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The remarkable growth in financial economics, 1974–2020

G. William Schwert[a,b,1,*]

[a] Simon School of Business, University of Rochester, Rochester, NY 14627, USA
[b] National Bureau of Economic Research, Cambridge, MA, USA

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ABSTRACT

The field of academic finance has grown and evolved in the 47 years since the *Journal of Financial Economics (JFE)* began publishing papers. This paper examines detailed data on the 3,003 papers written by 3,358 different authors published in the *JFE* over the period 1974–2020. Advances in computing power and electronic communication have driven trends toward more empirical work, more coauthorship, and more complex papers. The set of authors, referees, and editors has also evolved as the field spans a much larger geographic footprint and as women have come to play a larger role in all aspects of academic finance. Growth in the demand for finance faculty has driven up faculty compensation and the demand for scarce journal space.

1. Introduction

Michael C. Jensen, Eugene F. Fama, and Robert C. Merton founded the *Journal of Financial Economics* (*JFE*) in 1974. I began my academic career teaching at the University of Chicago in 1975. Since then much has changed in the field of financial economics. This paper documents some facts related to the phenomenal growth in this field and relates them to broader trends in financial markets and academia. My perspective is somewhat idiosyncratic, because it reflects my editorial experience at the *JFE* from 1979 to the present. Nonetheless, I believe that the lessons I have learned give an accurate picture of how the field of financial economics has evolved.

* Correspondence to: Simon School of Business, University of Rochester, Rochester, NY 14627, USA.
E-mail address: schwert@simon.rochester.edu

[1] This is a personal assessment of the evolution of academic finance during my career. It does not reflect the opinions of the *Journal of Financial Economics*, the University of Rochester, or the National Bureau of Economic Research. Many people have provided helpful comments and suggestions, especially Jonathan Brogaard, Harry DeAngelo, Ken French, Campbell Harvey, David Hirshleifer, Laura Liu, Lubos Pastor, Jim Poterba, René Stulz, Avanidhar Subrahmanyam, and Ivo Welch. Michelle Lowry, Laura Liu, and Kathleen Madsen provided special help with several aspects of the data collection for this paper. Janice Willett edited the manuscript.

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The focus of this paper is on data that reflect changes in the demand for and supply of academic research in finance over the last 47 years. Much of the discussion is unabashedly descriptive, but I also relate the facts to several theories about academic production functions from the broader economics and social sciences literature.

Section 2 describes the major editorial policies and goals that have guided the *JFE*. The *JFE* has been innovative in its use of incentive mechanisms, such as submission fees and payments to referees, to manage the review and editorial process. It has also been entrepreneurial in developing new areas of research through special issues, conferences, and clinical papers. It has stressed expositional quality and the importance of empirical implications in theoretical work. Data on the number of submissions, submission fees, rejection rates for submitted papers, turnaround times, and the topics of published papers (according to *Journal of Economic Literature* (*JEL*) classifications) show how the *JFE* has evolved since 1974.

In Section 3, data on *JFE* editorial decisions over the period 1994–2020 shed light on many issues related to the evolution of finance research. Characteristics of authors, referees, and editors, along with research topics and institutional affiliations, affect the set of papers ultimately published.

Section 4 analyzes data from the *Social Science Citation Index (SSCI)* on citations to papers published in the *JFE* over the past 47 years. These data show which papers, authors, and institutions have had the most influence on the finance and economics literature. Time-series and cross-sectional analyses provide insight into the success of *JFE* policies. The evidence shows that research produced by members of the *JFE* editorial board have played a key role in the success of the *Journal*.

Section 5 explores the secular growth in submissions, citations, and papers published in the *JFE,* the *Journal of Finance (JF),* the *Review of Financial Studies (RFS),* and the *Journal of Financial and Quantitative Analysis (JFQA)*. While there are some differences across journals, similar factors have affected all of them.

Compared with other areas of economics or accounting, the number of finance journals has grown remarkably from a single journal in 1922—the *Journal of Business*—to 62 journals in 2020. Although it is beyond the scope of this paper to fully explain this growth, Section 6 presents data on the trends in starting salaries of assistant professors of finance since 1975, along with data on starting salaries of MBA students. The demand for space in academic finance journals tracks the large salary rewards associated with successful publication in finance journals.

Section 7 provides a few concluding remarks.

2. *JFE* editorial policies

When Jensen, Fama, and Merton collaborated to start the *JFE* in 1974, their sense was that the finance profession could benefit from a new, high-quality academic journal. Their objectives were to provide timely service to authors and to apply high standards so that published papers would influence the finance and economics literature. From the beginning, the *JFE* published editorial data at the front of each issue describing turnaround times and rejection rates for papers under review during the preceding 12 months. These data reflect not only the importance placed by the *JFE* editors on a prompt, high-quality review process, but also our desire to communicate our productivity to authors and referees, allowing them to monitor our performance.

2.1. Using prices to improve efficiency

The *JFE* has always charged authors submission fees and paid referees for submitting reports within predetermined time limits. We subsequently began paying editors for prompt service after they became a bottleneck. We refund the last submission fee to authors of accepted papers, so the expected fee for a high-quality paper is low. On the other hand, papers that require several revisions before meeting publication standards must pay several submission fees. *JFE* editors have tried to keep submission fees high enough to induce authors to improve their papers as much as possible before asking a referee and an editor to read and review their work. The revenue from submission fees allows for payments to high-quality referees to encourage them to evaluate papers. The editorial (in Volume 17) by Jensen et al. (1986) provides a more detailed history and analysis of the role of submission fees in the management of the *JFE*.

Fig. 1 plots submission fees (deflated by the Consumer Price Index to August 1973 dollars) along with the number of submissions to the *JFE* for the preceding 12 months from January 1974 through December 2020. This plot shows that there has been a secular rise in the demand for *JFE* editorial services, despite the growth in real submission fees. Casual inspection shows that both fees and submissions trend upward strongly. Sections 5 and 6 provide evidence that the value of publishing in the *JFE* has driven the number of submissions upward, and the editors raised submission fees in a somewhat futile attempt to slow the growth of submissions.

Fig. 2 shows the rejection rate and the median turnaround time for *JFE* submissions over the period 1974–2020. After the first few years of operation, rejection rates have been stable with only a small upward trend. Because the number of submissions has grown substantially, the clear implication is that the number of papers published in the *JFE* has also grown. Section 4 shows and discusses this growth in relation to competing finance journals. The median turnaround time drifted upward from 1976 through 1996. This partly reflects the growth in the number of submissions and an increase in the number of *JFE* editors, which reached its maximum of seven between 1993 and 1996. Many other economics journals have similarly seen increases in turnaround times after 1970 (Ellison, 2002). In 1996, the organizational structure of the *JFE* editorial board changed substantially (Jensen and Schwert, 1996) and since then the median turnaround time has remained stable at about 28 days. There have been brief periods when these measures of editorial activity have varied from normal levels, often associated with special issues of the *JFE* (see Section 2.4).

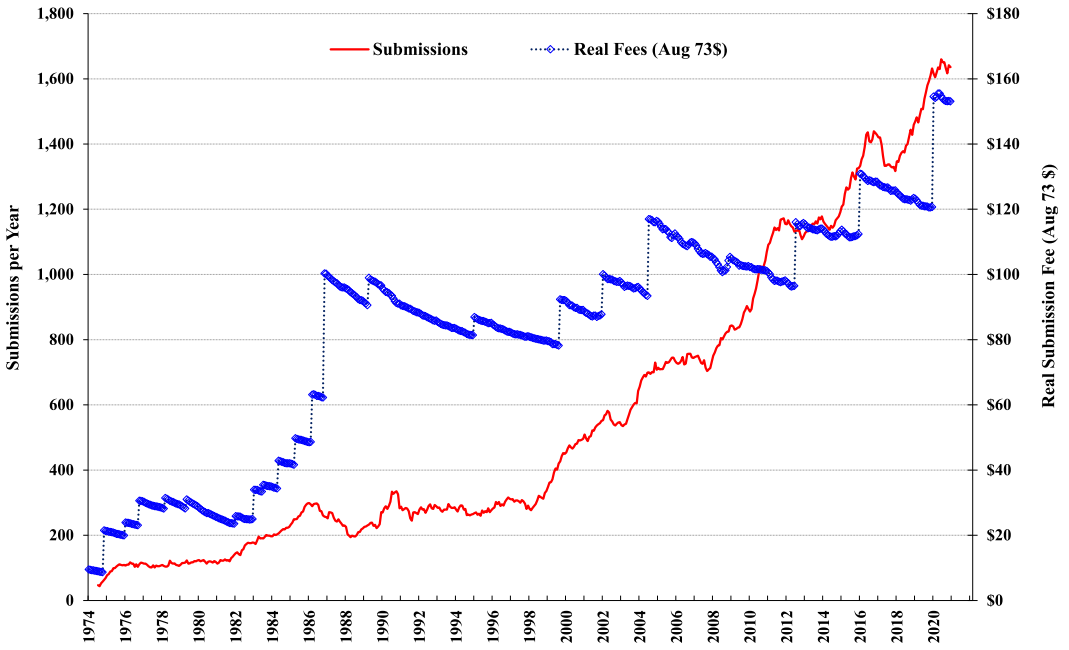

Fig. 1. Number of *JFE* submissions in the prior twelve months and real submission fees (in August 1973 dollars) in the period January 1974 through December 2020.

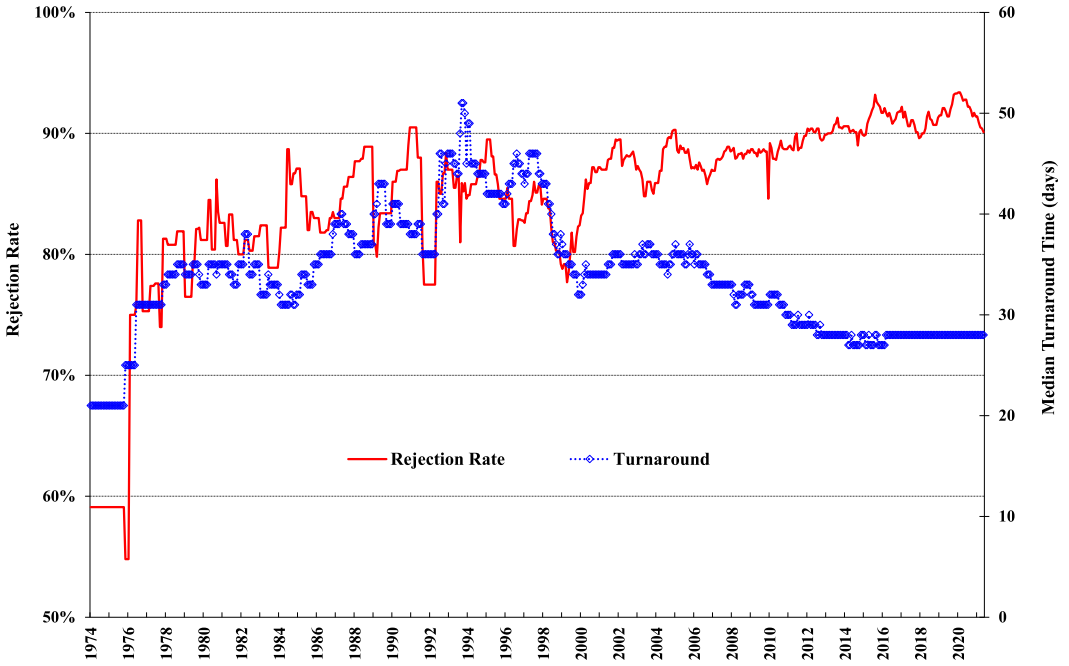

Fig. 2. *JFE* rejection rate and median turnaround time for the prior twelve months for the period January 1974 through December 2020.

Table 1 lists editors and their periods of service from 1974 to 2020. It includes 105 people who have served as associate editors, advisory editors, coeditors, and editors. The primary criteria for selecting members of the editorial board is the proven ability to help with the review process. In addition to their roles in editing and refereeing papers, members of the editorial board have contributed a large number of published papers that have received an above-average number of citations. As shown in the last two columns of Table 1, members of the editorial board have contributed about 12% of the papers and 20% of the citations to the *JFE*. In addition, members of the

Table 1
One hundred and five people who have served on the editorial board of the Journal of Financial Economics, 1974 through 2020.

					Associate Editor		Advisory Editor		Coeditor		Editor		Papers in the *JFE*	
			# Volumes	Years	# Volumes	Years	# Volumes	Years	# Volumes	Years	# Volumes	Years	Papers	Citations
1	P.	Asquith	18	9	12–29	1983–1991							3.25	28.9
2	G.	Baker	26	10	26–51	1990–1999							0.50	1.1
3	B.	Barber	6	2	133–138	2019–2020							2.08	31.0
4	M.	Barclay	67	20	20–51	1988–1999	52–86	1999–2007					4.67	19.4
5	V.S.	Bawa	4	4	6–9	1978–1981							3.00	10.9
6	H.	Bessembinder	79	20	60–138	2001–2020							7.58	25.8
7	F.	Black	19	14	1–19	1974–1987							3.50	25.5
8	M.	Blume	7	6	3–9	1976–1981							0.50	3.6
9	R.A.	Brealey	9	8	1–9	1974–1981								
10	D.T.	Breeden	12	7	10–21	1982–1988							2.00	21.6
					1–6	1974–1980								
11	M.	Brennan	25	16	12–19	1983–1987							4.83	27.6
					26–34	1990–1993								
					25–29	1989–1991								
12	J.	Campbell	89	25	48–79	1998–2006	122–138	2016–2020					2.92	47.7
					87–121	2008–2016								
13	D.	Cass	6	5	1–6	1974–1978								
14	L.	Dann	32	12	20–51	1988–1999							3.17	13.2
15	H.	DeAngelo	127	38	12–138	1983–2020							9.00	45.5
16	A.	Dittmar	30	8	104–133	2012–2019							1.83	19.6
17	G.	Donaldson	10	5	25–34	1989–1993							1.00	1.0
18	D.	Duffie	76	19	63–103	2002–2012	104–138	2012–2020					1.00	11.0
19	A.	Edmans	17	5	122–138	2016–2020							2.67	33.1
20	B.B	Esty	56	15	48–103	1998–2012							4.00	5.8
21	E.F.	Fama	138	47			5–138	1977–2020	1–4	1974–1977			15.00	392.1
22	K.R.	French	127	38	12–51	1983–1999	52–138	1999–2020					10.33	349.9
23	K.	Gaver	3	3	5–7	1977–1979								
24	M.	Geisel	7	6	1–7	1974–1979								
25	M.R.	Gibbons	15	8	10–24	1982–1989							2.00	7.1
26	N.	Gonedes	3	3	1–3	1974–1976								
27	J.P.	Gould	8	7	5–11	1977–1983							0.50	0.3
28	J.R.	Graham	6	2	133–138	2019–2020							6.25	99.4
29	C.W.J.	Granger	7	6	1–7	1974–1979								
30	R.	Green	28	8	87–134	2008–2015							2.83	8.8
31	N.H.	Hakansson	9	8	1–9	1974–1981							2.00	0.8
32	J.V.T.	Harford	79	20	60–138	2001–2020							6.75	75.9
33	C.	Harvey	71	19	41–81	1996–2006	133–138	2019–2020					7.83	100.9
					109–132	2013–2019								
34	P.	Healy	50	13	41–90	1996–2008							1.33	7.6
35	L.	Hentschel	39	10	48–86	1998–2007							1.50	17.4
36	D.	Hirshleifer	6	2	133–136	2019–2020			137–138	2020			2.83	14.0
37	G.L.	Hite	38	17	10–47	1982–1998							2.33	6.0
38	J.	Ingersoll	15	9	8–22	1980–1988							2.83	8.7
39	V.	Ivashina	6	2	133–138	2019–2020							4.00	53.4
40	C.	James	87	23	35–121	1994–2016							5.33	26.4
41	M.C.	Jensen	138	47			43–138	1997–2020			1–42	1974–1996	3.00	174.7
42	S.	Johnson	32	9	72–103	2004–2012							1.20	22.7

