; Sept. 1976; March 1977; June 1978; March 1979; Dec. 1980; Sept. 1981; March 1982; Dec. 1983; Dec. 1984; June 1985; Sept. 1986; March 1987; June 1988; Sept. 1989; Dec. 1990; March 1991; Sept. 1992; March 1993; June 1994.

FAJ: March/April 1975; Nov./Dec. 1976; May/June 1977; July/Aug. 1978; May/June 1979; Sept./Oct. 1980; May/June 1981; Nov./Dec. 1982; Jan./Feb. 1983; March/April 1984; July/Aug. 1985; Jan./Feb. 1986; Sept./Oct. 1987; July/Aug. 1988; March/April 1989; July/Aug. 1990; Jan./Feb. 1991; March/April 1992; Jan./Feb. 1993; Sept./Oct. 1994.

FM: Spring 1975; Autumn 1976; Winter 1977; Winter 1978; Summer 1979; Winter 1980; Summer 1981; Winter 1982; Autumn 1983; Spring 1984; Autumn 1985; Spring 1986; Summer 1987; Autumn 1988; Summer 1989; Winter 1990; Autumn 1991; Winter 1992; Spring 1993; Spring 1994.

JPM: Fall 1975; Summer 1976; Spring 1977; Fall 1978; Summer 1979; Spring 1980; Summer 1981; Winter 1982; Fall 1983; Summer 1984; Spring 1985; Fall 1986; Winter 1987; Summer 1988; Spring 1989; Fall 1990; Winter 1991; Winter 1992; Winter 1993; Winter 1994.

JBFI: June 1977; Dec. 1978; April 1979; June 1980; March 1981; Dec. 1982; Sept. 1983; March 1984; Sept. 1985; Dec. 1986; Dec. 1987; June 1988; July 1989; Oct. 1990; Dec. 1991; Aug. 1992; Feb. 1993; Jan. 1994.

JFR: Winter 1978; Fall 1979; Fall 1980; Summer 1981; Spring 1982; Summer 1983; Winter 1984; Summer 1985; Spring 1986; Fall 1987; Fall 1988; Winter 1989; Spring 1990; Winter 1991; Spring 1992; Summer 1993; Fall 1994.

JBFA: Summer 1975; Autumn 1976; Spring 1977; Winter 1978; Summer 1979; Spring 1980; Autumn 1981; Summer 1982; Spring 1983; Winter 1984; Summer 1985; Autumn 1986; Autumn 1987; Spring 1988; Winter 1989; Winter 1990; June 1991; Jan. 1992; April 1993; Sept. 1994.

JMCB: May 1975; Aug. 1976; Aug. 1977; May 1978; Feb. 1979; Nov. 1980; Aug. 1981; Feb. 1982; Nov. 1983; Nov. 1984; May 1985; Aug. 1986; Feb. 1987; May 1988; Aug. 1989; Feb. 1990; May 1991; Aug. 1992; Feb. 1993; May 1994.

FR: 1975; 1976; Fall 1977; Fall 1978; Spring 1979; Winter 1980; Spring 1981; Sept. 1982; Sept. 1983; March 1984; May 1985; Nov. 1986; May 1987; May 1988; Nov. 1989; Aug. 1990; Feb. 1991; May 1992; Nov. 1993; Aug. 1994.

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