(*continued on next page*)

Table 1 (*continued*)

					Associate Editor		Advisory Editor		Coeditor		Editor		Papers in the *JFE*	
			# Volumes	Years	# Volumes	Years	# Volumes	Years	# Volumes	Years	# Volumes	Years	Papers	Citations
43	R.	Kaniel	18	5			121–125	2016–2017	126–138	2017–2020			2.33	8.4
44	S.	Kaplan	108	29	31–138	1992–2020							6.67	28.7
45	G.A.	Karolyi	19	5	95–113	2010–2014							3.67	42.5
46	J.M.	Karpoff	35	9	104–138	2012–2020							3.92	25.6
47	B.	Kelly	6	2	133–138	2019–2020							1.58	15.3
48	A.	Kleidon	14	7	12–25	1983–1989							0.58	1.7
49	A.	Kraus	10	9	5–14	1977–1985							0.50	0.1
50	J.	Lerner	45	12	94–138	2009–2020							6.25	34.0
51	J.	Lintner	7	6	1–7	1974–1979								
52	R.H.	Litzenberger	16	9	9–24	1981–1989							3.08	10.3
53	J.B.	Long	51	26	1–10	1974–1982	43–51	1997–1999	20–42	1988–1996	11–19	1983–1987	4.33	7.6
54	F.	Longstaff	6	2	133–138	2019–2020							7.83	34.3
55	T.	Loughran	54	14	80–133	2006–2019							2.50	15.6
56	M.	Lowry	59	15	80–138	2006–2020							3.17	20.6
57	B.B	Mandelbrot	7	6	1–7	1974–1979								
58	R.	Masulis	6	2	20–25	1988–1989							6.83	41.8
59	D.	Mayers	40	23	1–40	1974–1996							5.33	12.5
60	R.C.	Merton	11	10	5–11	1977–1983			1–4	1974–1977			4.17	60.4
61	W.	Mikkelson	89	27	15–33	1986–1993	43–103	1997–2012	34–42	1993–1996			4.67	21.8
62	M.	Miller	11	10	1–11	1974–1983							0.50	2.8
63	T.	Moskowitz	6	2	133–138	2019–2020							2.28	34.6
64	J.	Mossin	7	6	1–7	1974–1979								
65	K.	Murphy	106	28	33–138	1993–2020							1.00	3.0
66	S.	Myers	22	15	1–22	1974–1988							3.33	142.9
67	M.	Officer	59	15	80–138	2006–2020							4.00	31.2
68	K.	Palepu	24	9	23–46	1989–1997							2.33	9.2
69	L.	Pastor	59	15	80–138	2006–2020							3.17	33.8
70	N.	Pearson	107	29	32–138	1992–2020							2.50	9.4
71	C.	Plosser	4	4	8–11	1980–1983								
72	S.	Richard	8	7	4–11	1977–1983							3.50	6.6
73	J.	Ritter	104	27	35–138	1994–2020							5.00	43.8
74	R.	Roll	33	20	1–33	1974–1993							9.70	75.5
75	S.	Ross	11	10	1–11	1974–1983							3.17	24.7
76	M.	Rozeff	7	7	5–11	1977–1983							2.00	5.3
77	R.S.	Ruback	54	20	11–21 52–64	1983–1988 1999–2002	43–51	1997–1999	22–42	1988–1996			5.83	28.8
78	M.	Rubinstein	40	23	1–40	1974–1996							1.33	15.2
79	P.	Samuelson	7	6	1–7	1974–1979							0.50	1.0
80	M.	Scholes	11	10	1–11	1974–1983							2.00	16.9
81	E.	Schwartz	28	11	20–47	1988–1998							3.50	9.6
82	G.W.	Schwert	134	44	5–6	1977–1978	18–24	1987–1989	7–8 25–42	1979–1980 1989–1996	9–17 43–138	1981–1986 1997–2020	6.33	42.6
83	P.	Seguin	14	4	41–54	1996–1999							1.17	2.6
84	J.	Shanken	119	33	20–51 104–138	1988–1999 2012–2020	52–103	1999–2012					6.67	26.5
85	A.	Shleifer	119	33	20–55	1988–2000	56–138	2000–2020					7.25	158.0

(*continued on next page*)

Table 1 (*continued*)

					Associate Editor		Advisory Editor		Coeditor		Editor		Papers in the *JFE*	
			# Volumes	Years	# Volumes	Years	# Volumes	Years	# Volumes	Years	# Volumes	Years	Papers	Citations
86	R.	Sloan	59	15	80–138	2006–2020							1.25	5.2
87	C.W.	Smith	129	43	5–10	1977–1982	43–133	1997–2019	20–42	1988–1996	11–19	1983–1987	6.83	59.7
88	R.	Stambaugh	22	11	12–33	1983–1993							10.33	92.6
89	J.	Stein	72	19	56–103 114–138	2000–2012 2015–2020							4.28	36.5
90	H.	Stoll	65	21	15–79	1986–2006							2.00	14.4
91	R.M.	Stulz	128	34	20–55	1988–2000	56–138	2000–2020			11–19	1983–1987	16.92	205.4
92	L.	Taylor	17	5	122–138	2016–2020							2.83	19.6
93	J.	van Binsbergen	6	2	133–138	2019–2020							1.75	15.4
94	R.	Vishny	36	13	20–55	1988–2000							3.67	88.7
95	J.B.	Warner	131	41	8–17 52–134	1980–1986 1999–2020	43–51	1997–1999	20–42	1988–1996	18–19	1987	5.67	77.3
96	R.	Watts	22	15	1–22	1974–1988							1.83	25.1
97	M.	Weisbach	31	8	60–90	2001–2008							6.42	67.8
98	R.	Whaley	28	10	25–50	1989–1998							3.83	11.6
99	T.	Whited	52	13	87–103	2008–2012	104–113	2012–2014	114–138	2014–2020			2.00	10.6
100	M.	Wolfson	9	5	23–33	1989–1993							1.00	2.2
101	K.	Wruck	99	28	23–121	1989–2016							4.67	22.0
102	J.	Wurgler	35	9	104–138	2012–2020							2.83	44.0
103	D.	Yermack	48	12	91–138	2009–2020							6.08	82.7
104	A.	Zellner	3	3	1–3	1974–1976								
105	L.	Zhang	35	9	104–138	2012–2020							2.03	9.9
Total Papers and Citations per year for all editors													370.7	3,734.1
Total Papers and Citations per year by all authors													3,003	18,673
Percent of totals represented by editors													12.3%	20.0%

Papers is the number of papers, weighted by the number of coauthor, published in the JFE by members of the editorial board any time from 1974 through 2020. Citations are the average number of citations per year since publication, weighted by the number of coauthor. Members of the editorial board have contributed a disproportionate share of the papers published in the JFE, and their papers have been cited even more disproportionately.

editorial board have written 6,167 referee reports from 1996 through 2020, representing more than 25% of all reports. Thus, they are directly responsible for much of the success of the *JFE* in achieving its goal of publishing high-quality research.

2.2. Peer review and feedback

All academic journals depend on the peer review system for their success. Journal editors often identify successful authors and others who exhibit expertise in a particular area as potential referees. Moreover, the set of potential referees is common across different journals, so some referees bear a large cost from the peer review process.[2] Given the scarce time available to referees, how can a journal elicit faster high-quality reviews?

From the beginning, Michael Jensen advocated both price and feedback incentives to affect referees' behavior. The *JFE* was only the second economics journal to pay referees who returned their reports promptly, although many major finance and economics journals now do so.[3] When we raised the submission fee to $275 in 1986, we began offering a discount equal to one-third of the submission fee for timely referee reports, in addition to a dollar payment. Thus, referees face a lower effective submission fee than those who do not contribute to the peer review system. While these payments do not fully compensate for a referee's time, they do give referees an incentive to move *JFE* papers up in their queue of work. For many years, the *JFE* published on its web page a list of people who produced referee reports and their average turnaround times during the preceding year, thereby providing reputational rewards for people who are frequent and timely referees. Interestingly, Hamermesh (1994, pp. 160–161) describes the success of the policy of rewarding referees to elicit faster service as a "bribe for prompt service," although the journal he refers to pays only a modest fee for service.

Some authors are particularly sensitive to speed in the review process. For example, junior faculty with imminent tenure reviews stand to gain the most from quick feedback on their work. By publishing the distribution of turnaround times on the first page of each issue of the *Journal,* and by striving to have a limited backlog of accepted papers waiting for publication, the *JFE* has stressed speed as an important aspect of its service.

In 2006, the *JFE* began a formal "desk rejection" process for papers that seemed unlikely to become publishable in the *JFE*. In many cases, the reason for the desk rejection decision is a lack of fit, since many referee reports note that "there is nothing wrong with the paper, except that it does not belong in this journal." That kind of feedback is useful to the editor in making rejection decisions, but it does not help the author improve the paper. Of course, the submission fee for papers that receive desk rejection decisions is lower. About 16% of submissions since 2005 have received desk rejections.[4] The most obvious benefit of this practice is to reduce the demands on referees' time.

Table 2 shows estimates of logit regression models relating desk rejection decisions to author characteristics for 17,716 submissions over the period 2006–2020. Author characteristics are measured as the average of the characteristics of each coauthor. I estimate marginal effects from the equivalent linear probability model. It seems that papers are much less likely to be desk rejected if the authors have served as referees for the *JFE* (a marginal effect of –21.4% with a t-statistic of –23.75). This result is not surprising, since familiarity with the standards for publication should be greater for authors who are also referees, making it less likely that such authors would submit a paper that is ultimately not accepted for publication. There are other, less pronounced (but still statistically significant) effects for gender and region, although these effects are likely proxying for experience.

Table 3 shows estimates of logit regression models relating acceptance decisions to author characteristics for 23,313 submissions from 1994 through 2020. Consistent with the results from Table 2, papers are more likely to be accepted if the authors also serve as referees for the *JFE* (a marginal effect of 13.1% with a t-statistic of 19.69) or are members of the editorial board (a marginal effect of 16.0% with a t-statistic of 7.32). Similarly, papers are more likely to be accepted by referees who have also submitted papers to the *JFE* (a marginal effect of 6.2% with a t-statistic of 10.88). A paper is also more likely to be accepted if the authors are located in the US, Europe, or Asia, versus the remaining 15% of submissions (marginal effects of 7.6%, 7.3%, and 5.4%, respectively, with t-statistics of 9.78, 8.96, and 6.31). I again interpret these results as showing that authors who are most familiar with the standards of the *JFE* are able to submit papers that are more likely to be accepted.

Fig. 3a shows several characteristics of the referees for *JFE* papers from 1994 through 2020. More than 91% of the referees have also submitted papers to the *JFE* as an author, and 67% of referees have had a paper published in the *JFE* (although not necessarily before serving as a referee). More than 16% of the referees are women, and more than 75% of the referees are based in the US (roughly 12% of the refer-

[2] It frequently happens that referees for the *JFE, JF,* and *RFS* are invited to review a submission that they have already reviewed in an earlier version for a different journal. Green, O'Hara, and Schwert (2002) and Hirshleifer, Schwert, and Singleton (2013) are editorials published simultaneously in the *JF, RFS,* and *JFE* that encourage authors to use feedback from referees to improve their papers.

[3] The *Bell Journal of Economics and Management Science* paid referees for prompt reports when it began operation in 1970. Its founding editor, Paul MacAvoy, reported that the *Bell Journal* was unusual in that it paid authors substantial royalties for accepted papers and it mailed subscriptions free to all members of the American Economics Association. American Telephone and Telegraph Company, which at that time was a regulated monopoly, provided the budget for the *Bell Journal*. The *Bell Journal* did not use submission fees.

[4] It is my understanding from Andrei Shleifer and Larry Katz that the *Quarterly Journal of Economics* (*QJE*) desk rejects more than half of its submissions. From the editor's web page, through August 2020, the *Journal of Finance* had desk rejected almost 33% of submissions for the prior 12 months. Card and Della Vigna (2021) show that desk-rejected papers receive fewer citations than papers that are rejected after reviewing using data from the *QJE*, the *Review of Economic Studies,* the *Review of Economics & Statistics,* and the *Journal of the European Economic Association*. The *JFE* receives many submissions, without submission fees, from young, inexperienced authors who are clearly unaware of the standards for *JFE* publication. These are not counted in the submission or desk rejection data.

Table 2
Logit model for "desk rejection" decisions by the JFE, 2006 through 2020

Author referee is the proportion of the coauthors who also serve as JFE referees. Author_JFE is the proportion of the coauthors who have been on the JFE editorial board at any time between 1974 and 2020. Number_authors is the number of coauthors of the submitted paper. Author_women is the proportion of the coauthors for a paper who are women. Author_US is the proportion of the coauthors who work in the US. Author_Europe is the proportion of coauthors who work in Europe. Author_Asia is the proportion of coauthors who work in Asia. Asymptotic Z-statistics based on White (1980) heteroskedastic-consistent standard errors are in parentheses. Estimates of marginal effects from the equivalent linear probability model are in brackets.

Variable	(1) Coefficient (Z-statistic) [marg. effect]	(2) Coefficient (Z-statistic) [marg. effect]	(3) Coefficient (Z-statistic) [marg. effect]
Constant	-1.260	-1.206	-0.710
	(-20.89)	(-13.32)	(-5.52)
	[0.247]	[0.254]	[0.313]
Author_referee	-2.932	-2.521	-2.575
	(-28.11)	(-23.44)	(-23.75)
	[-0.267]	**[-0.209]**	**[-0.214]**
Author_JFE	-4.455	-4.222	-4.355
	(-4.76)	(-4.52)	(-4.65)
	[-0.078]	**[-0.062]**	**[-0.07]**
Number_authors	0.087	0.098	0.132
	(3.79)	(3.89)	(5.18)
	[-0.001]	[0.001]	[0.004]
Author_women	0.377	0.411	0.421
	(5.29)	(5.10)	(5.22)
	[0.053]	**[0.051]**	**[0.052]**
Author_US		-0.574	-0.510
		(-7.34)	(-6.38)
		[-0.079]	**[-0.071]**
Author_Europe		-0.123	-0.051
		(-1.43)	(-0.58)
		[-0.025]	[-0.016]
Author_Asia		0.369	0.473
		(4.01)	(5.02)
		[0.059]	**[0.071]**
Year dummy variables?	N	N	Y
McFadden R-squared	0.114	0.121	0.130
Observations	17,716	16,620	16,620

Table 3
Logit model for acceptance decisions by the JFE, 1994 through 2020

Author_referee is the proportion of the coauthors who also serve as JFE referees. Author_JFE is the proportion of the coauthors who have been on the JFE editorial board at any time between 1974 and 2020. Number_authors is the number of coauthors of the submitted paper. Author_women is the proportion of the coauthors for a paper who are women. Author_US is the proportion of the coauthors who work in the US. Author_Europe is the proportion of coauthors who work in Europe. Author_Asia is the proportion of coauthors who work in Asia. Referee_author is the proportion of referees for the paper who have also submitted a paper to the JFE. Number_referees is the number of referees asked to review the paper. Asymptotic Z-statistics based on White (1980) heteroskedastic-consistent standard errors are in parentheses. Estimates of marginal effects from the equivalent linear probability model are in brackets.

Variable	(1) Coefficient (Z-statistic)	(2) Coefficient (Z-statistic)	(3) Coefficient (Z-statistic)
Constant	-3.180	-4.510	-4.479
	(-41.77)	(-23.55)	(-16.86)
	[0.033]	[-0.004]	[-0.001]
Author_referee	1.630	1.244	1.261
	(28.99)	(19.87)	(19.69)
	[0.159]	**[0.130]**	**[0.131]**
Author_JFE	0.842	0.954	0.924
	(7.10)	(7.71)	(7.32)
	[0.152]	**[0.164]**	**[0.160]**
Number_authors	0.136	0.141	0.144
	(5.70)	(5.80)	(5.64)
	[0.007]	**[0.009]**	**[0.009]**
Author_women	-0.194	-0.159	-0.156
	(-2.34)	(-1.88)	(-1.84)
	[-0.017]	[-0.015]	[-0.015]
Author_US		1.271	1.270
		(10.02)	(9.78)
		[0.077]	**[0.076]**
Author_Europe		1.249	1.256
		(9.19)	(8.96)
		[0.074]	**[0.073]**
Author_Asia		0.995	1.007
		(6.44)	(6.31)
		[0.053]	**[0.054]**
Referee_author		1.185	1.203
		(10.79)	(10.88)
		[0.061]	**[0.062]**
Number_referees		-0.644	-0.621
		(-6.83)	(-6.55)
		[-0.066]	**[-0.064]**
Year dummy variables?	N	N	Y
McFadden R-squared	0.067	0.081	0.084
Observations	23,313	22,195	22,195

ees are based in Europe and 3% of the referees are based in Asia). Fig. 3a also shows the characteristics of authors. About 13% of authors have also served as a referee for the *JFE,* about 21% of authors have had papers published in the *JFE,* and about 21% of authors are women. In terms of geographic dispersion, 46% of authors work in the US, 18% work in Europe, and 10% work in Asia.

Fig. 3b shows the histogram of turnaround times since 1994 for referees who met the 28-day deadline and received payment, along with the turnaround times for referees who missed their deadline and received no payment. There are some referees who requested and were granted deadline extensions, but by far the largest bin in the graph is the last week before the deadline (over 39% of the completed reports). The mean and median turnaround times for compensated referees are 21.9 and 26 days. Almost two-thirds of the reports met the 28-day deadline. For the remaining reports that were submitted too late to receive payment, the mean and median turnaround times are 70.7 and 52 days, which is not bad by the standards of many competing finance and economics journals. Thus, the incentive compensation system seems to have been effective in eliciting timely reports, on average.

Interestingly, most other finance journals, and some economics journals, have now adopted compensation schemes for referees that mimic aspects of the *JFE* policy. In fact, the *Review of Finance* offers a fast-track submission system with a submission fee of €900 and payments to referees of €700 if the report is returned within one week.

Of course, speed is not the only dimension of journal service. Authors also want comments and criticisms that will improve the quality of their work, whether or not their papers are accepted for publication. The *JFE* has departed from many of its competitors in several ways that are intended to improve the quality of feedback to authors. First, most submissions are reviewed by only

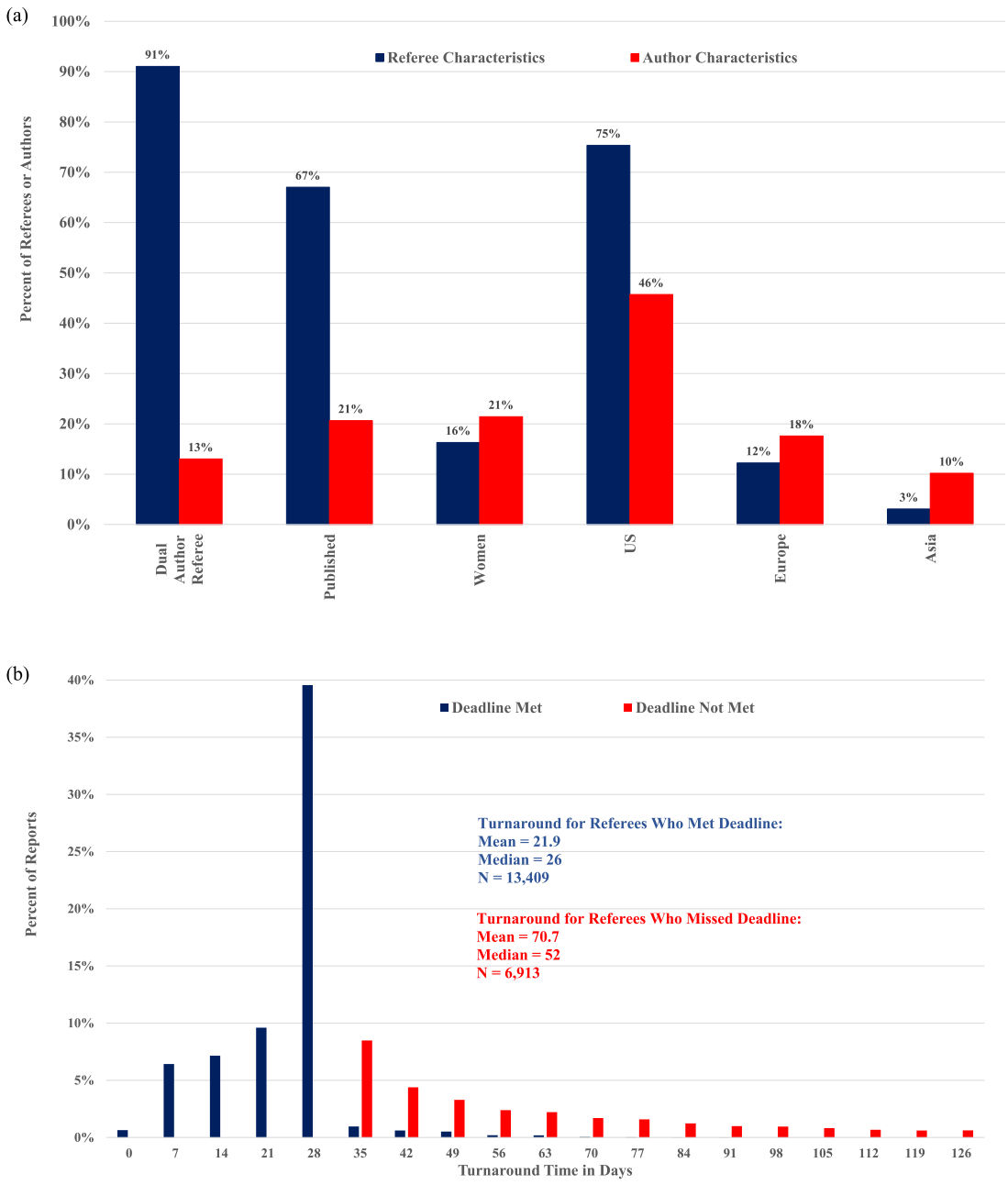

Fig. 3. (a) Characteristics of referees and authors for papers submitted to the *JFE*, 1994 through 2020. (b) Histograms of referee turnaround time for *JFE* papers that were not desk rejected, by whether the referee met the deadline to receive compensation, 1994 through 2020.

one referee, making the referee more responsible for the outcome (i.e., the free-rider problem is smaller). The cost of this policy is that idiosyncratic judgment by a single referee could expose the author to more risk. On the other hand, to the extent that editors are likely to focus on negative reports, papers receiving multiple reports face a higher risk of rejection. Welch (2014) shows that referees often disagree, and argues that the trend of using more referees, associate editors, and editors has raised costs to authors in terms of a higher likelihood of rejection.

Fig. 4a shows the average turnaround time for papers with one referee and for papers with more than one referee by year from 1994 through 2020. Not surprisingly, the use of multiple referees increases the time that authors wait. Of course, several factors can explain the use of multiple referees. Some papers are more complex and require several types of expertise to be evaluated properly. In other cases, editors have doubts about some aspect of the first referee's report and decide to solicit a second opinion. Finally, some authors are unusually argumentative, which

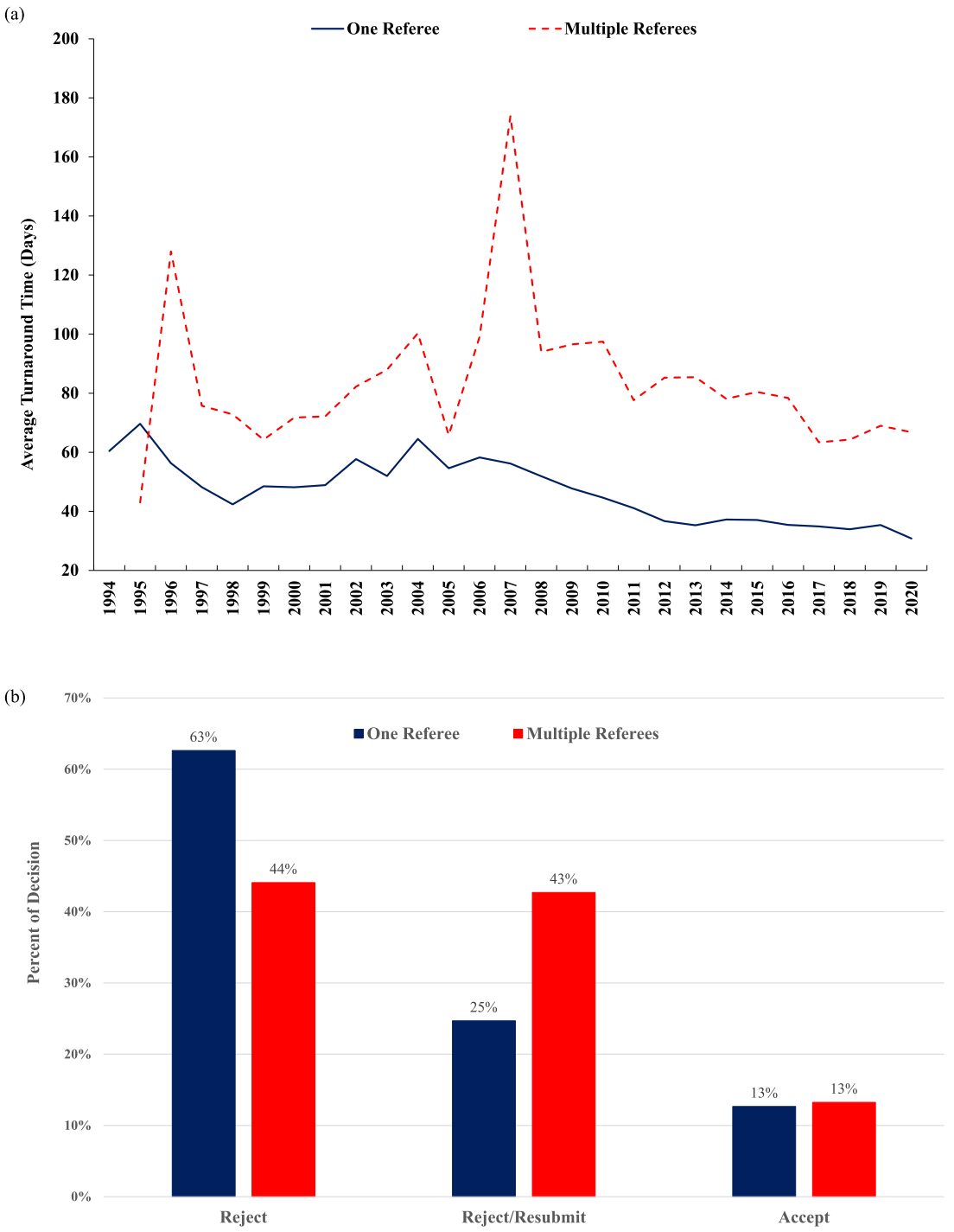

Fig. 4. (a) Average turnaround times with one or multiple referees for the *JFE*, 1994 through 2020. (b) Decision outcomes for papers with one or multiple referees for the *JFE*, 1994 through 2020.

could cause editors to seek multiple reports to reduce the likelihood of a subsequent dispute.

Fig. 4b shows the decisions for papers that involve single and multiple referees for the years 1994–2020. The rate of rejection is 63% with one reviewer versus 44% when there is more than one reviewer, which is inconsistent with Welch's (2014) conjecture that more referees are likely to lead to more rejections.The rate of rejection with the possibility of resubmission is 25% when there is one reviewer and 43% when there are more reviewers. Therefore, the rate of acceptance is similar for both situations, about 13%. These facts are consistent with

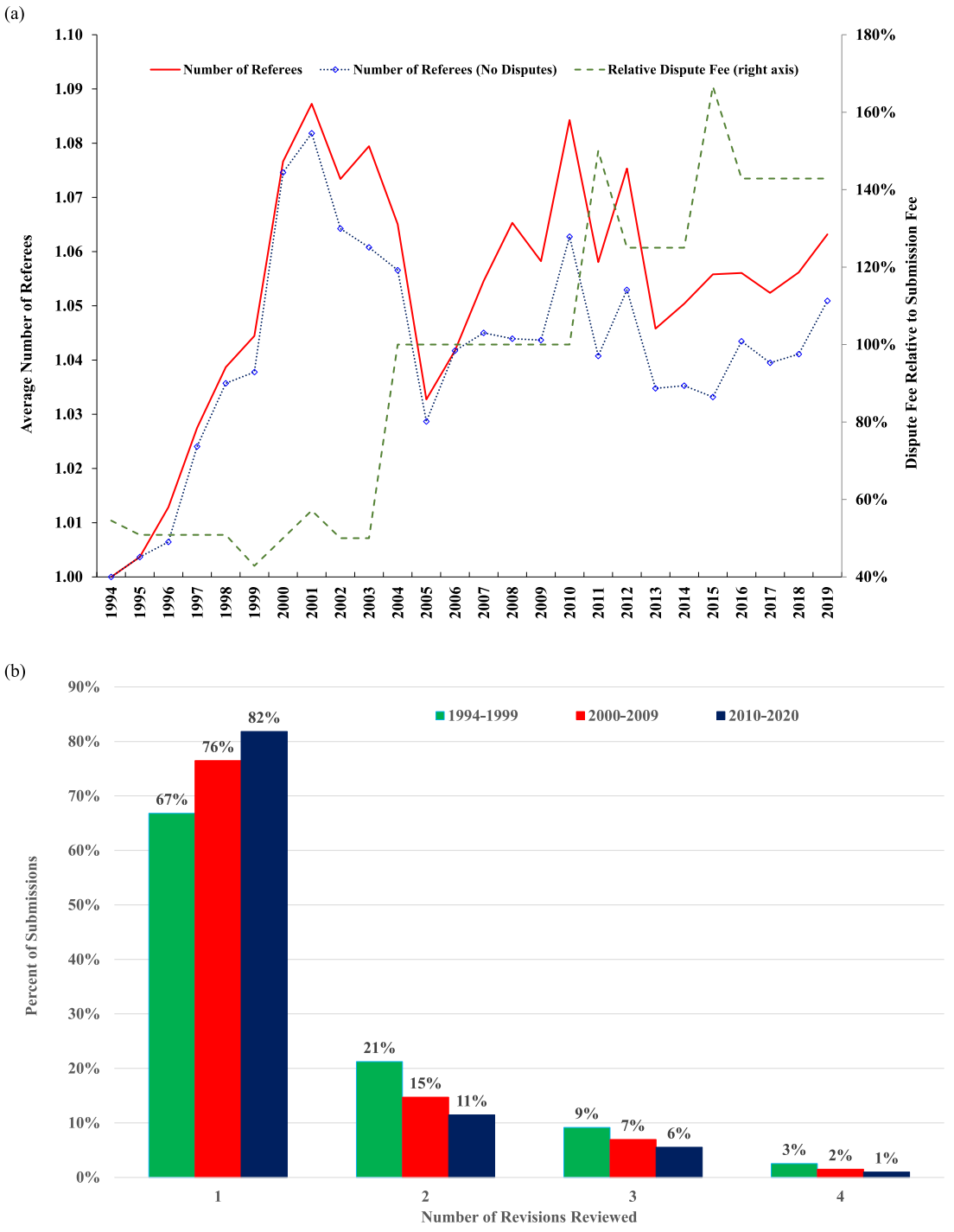

Fig. 5. (a) Average number of referees per paper submitted to the *JFE*, 1994 through 2020, including and excluding dispute referees. Also, the fee for a dispute relative to the subscribers' submission fee (right axis). (b) Percentage of submissions to the *JFE* that are first, second, third, or fourth rounds of review, 1994 through 2020.

a variety of scenarios, but in my judgment it reflects the desire by the editor to seek more advice on papers that are complex but potentially publishable.

Fig. 5a shows the average number of referees per paper yearly from 1994 to 2020. The average number of referees is never above 1.1 and there is no substantial trend after 2000. The *JFE* uses "dispute referees," who are asked to intermediate disagreements between authors and referees. It is apparent that the rate of disputes has increased over time, despite the high cost to authors of pursuing a dispute (the dispute fee is currently $1,500). Foreshadowing the discussion of submission fees in Section 6, Fig. 5a

shows that the editors increased the dispute fee in 2004, 2011, and 2015 following unusual increases in the number of disputes.

The referee always receives a copy of the letter written by the editor to the author. This enables the editors to convey *JFE* policies to both authors and referees in a consistent way, which is important since many of our referees are also authors.

Another editorial policy that affects the speed of the publication process is the number of iterations required to produce a publishable paper. In the early days of the *JFE,* the number of authors and papers was smaller, and it made sense for the referees and editors to make larger investments in helping to improve poorly executed papers that had a good idea. Accordingly, there were occasions when there might be five or more resubmissions before the paper was finally accepted or rejected. As the profession matured and competition among authors and papers for scarce journal space increased, the *JFE* decided to informally limit the number of resubmissions, so that if a paper was not acceptable after a third submission it would be rejected. Fig. 5b shows that the frequency of multiple resubmissions has fallen over time, consistent with *JFE* policy.

The value of repeated iterations between authors and referees has been hotly debated and blamed at least in part for the increasing delay in the speed of publication in the finance and economics literature (e.g., Ellison, 2002; McAfee, 2010; Spiegel, 2012; Berk et al., 2017; and Hadavand et al., 2020). While we have not experimented with the "no revisions" process used by *Economic Inquiry,* we do try to avoid prolonged battles between authors and referees about the evolution of the paper.

The *JFE* editorial board includes people who provide the highest level of peer review. As shown in Table 1, editors have been important contributors to the *JFE* as authors, with almost 12% of the papers published and 20% of the citations to *JFE* papers. Occasionally, they help identify important papers for solicitation (for which we waive the submission fee). While the editorial board includes well-known senior people, we added many members early in their careers because they were identified as productive scholars and reviewers. Indeed, many of these people were on the *JFE* board before they were given similar recognition by other finance and economics journals, including editors of the *Journal of Finance* (Blume, Brennan, Stulz, Stambaugh, and Harvey), the *Review of Financial Studies* (Brennan and Karolyi), and the *Journal of Financial and Quantitative Analysis* (Bessembinder and Harford). In addition, other members of the *JFE* editorial board later became editors of significant journals in other fields, including John Campbell (*American Economic Review* and *Review of Economics and Statistics*), Charles Plosser (*Journal of Monetary Economics*), Andrei Shleifer (*Quarterly Journal of Economics*), and Ross Watts (one of the founding editors of the *Journal of Accounting & Economics*). Some of the most senior people on the editorial board when the *JFE* began in 1974 are among the few who did not contribute as authors, and most of these people were replaced on the board by 1980. We added most people to the board based on their delivered performance as referees and authors.

2.3. Expositional policies

The *JFE* has always stressed expositional clarity as an important goal for the papers it publishes. Beyond the usual help that editors and referees provide authors, the *JFE* hires a professional copyeditor to review every accepted paper.

The *JFE* also has high standards for tables and figures. (After René Stulz became the editor of the *Journal of Finance* in 1987, that journal adopted table and figure policies similar to those of the *JFE*.) The goal is for each table and figure to be virtually self-contained; that is, readers should be able to understand the information in the table or figure without frequent reference to the text of the article. We believe that this objective is important because many readers skim a paper's abstract, tables, figures, and conclusions in deciding whether to devote the time to read the paper carefully. In addition, many readers use results from *JFE* papers as separate handouts to highlight a particular fact or result. To help authors achieve this goal, we send a packet of materials containing good examples of tables and figures when authors are being encouraged to revise and resubmit a paper for further review (and these guidelines are on the web page of the *JFE* editors' office). Frequently, *JFE* editors also send authors instructions on footnotes (we strive to minimize footnotes) and other matters of exposition (e.g., Hamermesh, 1992; McCloskey, 1985; and Wydick, 1978). The editors believe that expositional quality is important, along with analytical quality, in determining the success of *JFE* papers.

The *JFE* stresses clarity, but it also has a policy of ignoring absolute length in judging the publishability of a paper. We would rather see one longer comprehensive paper than several shorter papers (whose cumulative length is greater). This policy also distinguishes the *JFE* from many competing economics and finance journals. For example, the *Journal of Finance* has a policy that submitted papers cannot exceed 60 manuscript pages. Fig. 6a shows the distribution of paper lengths for the 3,003 papers published in Volumes 1–138 of the *JFE,* ignoring short editorials and introductory papers in special issues. The average length is about 30.8 pages, but 12% of the papers have been more than 40 pages long. Fig. 6b shows that the length of papers has grown over time, probably due to increased complexity. Section 5 analyzes these findings in more detail. Note that since 2008, starting with Volume 89, the printed *JFE* has used two columns of text, which makes the printed issues about 33% shorter than the original single-column format. The length of papers after Volume 88 are adjusted to reflect the original format.

2.4. Entrepreneurial activities: conferences, special issues, and clinical papers

Another policy that has differentiated the *JFE* from other finance and economics journals is the frequent effort to highlight and cultivate new areas of research. Table 4 lists the special symposium issues of the *JFE,* many of which resulted from conferences that the *JFE* cosponsored. It shows the topic of the symposium, the

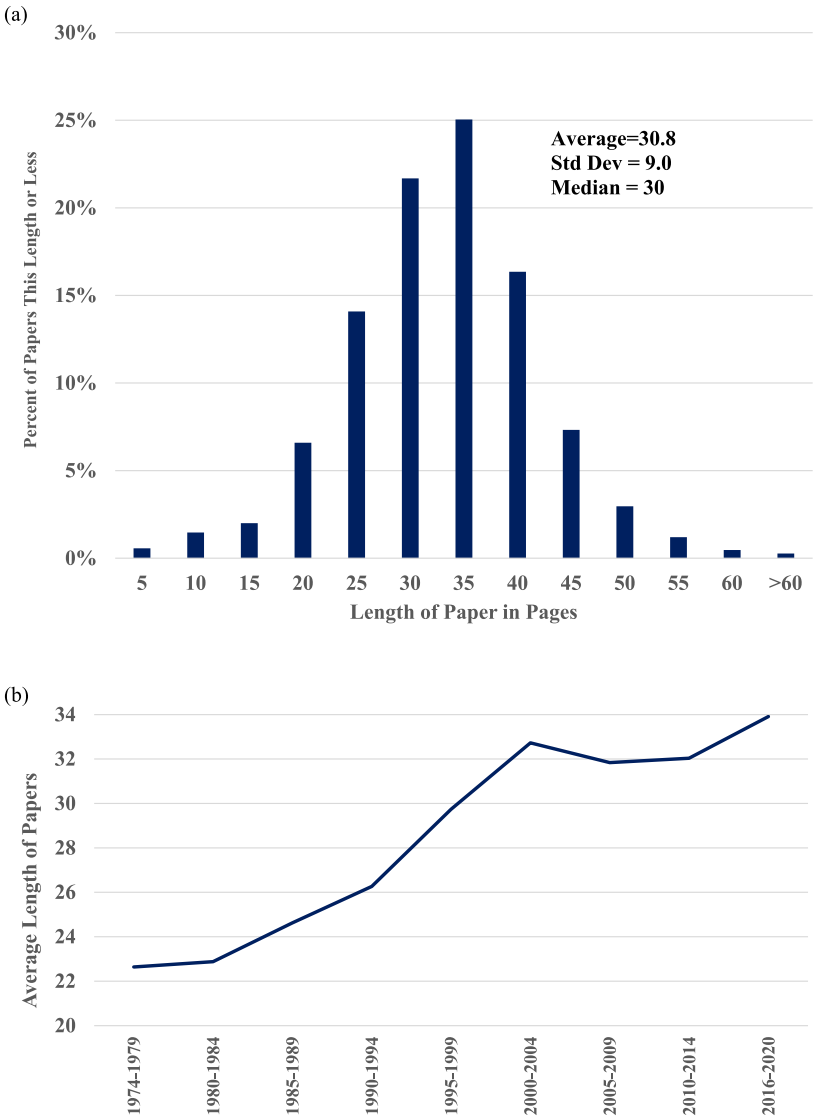

Fig. 6. (a) Histogram of paper lengths for *JFE* papers, 1974 through 2020. Length is based on the printed published paper. (b) Average length of *JFE* papers for five-year intervals, 1974 through 2020.

number of papers and pages in the special issue, the editors responsible, and the total number of citations from the *SSCI* to these papers from publication through 2020. It also shows the average citations per paper per year for each symposium. While these special issues vary in size and subject matter, it is clear from the citation data that they have been highly influential in the literature. The average number of citations per paper per year in special issues is 9.3, more than 43% higher than the 6.5 average citations per paper per year for normal issues of the *JFE*. Sections 4 and 5 provide further analysis of citation patterns for *JFE* papers.

Besides the special issues, in 1989 the *JFE* began a section on clinical papers under the guidance of Richard Ruback (Jensen et al., 1989). The *JFE* has published 66 clinical papers through 2020. The average number of citations per year is 2.1, compared with 6.2 average citations per year for nonclinical papers. Of course, the goal of the clinical papers is somewhat different, so it is not appropriate to judge the success of this policy solely on the basis of citations in the academic journal literature.

3. Factors of production for the *JFE*

The success of any academic journal rests on the papers it publishes. Thus, it is the decisions of authors to submit their papers for review, and then the efforts of referees and editors in helping to improve papers and selecting among the many submissions, that result in the set of published papers. This section will present data on the types of authors, referees, topics, and methods that have contributed to the success of the *JFE*.

Table 4
Special issues of the Journal of Financial Economics, 1974 through 2020.

Topic	Year	Volume	Papers	Pages	Citations		Editors
					Total	Paper/Year	
Option Pricing Models	1976	3	6	176	3,894	14.4	Michael C. Jensen
Anomalous Evidence Regarding Market Efficiency	1978	6	9	235	1,109	2.9	Michael C. Jensen
Futures Pricing	1981	9	3	62	554	4.6	G. William Schwert
The Market for Corporate Control: The Scientific Evidence	1983	11	17	466	4,004	6.2	Michael C. Jensen
Size and Stock Returns, and Other Empirical Regularities	1983	12	8	154	1,660	5.5	G. William Schwert
Investment Banking and the Capital Acquisition Process	1986	15	10	279	3,617	10.3	Michael C. Jensen and Clifford W. Smith
The Distribution of Power Among Corporate Managers, Shareholders, and Directors	1988	20	18	504	6,578	11.1	Michael C. Jensen and Jerold B. Warner
The Structure and Governance of Enterprise	1990	27	23	604	4,723	6.6	Michael C. Jensen and Richard S. Ruback
Symposium on Corporate Focus	1995	37	5	124	1,600	12.3	Michael C. Jensen and Wayne H. Mikkelson
Symposium on Market Microstructure: Focus on Nasdaq	1997	45	7	164	311	1.9	G. William Schwert
Special Issue on International Corporate Governance	2000	58	9	332	5,451	28.8	Andrei Shleifer
Complementary Research Methodologies: The Interplay of Theoretical, Empirical and Field-Based Research in Finance	2001	60	11	433	1,621	7.4	Peter Tufano
Limits on Arbitrage	2002	66	9	336	1,762	10.3	Andrei Shleifer and Jeremy C. Stein
Tuck Symposium on Corporate Governance	2003	69	8	276	1,290	9.0	G. William Schwert and B. Espen Eckbo
NBER Conference on Corporate Alliances	2006	80	2	75	175	5.8	Josh Lerner and Raghuram Rajan
NBER Conference on the Economics of Conflicts of Interest in Financial Institutions	2007	85	10	332	1,082	7.7	Hamid Mehran and René M. Stulz
Special Issue on Investor Sentiment	2012	104	11	193	1,233	12.5	Jeffrey Wurgler
NBER Conference on Market Institutions, Financial Market Risks, and Financial Crisis	2012	104	7	139	1,401	22.2	Mark Carey, Anil K Kashyap, Raghuram Rajan, and René M. Stulz
NBER Conference on the Causes and Consequences of Corporate Culture	2015	117	11	223	662	10.0	Luigi Zingales and G. William Schwert
NBER Symposium on New perspectives on corporate capital structures	2015	118	8	162	228	4.8	Viral V. Acharya, Heitor Almeida, and Malcolm Baker
JFE Special Issue on Labor and Finance	2019	133	10	225	30	1.5	Toni M. Whited
Average for *JFE* Special Issues			9.6	262	2,047	9.3	
Average for Normal Issues of the *JFE*						6.5	

Citations Total is the sum of all citations for all papers in the issue from publication through 2020. Citations per Paper/Year is the average number of citations per year since publication through 2020 for all papers in the issue. Across all special issues, average citations per year are about 43% higher for papers in special issues.

3.1. Research topics and methods

JEL classification codes provide one method of identifying the questions that are addressed in *JFE* papers.[5] Fig. 7a shows the evolution of topics addressed in the *JFE* by decade since 1974. It is apparent that asset markets and pricing (G1) was the most important category through the 1980s, and it remains the subject of about one-third of the papers published today. Financial institutions and services (G2) has grown substantially as a focus of research since the 1990s, probably because of the various financial crises that have motivated studies of the role that institutions play in financial markets. Corporate finance and governance (G3) grew from one-sixth of the papers in the 1970s to more than one-third of the papers today, in large part because of papers published in the *JFE* and its special issues in the 1980s and 1990s. It remains the topic of about one-quarter of the papers today.

Financial economists benefit from access to a large and growing collection of data to learn about finance research topics. Thus, it is not surprising that the role of empirical papers in the finance literature has grown since 1974. Fig. 7b shows that from 1974 through 1979, almost 60% of the papers were theoretical, with essentially no empirical analysis. Michael Jensen was well known for asking theorists to include empirical predictions from their models in their *JFE* papers. Over time, the proportion of theory papers has declined as the number of empirical papers increased.[6] In fairness, the categorization between theory and empirical content is subjective. I categorized papers

[5] https://www.aeaweb.org/jel/guide/jel.php.

[6] Angrist, Azoulay, Ellison, Hill, and Lu (2020) find that both the proportion of and citations to empirical papers in top economics journals have grown steadily from 1980 to 2015. Hamermesh (2013, Table 4) shows that the proportion of theory papers has declined since the mid-1980s. Kim, Morse, and Zingales (2006, appendix Table 1B) show that the proportion of highly cited theory papers in economics journals, including finance, declined substantially from 1970 to 1999.

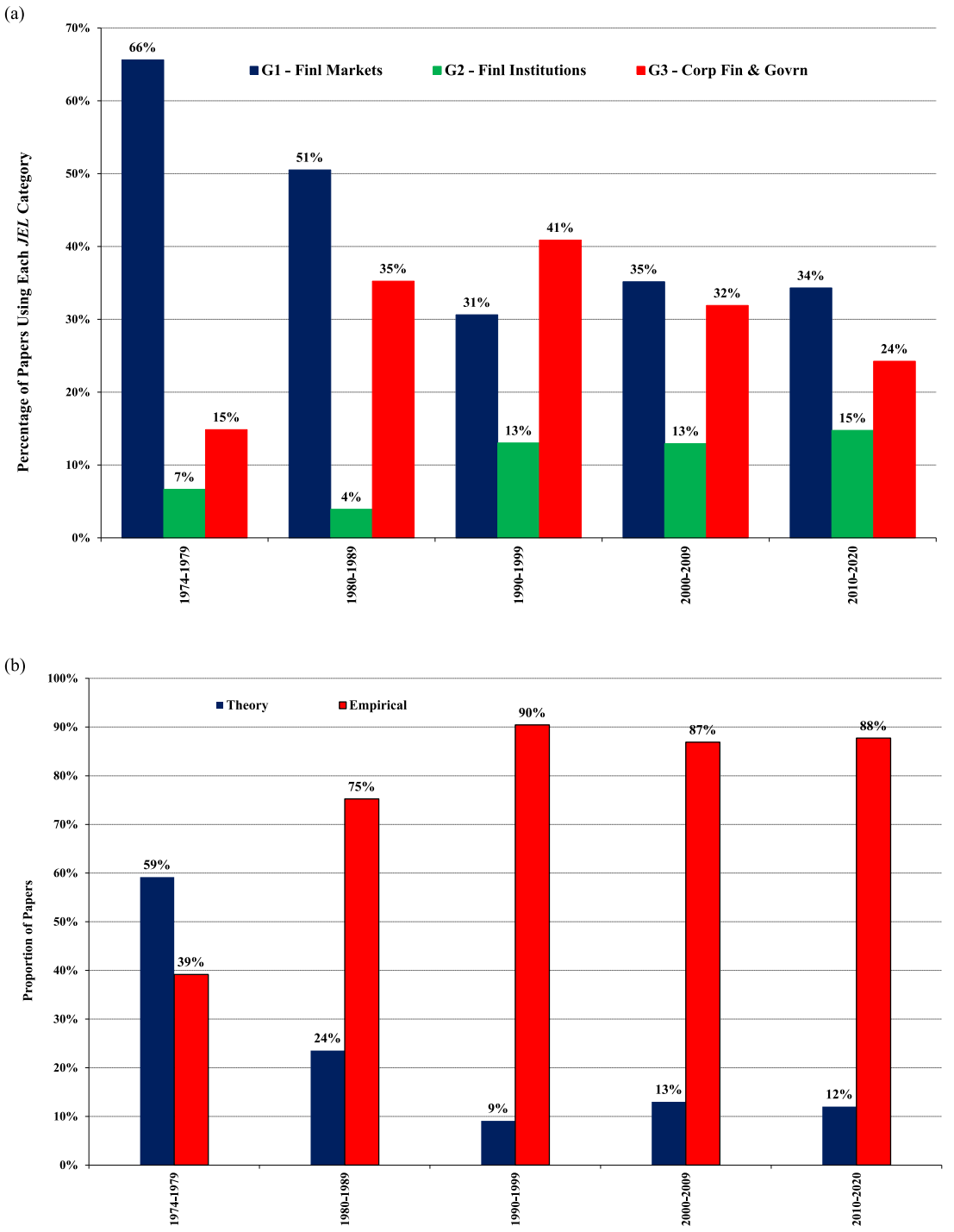

Fig. 7. (a) Percentage of *JEL* categories used in *JFE* papers by decade, 1974 through 2020. (b) Theory and empirical papers in the *JFE* by decade, 1974 through 2020.

that contain both theory and empirical work as "empirical." Since many papers now have significant content of both types, the simplistic evidence in Fig. 7b does not mean that there have been fewer theoretical contributions since 1979.

3.2. Who are the authors and referees?

The *JFE* has collected detailed information about characteristics of authors and referees since 1994. There are several trends that are apparent over this 27-year period.

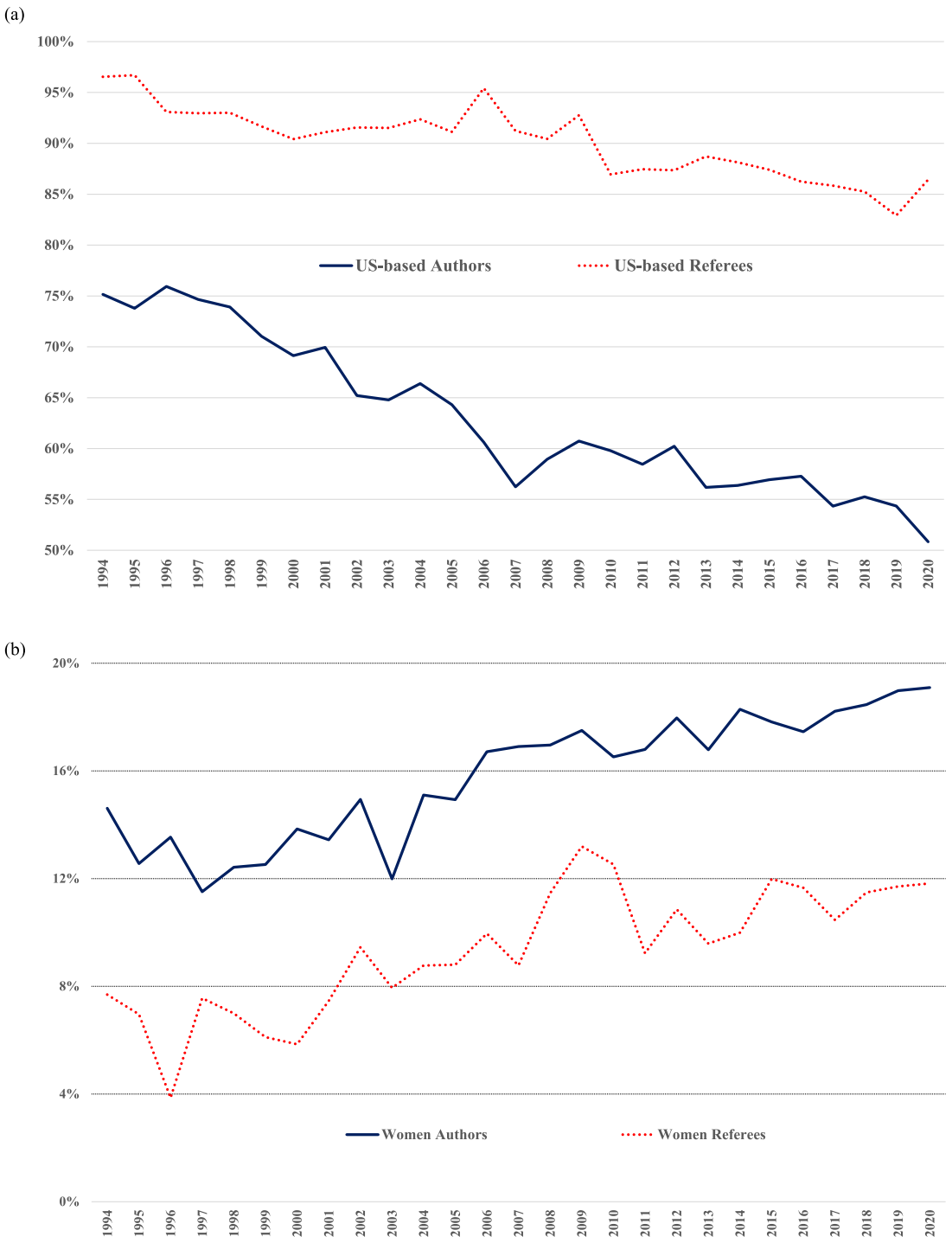

Fig. 8. (a) Percentage of US-based authors and referees for *JFE* submissions by year, 1994 through 2020. (b) Percentage of women authors and referees for *JFE* submissions by year, 1994 through 2020.

First, almost all referees (91%) are also authors who have submitted papers, and about 67% of the referees have published a paper in the *JFE* during this period, as seen earlier in Fig. 3a.

Fig. 8a shows that the proportion of authors and referees based in the US has fallen steadily since 1994 as academic finance has become more of a global enterprise. Similarly, Fig. 8b shows that the proportion of authors and referees who are women has risen steadily as the profession itself has become more gender diverse, similar to what Hamermesh (2013) notes for economics journal publications.

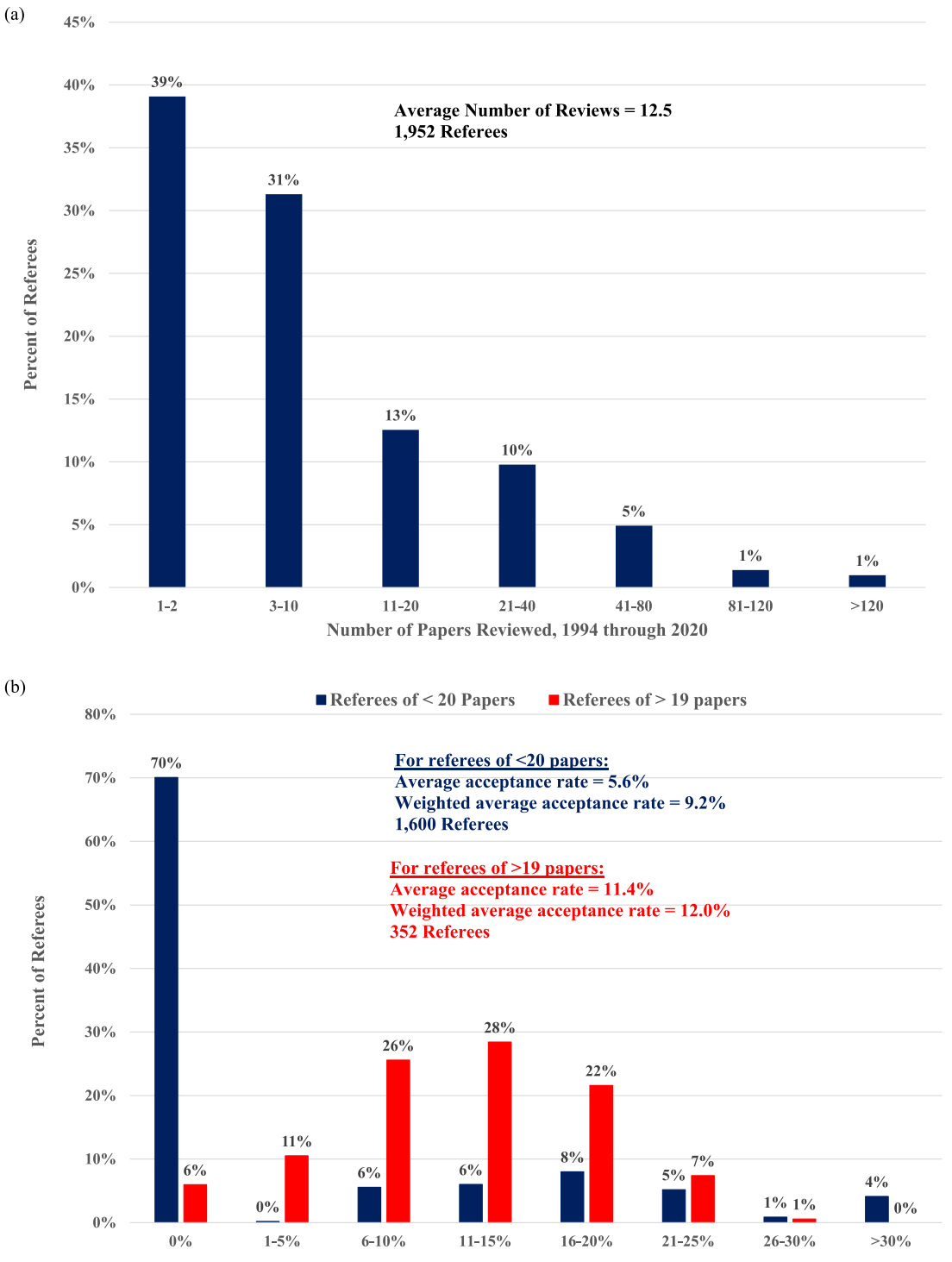

Fig. 9. (a) Percentage of referees by number of *JFE* papers reviewed, 1994 through 2020. (b) Percentage of referees with acceptance rates in each category, 1994 through 2020.

As with many things in economics, the distribution of the referee workload is positively skewed. Fig. 9a shows that of the 1,952 people who have written referee reports for the *JFE* between 1994 and 2020, about 39% have prepared one or two reports. By comparison, 7% of the referees have written more than 40 reports (the maximum is 215). The distribution of acceptance rates in Fig. 9b is unusual. Most referees (59%) have never written reports for a paper that is accepted by the editor, but a handful of referees have relatively high acceptance rates. It is clear

that the acceptance rates are higher for referees who have written 20 or more reports, with an average acceptance rate of 11.4%, double the 5.6% average for infrequent referees. This disparity is consistent with a sorting process by which editors choose inexperienced referees, or at least referees who are not well known to the editor, to review papers that the editor forecasts are unlikely to become publishable in the *JFE*.

In fact, editors often select experienced referees for papers that the editor thinks have a higher likelihood of eventually becoming publishable. Card and Della Vigna (2020) find that editors give more weight to experienced and highly cited referees and also to referees whom they have used many times before. This sorting model makes sense in the context of the dynamic quid pro quo system in academic publishing. Even when authors pay "large" submission fees, and referees receive "large" honoraria for their on-time work, the compensation for referees is far below their opportunity cost of time, especially for the most experienced referees, who are also among the most prolific authors. Nonetheless, experienced referees often devote a lot of time to reading other papers and writing reports on them. Since authors do not know the identity of the referee, only the editor can observe the valuable work contributed by the referee. The implicit compensation received by experienced referees is the expectation that the editor will devote scarce high-quality refereeing resources to their papers when they submit as authors.

As mentioned in Section 2.2, another way the *JFE* has rewarded referees is to list on the editor's web page all of the people who have refereed papers in the preceding 12-month period, along with the number of reports they have written and the average turnaround time (The *Journal of Finance* has also published lists of referees for the preceding 12 months in its editor's reports.) This information provides quantifiable evidence of professional service, which could be useful to colleagues and administrators. In addition, as noted earlier, if the authors of an accepted paper thank "an anonymous referee," the editor gives the referee the opportunity to reveal his or her identity in the published paper. (The *JFE* no longer publishes lists of referees and their workload.)

Another aspect of the sorting process in selecting referees is that it is expensive for the editor if the referee errs in being too generous in assessing papers, which often results either in asking a second person to review the paper or in publishing a paper that lowers the quality of the journal. Given this asymmetric loss function, it is normal for editors to learn about the referee's quality by asking them to review lower-quality papers. For example, my first six or seven referee reports for the *JFE* in 1976 were all for papers that were easy rejection decisions. One day I commented to then-editor Mike Jensen that I would love to see a paper that might actually have a chance of being accepted. As a result, the next two papers I reviewed were Roll (1977) and Scholes and Williams (1977), which have had 883 and 968 citations in the *SSCI* through 2020, so Mike apparently had decided that he could trust my judgment.

Another important source of information about referees is the members of the editorial board. Editors frequently ask members of the board for recommendations about possible referees as a way to broaden the set of people who contribute to a journal. Young scholars have incentives to produce high-quality reports to establish a good reputation with the editor.

As mentioned in Section 2.2, one form of compensation for on-time referee reports is a "coupon" that can be used to pay one-third of the submission fee if the referee subsequently submits a paper to the *JFE*. This coupon is in addition to the cash payment, which is itself a substantial portion of the submission fee. Since referees are also likely to write papers that might be publishable in the *JFE*, the coupons, which are nontransferable, are a price discrimination device in favor of authors who have a higher likelihood of acceptance. Some referees effectively have an unlimited number of free submissions. Together with the policy of refunding submission fees for the version of the paper that is accepted, and soliciting papers that the editor has identified as being likely to be publishable, these policies lower submission costs for authors who have papers that are likely to be publishable.

Table 5 shows the list of the 56 authors whose *JFE* papers have been cited the most, along with the number of papers published (a full tabulation of the 3,358 authors who have published papers in the *JFE* over the period 1974–2020 is in Table 5A in the internet appendix). The institutional affiliations in Table 5 are based on the author's last published *JFE* paper. Eugene Fama and Kenneth French rank first and second with 392.1 and 349.9 average citations per author per year. They rank second and third in terms of papers per coauthor. René Stulz has the most papers with 38 (16.92 adjusting for coauthorship), and he ranks third in terms of citations. More than half of the authors in this table were on the editorial board at some time, and about 90% have served as referees. These 56 authors are 1.7% of all authors but represent 9.4% of the papers per coauthor and 22.9% of the citations per coauthor per year.

3.3. Where do the authors work?

Table 6 shows the list of the 42 institutions whose authors have published the most papers in the *JFE*, along with various measures of the citations to those papers (a full tabulation of the 605 institutions whose 3,358 authors have published papers in the *JFE* over the period 1974–2020 is in Table 6A in the internet appendix). These 42 institutions are 6.9% of all institutions but represent 64.9% of the citations per coauthor per year and 54.7% of the papers per coauthor. The institutional affiliations in Table 6 are measured at the time that the paper is published.

The role that these leading institutions have played in the *JFE* has declined over time as the breadth and depth of the set of potential *JFE* authors have grown around the world. Fig. 10a shows the share of *JFE* papers weighted by coauthorship for ten universities at the top of Table 6. Rochester, Chicago, MIT, and UCLA represented almost 40% of the *JFE* papers in the 1970s, and slightly less than 6% from 2010 through 2020. The ten universities together represented only about 18% of the *JFE* papers from 2010 through 2020. Fig. 10b shows the

Table 5
Authors of JFE papers with the most citations and papers, 1974 through 2020

Papers/Coauth: each of n authors receives 1/n credit for a JFE paper. Papers/Author: each coauthor receives full credit for each paper. Total Cites: the sum of citations across all papers from the *Social Science Citation Index* for each year since a paper was published. Cites/Year: average citations per year since publication. Cites/Author: average citations per author for all years since publication. Cites/Auth/Year: average citations per year per author. Affiliation reflects the author's location at the time of the last JFE paper was published. JFE editor indicates the author was on the editorial board at some time between 1974 and 2020. There are 3,358 authors who published 3,003 papers in the JFE between 1974 and 2020.

Citations Rank	Papers Rank	Author		Papers/ Coauth	Papers/ Author	Total Cites	Cites/ Year	Cites/ Author	Cites/ Auth/Yr	Affiliation	*JFE* Editor
1	2	Fama	E.F.	15.00	24	15,097	720.9	8,416.0	392.1	U. Chicago	1
2	3	French	K.R.	10.33	19	14,646	699.0	7,375.8	349.9	Dartmouth C.	1
3	1	Stulz	R.M.	16.92	38	8,854	454.4	4,471.3	205.4	Ohio St. U.	1
4	126	Jensen	M.C.	3.00	5	15,052	341.8	7,688.0	174.7	U. Rochester	1
5	10	Shleifer	A.	7.25	20	8,894	469.9	3,055.3	158.0	Harvard U.	1
6	1506	Meckling	W.H.	0.50	1	13,162	292.5	6,581.0	146.2	U. Rochester	0
7	98	Myers	S.C.	3.33	6	7,578	221.9	5,199.2	142.9	Massachusetts Inst. Tech.	1
8	7	Harvey	C.R.	7.83	17	4,070	247.8	1,860.6	100.9	Duke U.	1
9	23	Graham	J.R.	6.25	13	3,349	232.9	1,605.0	99.4	Duke U.	1
10	4	Stambaugh	R.F.	10.33	18	3,759	187.5	2,055.2	92.6	U. Pennsylvania	1
11	80	Vishny	R.W.	3.67	10	5,978	254.9	2,071.3	88.7	U. Chicago	1
12	27	Yermack	D.	6.08	8	1,980	93.2	1,860.3	82.7	New York U.	1
13	82	Laeven	L.	3.67	9	2,260	185.4	952.0	78.8	Tilburg U.	0
14	31	Warner	J.B.	5.67	11	5,533	159.6	2,717.2	77.3	U. Rochester	1
15	15	Harford	J.	6.75	15	1,996	169.3	980.5	75.9	U. Washington (Seattle)	1
16	5	Roll	R.	9.70	18	3,375	155.8	2,062.8	75.5	Cal Tech	1
17	25	Acharya	V.V.	6.08	16	1,965	176.4	852.7	75.4	New York U.	0
18	89	Lang	L.H.P.	3.50	9	4,255	181.7	1,657.3	71.6	Chinese U. Hong Kong	0
19	19	Weisbach	M.S.	6.42	13	2,266	105.8	1,699.0	67.8	Ohio St. U.	1
20	105	Levine	R.	3.17	8	2,291	154.9	968.5	66.9	U. Cal. (Berkeley)	0
21	61	Merton	R.C.	4.17	6	2,645	66.4	2,542.8	60.4	Massachusetts Inst. Tech.	1
22	104	Pedersen	L.H.	3.20	9	1,483	143.7	654.0	60.0	Copenhagen Bus Sch	0
23	14	Smith	C.W.	6.83	12	3,674	106.5	2,122.2	59.7	U. Rochester	1
24	20	Subrahmanyam	A.	6.33	18	2,721	159.0	1,028.6	57.8	U. Cal. (Los Angeles)	0
25	1057	Djankov	S.	0.92	3	3,063	192.5	938.0	57.8	World Bank	0
26	130	Novy-Marx	R.	3.00	3	436	53.6	436.0	53.6	U. Rochester	0
27	68	Ivashina	V.P.	4.00	8	992	94.4	581.0	53.4	Harvard U.	1
28	1506	Majluf	S.	0.50	1	3,828	103.5	1,914.0	51.7	U. Catolica de Chile	0
29	63	Brown	S.J.	4.08	10	3,145	108.5	1,535.4	49.1	Monash U. (Australia)	0
30	33	Chordia	T.	5.58	14	2,227	134.8	830.5	48.9	Emory U.	0
31	107	Yuan	Y.	3.17	7	924	119.9	372.0	48.8	Shanghai Mingshi Invest.	0
32	100	Ferreira	M.A.	3.25	9	1,280	133.0	500.9	48.7	U. Nova de Lisboa	0
33	28	Hong	H.	6.00	15	1,573	116.6	624.8	48.4	Columbia U.	0
34	134	Campbell	J.Y.	2.92	6	1,834	86.7	1,199.3	47.7	Harvard U.	1
35	6	DeAngelo	H.	9.00	21	2,473	109.8	1,090.2	45.5	U. Southern Cal.	1
36	139	Zingales	L.	2.83	7	1,296	108.0	587.7	45.4	U. Chicago	0
37	143	Wurgler	J.	2.83	6	1,220	84.6	734.3	44.0	New York U.	1
38	39	Ritter	J.R.	5.00	10	1,988	90.4	1,013.2	43.8	U. Florida	1
39	29	Kang	Jun-Koo	6.00	14	1,662	110.8	732.8	43.8	Nanyang Tech U.	0
40	26	Keim	D.B.	6.08	9	1,853	75.8	1,229.8	43.3	U. Pennsylvania	0
41	38	O'Hara	M.	5.17	11	1,168	82.8	587.0	42.9	Cornell U.	0
42	22	Schwert	G.W.	6.33	9	2,714	82.0	1,371.8	42.6	U. Rochester	1
43	80	Karolyi	G.A.	3.67	10	1,628	121.6	576.2	42.5	Cornell U.	1
44	12	McConnell	J.J.	6.92	16	2,449	90.7	1,150.1	41.9	Purdue U.	0
45	580	Thompson	S.B.	1.33	2	467	44.6	425.7	41.9	Arrowsteet Capital	0
46	13	Masulis	R.W.	6.83	13	2,244	82.3	1,200.2	41.8	U. New South Wales	1
47	137	Coles	J.L.	2.83	8	2,076	124.1	702.3	41.7	Arizona State U.	0
48	251	Barberis	N.C.	2.17	6	1,869	115.0	682.1	41.1	Yale U.	0
49	61	Lewellen	J.	4.17	6	980	68.3	614.2	40.7	Dartmouth C.	0
50	66	Sadka	R.	4.08	7	720	55.1	523.3	39.1	Boston C.	0
51	238	Rajan	R.G.	2.28	6	1,688	102.5	649.7	38.8	U. Chicago	0
52	167	Nagel	S.	2.67	5	880	70.8	524.8	38.5	U. Chicago	0
53	75	Guay	W.R.	3.83	8	1,128	70.9	690.5	38.4	U. Pennsylvania	0
54	70	Campello	M.	4.00	7	891	81.1	444.5	37.9	Cornell U.	0
55	325	Matos	P.P.	1.92	6	1,135	110.7	413.3	37.8	U. Virginia	0
56	216	Tian	X.	2.33	5	645	90.1	292.7	37.4	Tsinghua U (CHI)	0

average citations to *JFE* papers from the ten universities weighted by coauthorship relative to the average for all papers. The highly cited Jensen and Meckling (1976) and Fama and French (1993) papers explain the unusual values for Rochester and Chicago in those decades. In general, the papers published by authors at these institutions were cited more frequently than the average paper.

Table 6
Citations and papers written by authors at a given institution published in the JFE, 1974 through 2020

Papers/Coauth: each of n authors receives 1/n credit for a JFE paper. Papers/Author: each coauthor receives full credit for each paper. Total Cites: the sum of citations across all papers from the *Social Science Citation Index* for each year since a paper was published. Cites/Year: average citations per year since publication. Cites/Author: average citations per author for all years since publication. Cites/Auth/Year: average citations per year per author. The institutions are identified at the time the paper is published. There are 605 institutions and 3,358 authors who published 3,003 papers in the JFE from 1974 through 2020.

Citations Rank	Papers Rank	Affiliation	Papers/ Coauth	Papers/ Author	Total Cites	Cites/ Year	Cites/ Author	Cites/ Auth/Yr
1	2	U. Chicago	115.95	226	58,517	2,747.1	28,997.8	1,304.2
2	1	Harvard U.	117.02	251	35,861	2,278.6	16,670.7	985.9
3	5	U. Rochester	83.17	138	56,829	1,640.5	30,716.5	902.5
4	3	U. Pennsylvania	92.50	181	25,417	1,602.6	12,251.1	731.3
5	7	Massachusetts Inst. Tech.	63.65	132	26,703	1,179.9	15,671.5	592.6
6	4	New York U.	84.30	182	19,712	1,301.7	9,610.4	589.8
7	6	U. Cal. (Los Angeles)	64.67	136	16,853	894.7	8,502.0	410.7
8	13	Duke U.	40.32	98	14,074	992.6	5,881.0	387.3
9	8	Ohio St. U.	53.55	124	16,857	943.4	7,258.7	381.2
10	9	Stanford U.	49.08	107	11,424	690.6	5,896.7	317.3
11	32	Yale U.	22.70	50	11,858	596.0	5,812.4	280.7
12	11	U. Michigan	44.50	97	10,188	566.2	4,974.8	267.4
13	51	World Bank	14.42	33	10,804	676.7	4,139.5	257.0
14	10	Columbia U.	45.60	112	9,498	659.3	3,867.9	253.5
15	15	U. Washington (Seattle)	39.17	88	8,336	597.5	3,757.1	250.8
16	14	U. Southern Cal.	39.67	85	8,313	555.1	4,156.5	246.5
17	16	Boston C.	37.45	85	8,082	603.9	3,440.6	241.2
18	19	Northwestern U.	33.95	70	8,451	474.5	4,741.1	229.8
19	41	Dartmouth C.	18.50	39	5,710	525.8	2,457.6	227.3
20	12	U. Cal. (Berkeley)	44.32	86	7,717	485.1	4,417.0	220.9
21	21	London Business School	31.12	66	5,931	393.3	3,205.3	188.4
22	22	Cornell U.	29.83	69	6,578	451.5	2,890.0	184.3
23	26	Purdue U.	27.17	57	6,525	366.5	3,190.8	172.6
24	37	Princeton U.	19.83	40	5,110	325.2	2,850.3	165.6
25	18	U. North Carolina	34.42	79	4,789	368.3	2,155.6	156.6
26	24	U. Texas (Austin)	27.37	64	5,870	354.5	2,785.5	149.0
27	25	Arizona State U.	27.33	60	5,269	356.8	2,233.8	144.7
28	85	Chinese U. Hong Kong	8.87	26	5,565	402.3	2,027.4	142.9
29	33	Indiana U.	21.67	49	3,744	355.8	1,464.4	141.2
30	20	U. Illinois (Urbana-Champaign)	31.67	72	4,813	332.7	2,014.7	139.1
31	28	U. Maryland	24.82	57	3,587	282.9	1,743.5	129.4
32	17	Federal Reserve Board	36.15	73	3,525	314.2	1,517.7	129.0
33	31	Washington U.(St Louis)	23.83	53	2,448	309.6	1,152.3	126.2
34	27	U. British Columbia	25.92	51	4,814	269.7	2,752.9	125.0
35	55	U. Georgia	13.58	31	3,892	307.2	1,555.8	124.1
36	39	Emory U.	19.70	44	3,483	274.3	1,564.7	123.5
37	23	U. Utah	28.08	65	4,277	288.7	1,989.0	117.9
38	29	U. Florida	24.50	57	4,638	285.0	1,988.8	117.6
39	30	Notre Dame U.	24.37	51	3,426	248.6	1,704.2	117.1

4. Citations to *JFE* papers

When Michael C. Jensen, Eugene F. Fama, and Robert C. Merton originally planned the *JFE,* they agreed that citations to papers published in the *JFE* should be an objective measure of success. (This is not surprising, since Robert K. Merton, a prominent sociologist of science and Robert C. Merton's father, advocated the value of citation analysis for understanding how science works; see Merton, 1973.) Three separate editorials (Jensen et al., 1987, 1990; and Schwert, 1993) summarize the citation success of *JFE* papers, and the web page for the editor's office has maintained numerous statistics reflecting citation performance since 1996. Papers published in the *JFE* have received 313,959 citations from other published papers as reflected in the *Social Science Citation Index*.

There are many metrics used to rank journals based on citations, but probably the most frequently used is the "impact factor" created by *Journal Citation Reports* (*JCR*), which measures the average number of citations in year T to papers published in years T–1 and T–2. Fig. 11a shows the time series of impact factors for the *JFE,* the *JF,* the *RFS,* and the *JFQA* from 1977 through 2019. Several things are apparent from this graph. First, impact factors have increased over time for all four journals. This probably reflects the increase in the number of journals, and therefore the number of papers and citations, along with the positive skewness in citations that means "better" papers receive more than a proportional share of newly available citations. Second, the *JFE* had amazingly high impact factors in the 1980s, in large part because of special issues focused on corporate control. Third, the impact factors for the *JF* have grown substantially since 1988, when René Stulz began his editorial term. Fourth, the impact factors of the *RFS* have increased since 2008. The impact factors for the *RFS* jumped substantially in 2010 and 2011 due in large part to one very highly cited paper; the impact factors of 4.60 and 4.75 in 2010 and 2011 would have been 4.02 and 4.04

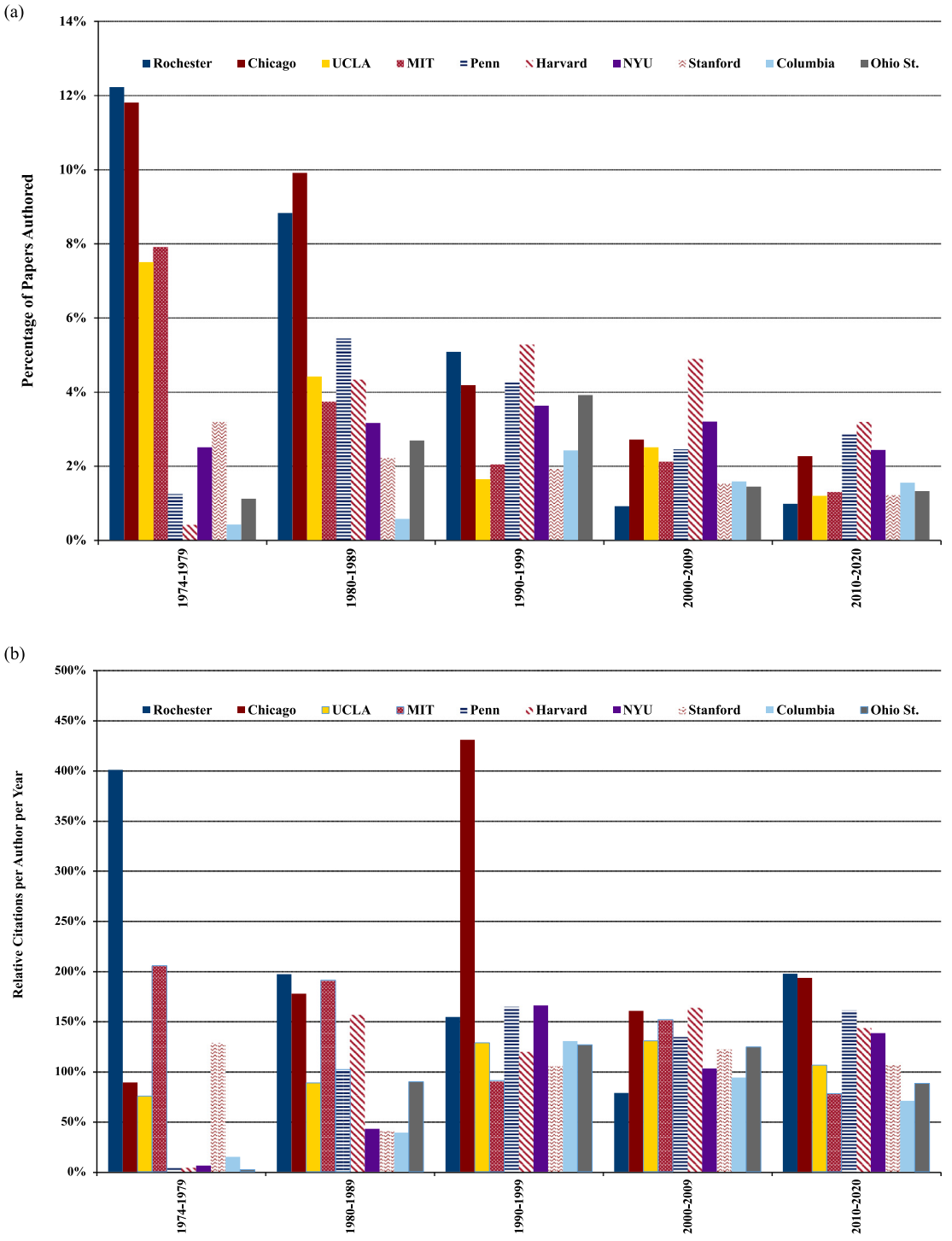

Fig. 10. (a) Percentage of *JFE* papers authored at ten institutions, weighted by coauthorship, 1974 through 2020. (b) Total average citations per year per coauthor at ten institutions relative to average for all *JFE* papers, 1974 through 2020.

excluding Petersen (2009) (and that paper now has one more citation).

Fig. 11b shows the number of papers for the same four journals from 1977 through 2019. Since 1995, the size of the *JFE* has more than tripled. The size of the *RFS* has also almost tripled since 2006. The size of the *JFQA* has more than doubled since 2008. In contrast, the number of papers published in the *JF* since 2009 is below its 1974–2019 average. As shown in Fig. 2, the rejection rate for the *JFE* has been stable over time, so the number of published papers has grown as the number of submissions has grown (Fig. 1). The fact that the impact factors in Fig. 11a have

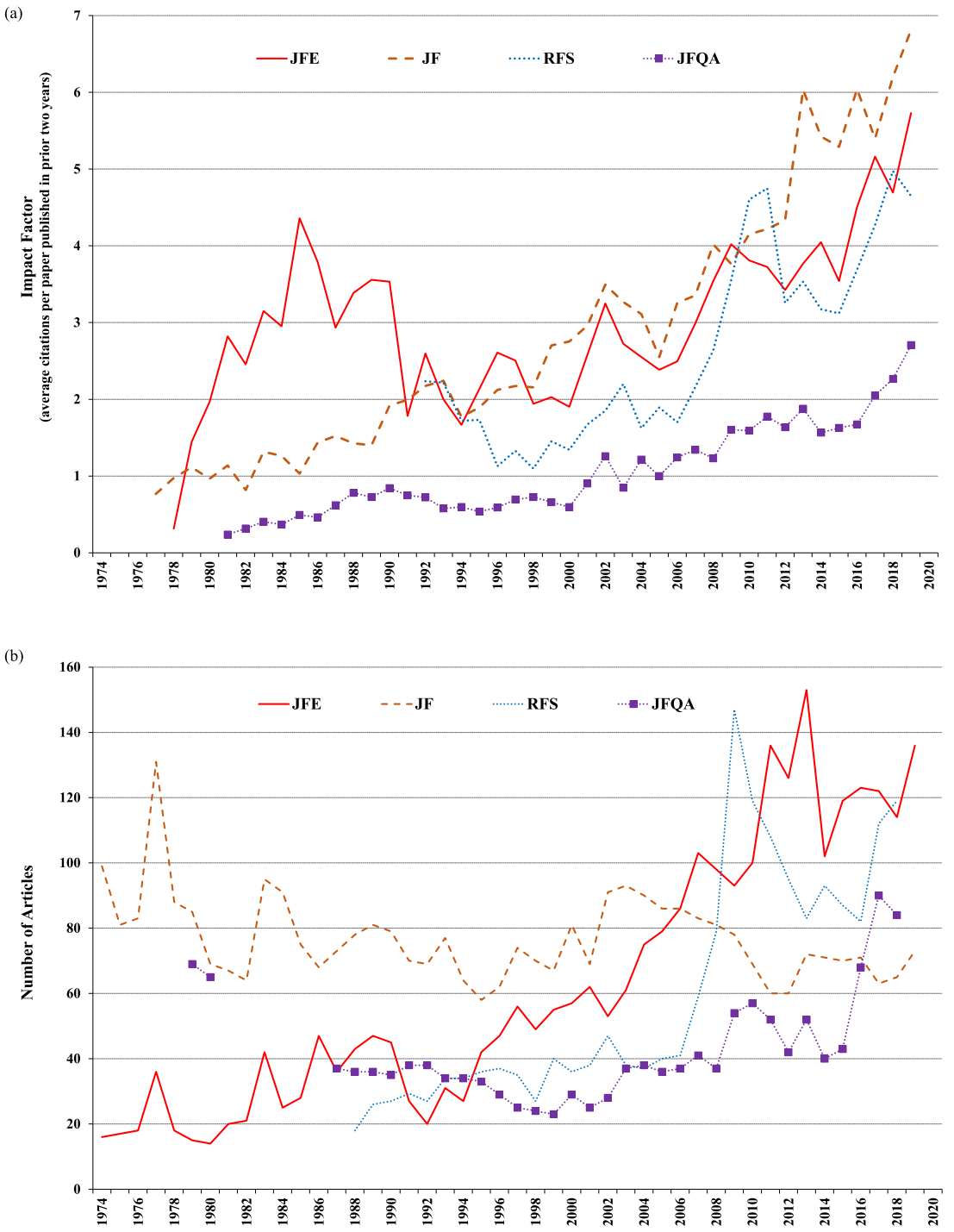

Fig. 11. (a) Impact factors for four finance journals, *JFE, JF, RFS,* and *JFQA,* from the *Journal Citation Reports,* 1977 through 2019. Data for 1998 and 1999 are corrected for errors in *JCR.* (b) Number of articles published in four finance journals, *JFE, JF, RFS,* and *JFQA,* 1974 through 2019.

also trended upward suggests that the growth in the size of the *JFE* has not adversely affected the quality of the papers published. The shrinkage in the size of the *JF* probably contributes to the increasing impact factor for the papers it publishes.

4.1. Which papers are cited?

There are many ways to break down the kinds of papers that are most cited. Fig. 12a shows the percentage of citations in five decades spanning 1974–2020 for papers

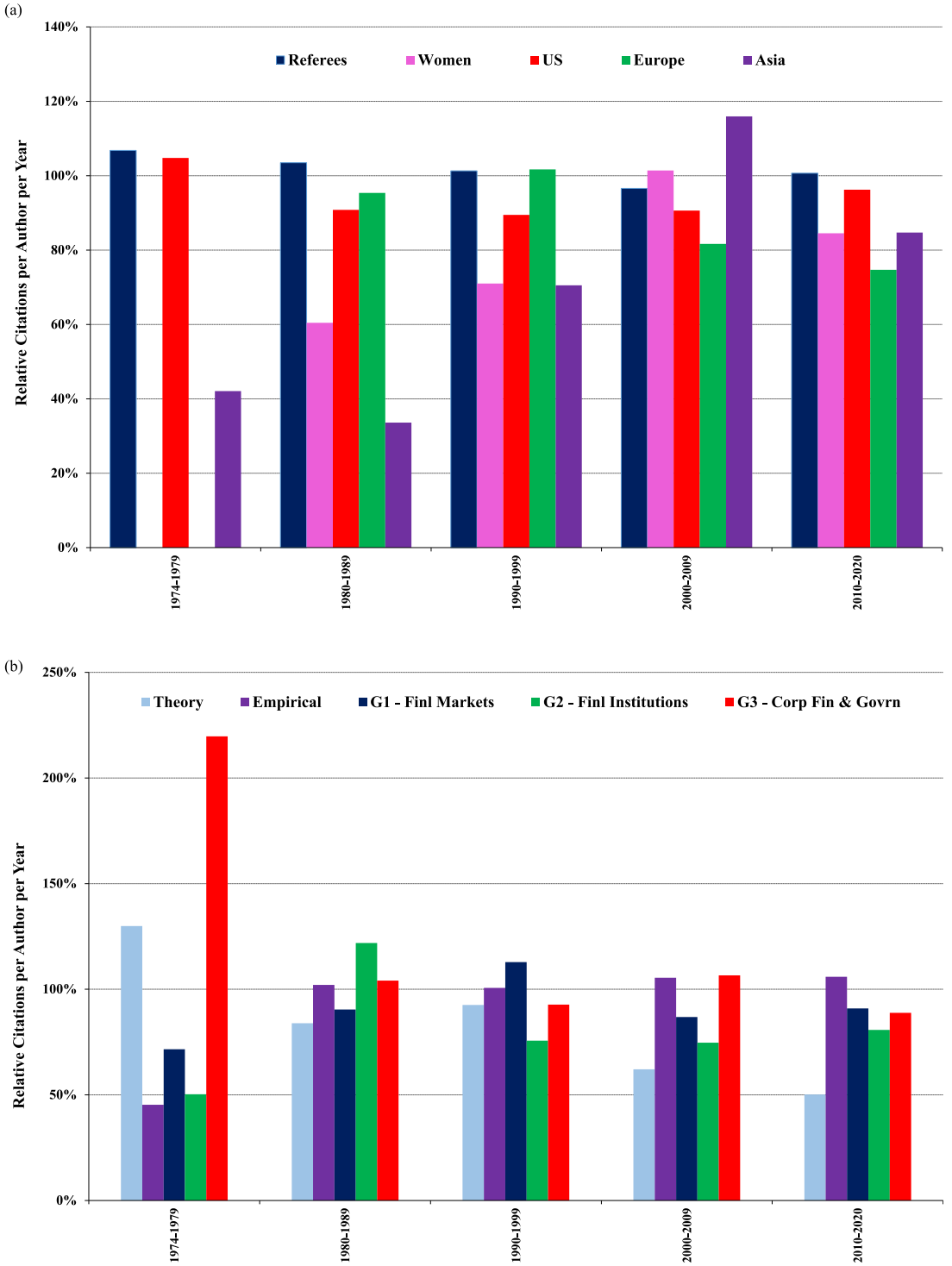

Fig. 12. (a) Number of citations per author per year for authors who are also referees for the *JFE*, who are women, and who work in the US, in Europe, or in Asia, relative to the average number of citations per author per year. Citations from the *Social Science Citation Index*, 1974 through 2020. (b) Number of citations per author per year for papers that are primarily theoretical, primarily empirical, in the financial markets area (G1), the financial institutions area (G2), and the corporate finance (G3) area, relative to the average number of citations per author per year. Citations from the *Social Science Citation Index*, 1974 through 2020.

written by authors categorized by whether or not they are also referees for the *JFE* as well as by gender and region. In most periods, papers written by authors who are also referees are cited more than average. For the other categories, there is no particular pattern in citations relative to an average paper.

Fig. 12b shows the relative citations to theory and empirical papers as well as to papers that cover topics in financial markets (G1), financial institutions (G2), or corporate finance (G3) for the decades spanning 1974 through 2020. The strong influence of Jensen and Meckling (1976) causes corporate finance papers and theory papers to have higher-than-average citations in the first period. After that, the most striking tendency is that citations to theory papers have declined, and citations to empirical papers have increased.

Table 7 shows the 100 papers that have received the most citations per year since publication, led by Jensen and Meckling (1976) with over 292 citations per year on average. It is clear that the mix of papers is quite diversified, spanning time, topics, and methods. The complete list of all papers and their citations is in the internet appendix, Table 7A. Table 1A in the internet appendix provides a detailed description of the process used to extract citation information from the *SSCI*.

Table 8 shows the list of papers that were selected as the "best" papers published in the *JFE* in each year from 1997 through 2019. There are two prizes (first place and second place) in each of two categories: the Fama/DFA capital markets prize and the Jensen corporate finance prize. In the early years, all personal subscribers were allowed to vote. As it became more difficult to monitor the list of subscribers, the eligible voters were limited to people who either had published a paper in the *JFE* in the past year or had refereed three or more papers in the past year. Table 8 also includes information about the order in which each winning paper appears in its issue of the *JFE,* which reflects the editor's forecast of the "importance" of the paper, and the average number of citations per year that the paper has received since its publication, which reflects subsequent authors' perceptions of the importance of the paper.

4.2. Relations between "paper quality" and citations

Table 9 contains estimates of regression models that analyze the relation between citations and various factors that arguably reflect the "quality" of *JFE* papers from 1997 through 2020. The dependent variable is the log of the average number of citations received per year (from the *SSCI*) since the paper was published, plus 1. This transformation reduces the substantial positive skewness that occurs in citation data. The first column of Table 9 shows that winners of the Fama/DFA and Jensen best papers prizes receive higher-than-average citations, with t-statistics between 3.50 and 6.94. Expressed as percent changes, the average citations for prize-winning papers are between 19 and 54% larger. Coupe (2013) similarly shows for 26 economics and finance journals that prize-winning papers accrue a larger-than-average number of citations.

Schwert (1993) notes that *JFE* editors typically order papers in each issue based on predicted impact. (Conversations with former editors of the *JF* and the *RFS* confirm that they followed a similar policy.) The second column of Table 9 shows that papers positioned first, second, or third in each issue receive higher-than-average citations, with t-statistics between 3.22 and 5.73. The marginal effect of winning a prize, given the ordering of the papers, remains positive and reliably different from zero.

The role of the ordering of papers in explaining differences in citations has been studied many times in the economics and finance literature, including Schwert (1993), Smart and Waldfogel (1996), Coupe et al. (2010) and Brogaard et al. (2014). There are two obvious competing hypotheses that can explain higher citation rates. In addition to the editor identification of quality, it is also possible that readers and subsequent authors pay more attention to articles at the front of an issue. Of course, the ordering effect could change as electronic publishing causes readers to depend less on the structure of "issues."

Coupe et al. (2010) study citations to papers in the *European Economic Review* between 1975 and 1977 because this journal used two different methods to order papers in each issue. The first method was the usual editor's choice model, and the second was to order papers by the first author's surname. Coupe et al. describe their analysis as a "natural experiment" on the premise that the surname of the first author should not be correlated with the quality of the paper. On the basis of their estimates for the 303 papers that were ordered alphabetically versus the 760 papers that were ordered by the editors, they conclude that two-thirds of the "first paper effect" is unrelated to a forecast of quality. Of course, alert readers presumably could have detected which model was being used by inspection of the alphabetical ordering of papers in the issue. A better experiment would have been to select the order of the papers randomly and not inform readers about which method was used for ordering.[7]

The *JFE* had one small "natural experiment" in 1999. The publisher accidentally used a random order for the December 1999 issue (volume 54, issue 3). The editor had requested that Stambaugh (1999) predictive regressions paper be the lead article, since that paper had been solicited by the editor. In fact, it appeared as the fourth paper out of five in the issue (its fourth order in Table 8 is highlighted with an asterisk). Stambaugh's paper won the Fama/DFA second-place prize and through 2020 it has received more than twice as many citations as any other paper in that issue. This is essentially a clinical study of the role of ordering in citations because of the small sample size, but it truly was a natural experiment.

Finally, the institutional affiliation of the authors of the paper can be a signal of the quality of the paper. Many papers have found evidence that authors at high-ranked institutions tend to receive more citations for their papers, and there is evidence of this in Tables 1, 5, and 6. To control for this phenomenon, column 3 in Table 9 shows that papers whose authors are affiliated with the *JFE* editorial

[7] Feenberg, Ganguli, Gaule, and Gruber (2017) show that National Bureau of Economic Research (NBER) working papers listed early in the ordering of its weekly email list were downloaded more frequently, so NBER adopted a policy of random ordering in 2015.

Table 7
'The 100 most cited papers published in the JFE
'Authors, title, volume, publication year, total citations since the paper was published through 2020, and the average number of citations per year in the Social Science Citation Index.

Rank	Title	Vol	Year	Authors	Cites/Yr	Total Cites
1	Theory of the firm: Managerial behavior, agency costs and ownership structure	3	1976	M.C. Jensen, W.H. Meckling	292.5	13,162
2	Common risk factors in the returns on stocks and bonds	33	1993	E.F. Fama, K.R. French	212.4	5,948
3	A five-factor asset pricing model	116	2015	E.F. Fama, K.R. French	118.7	831
4	Corporate financing and investment decisions when firms have information that investors do not have	13	1984	S.C. Myers, S. Majluf	103.5	3,828
5	The law and economics of self-dealing	88	2008	S. Djankov, R. LaPorta, F. Lopez-de-Silanes, A. Shleifer	76.6	996
6	Industry costs of equity	43	1997	E.F. Fama, K.R. French	72.9	1,750
7	How do family ownership, control, and management affect firm value?	80	2006	B. Villalonga, R. Amit	68.3	1,024
8	Determinants of corporate borrowing	5	1977	S.C. Myers	64.1	2,822
9	The separation of ownership and control in East Asian Corporations.	58	2000	S. Claessens, S. Djankov, L.H.P. Lang	63.6	1,335
10	Earnings management and investor protection: An international comparison	69	2003	C. Leuz, D. Nanda, P.D. Wysocki	62.9	1,133
11	Investor protection and corporate governance	58	2000	R. LaPorta, F. Lopez-de-Silanes, A. Shleifer, R.W. Vishny	62.4	1,310
12	Women in the boardroom and their impact on governance and performance	94	2009	R.B. Adams, D. Ferreira	62.3	747
13	Bank governance, regulation and risk taking	93	2009	L. Laeven, R. Levine	60.6	727
14	Law, finance and economic growth in China	77	2005	F.H. Allen, J. Qian, M. Qian	60.3	964
15	Bank lending during the financial crisis of 2008	97	2010	V.P. Ivashina, D. Scharfstein	55.6	612
16	The theory and practice of corporate finance: Evidence from the field	60	2001	J.R. Graham, C.R. Harvey	55.4	1,107
17	Endogeneity and the dynamics of internal corporate governance	105	2012	M.B. Wintoki, J.S. Linck, J.M. Netter	54.7	492
18	Politically connected CEOs, corporate governance, and post-IPO performance of China's newly partially privatized firms	84	2007	J.P.H. Fan, T.J. Wong, Tianyu Zhang	52.8	739
19	Management ownership and market valuation: An empirical analysis	20	1988	R. Morck, A. Shleifer, R.W. Vishny	52.5	1,733
20	Higher market valuation of companies with a small board of directors	40	1996	D. Yermack	52.4	1,309
21	Private credit in 129 countries	84	2007	S. Djankov, C. McLiesh, A. Shleifer	52.3	732
22	Econometric measures of connectedness and systemic risk in the finance and insurance sectors	104	2012	M. Billio, M. Getmansky, A.W. Lo, L. Pelizzon	52.2	470
23	The ultimate ownership of Western European corporations	65	2002	M. Faccio, L.H.P. Lang	50.9	967
24	Using daily stock returns: The case of event studies	14	1985	S.J. Brown, J.B. Warner	49.3	1,774
25	A model of investor sentiment	49	1998	N.C. Barberis, A. Shleifer, R.W. Vishny	47.2	1,086
26	Who makes acquisitions? CEO overconfidence and the market's reaction	89	2008	U.M. Malmendier, G. Tate	46.7	607
27	Market efficiency, long-term returns, and behavioral finance	49	1998	E.F. Fama	46.3	1,064
28	Financial literacy and stock market participation	101	2011	M. van Rooij, A. Lusardi, R. Alessie	45.4	454
29	Corporate governance, chief executive officer compensation, and firm performance	51	1999	J.E. Core, R.W. Holthausen, D.F. Larcker	45.3	997
30	The great reversals: The politics of financial development in the 20th century	69	2003	R.G. Rajan, L. Zingales	44.4	800
31	Bid, ask and transaction prices in a specialist market with heterogeneously informed traders	14	1985	L.R. Glosten, P.R. Milgrom	44.3	1,593
32	Boards: Does one size fit all?	87	2008	J.L. Coles, N.D. Daniel, L. Naveen	43.4	607
33	Size, value, and momentum in international stock returns	105	2012	E.F. Fama, K.R. French	42.9	386
34	Managerial incentives and risk-taking	79	2006	J.L. Coles, N.D. Daniel, L. Naveen	42.8	642
35	The real effects of financial constraints: Evidence from a financial crisis	97	2010	M. Campello, J.R. Graham, C.R. Harvey	41.7	459
36	The short of it: Investor sentiment and anomalies	104	2012	R.F. Stambaugh, Jianfeng Yu, Y. Yuan	41.7	375
37	Securitized banking and the run on repo	104	2012	G. Gorton, A. Metrick	41.6	416
38	Betting against beta	111	2014	A. Frazzini, L.H. Pedersen	41.0	328
39	Asset pricing with liquidity risk	77	2005	V.V. Acharya, L.H. Pedersen	40.8	653
40	Simple formulas for standard errors that cluster by both firm and time	99	2011	S.B. Thompson	40.5	405
41	The other side of value: The gross profitability premium	108	2013	R. Novy-Marx	38.5	308

(*continued on next page*)

Table 7 (*continued*)

Rank	Title	Vol	Year	Authors	Cites/Yr	Total Cites
42	Political uncertainty and risk premia	110	2013	L. Pastor, P. Veronesi	38.4	307
43	Firm size and the gains from acquisitions	73	2004	S.B. Moeller, F.P. Schlingemann, R.M. Stulz	36.1	614
44	The information content of stock markets: Why do emerging markets have synchronous stock price movements?	58	2000	R. Morck, B. Yeung, Wayne Yu	35.8	751
45	The determinants of board structure	87	2008	J.S. Linck, J.M. Netter, T. Yang	35.5	461
46	Outside directors and CEO turnover	20	1988	M.S. Weisbach	35.3	1,165
47	The investment opportunity set and corporate financing, dividend, and compensation policies	32	1992	C.W. Smith, R.L. Watts	34.9	1,011
48	The market for corporate control: The scientific evidence	11	1983	M.C. Jensen, R.S. Ruback	34.7	1,318
49	Business conditions and expected returns on stocks and bonds	25	1989	E.F. Fama, K.R. French	34.1	1,092
50	Asset pricing and the bid-ask spread	17	1986	Y. Amihud, H. Mendelson	33.6	1,177
51	An equilibrium characterization of the term structure	5	1977	O.A. Vasicek	33.5	1,475
52	Finance and the sources of growth	58	2000	T. Beck, R. Levine, N. Loayza	33.3	700
53	Option pricing: A simplified approach	7	1979	J.C. Cox, S.A. Ross, M. Rubinstein	33.3	1,399
54	Expected stock returns and volatility	19	1987	K.R. French, G.W. Schwert, R.F. Stambaugh	33.2	1,129
55	R^2 around the world: New theory and new tests	79	2006	Li Jin, S.C. Myers	33.2	498
56	CEO incentives and earnings management	80	2006	D. Bergstresser, T. Philippon	33.0	495
57	Option pricing when underlying stock returns are discontinuous	3	1976	R.C. Merton	33.0	1,484
58	The determinants and implications of corporate cash holdings	52	1999	T. Opler, L. Pinkowitz, R.M. Stulz, R. Williamson	32.9	724
59	The distribution of stock return volatility	61	2001	T.G. Andersen, T. Bollerslev, F.X. Diebold, H. Ebens	32.7	654
60	Diversification's effect on firm value	37	1995	P.G. Berger, E. Ofek	32.3	841
61	Corporate governance and the value of cash holdings	83	2007	A. Dittmar, J. Mahrt-Smith	32.0	448
62	Disappearing dividends: Changing firm characteristics or lower propensity to pay?	60	2001	E.F. Fama, K.R. French	31.7	633
63	Monitoring: Which institutions matter?	86	2007	X. Chen, J. Harford, K. Li	31.4	439
64	Additional evidence on equity ownership and corporate value	27	1990	J.J. McConnell, H. Servaes	31.1	965
65	The colors of investors' money: Which firms attract institutional investors from around the world?	88	2008	M.A. Ferreira, P. Matos	30.8	401
66	Detecting long-run abnormal stock returns: The empirical power and specification of test statistics	43	1997	B.M. Barber, J.D. Lyon	30.5	731
67	Opaque financial reports, R^2, and the distribution of crash risks	94	2009	A.P. Hutton, A.J. Marcus, H. Tehranian	30.3	364
68	Does the stock market fully value intangibles? Employee satisfaction and equity prices	101	2011	A. Edmans	30.3	303
69	Momentum crashes	122	2016	K.D. Daniel, T.J. Moskowitz	30.2	151
70	Payout policy in the 21st century	77	2005	A. Brav, J.R. Graham, R. Michaely, C.R. Harvey	30.0	480
71	The price of sin: The effects of social norms on markets	93	2009	H. Hong, M. Kacperczyk	29.9	359
72	Political connections and preferential access to finance: The role of campaign contributions	88	2008	S. Claessens, E. Feijen, L. Laeven	29.8	388
73	Tunneling through inter-corporate loans: The China experience	98	2010	Guohua Jiang, C.M.C. Lee, H. Yue	29.8	328
74	Time series momentum	104	2012	T.J. Moskowitz, Y.H. Ooi, L.H. Pedersen	29.7	267
75	The relationship between return and market value of common stocks	9	1981	R.W. Banz	29.2	1,168
76	Do liquidity measures measure liquidity?	92	2009	R.Y. Goyenko, C.W. Holden, C.A. Trzcinka	29.1	349
77	Does financial liberalization spur growth?	77	2005	G. Bekaert, C.R. Harvey, C.T. Lundblad	29.1	465
78	High idiosyncratic volatility and low returns: International and further U.S. evidence	91	2009	A. Ang, R.J. Hodrick, Y. Xing, X. Zhang	29.0	348
79	Corporate social responsibility and stakeholder value maximization: Evidence from mergers	110	2013	X. Deng, J.K. Kang, B.S. Low	29.0	232
80	The jump-risk premia implicit in options: Evidence from an integrated time-series study	63	2002	J. Pan	28.5	542
81	International tests of a five-factor asset pricing model	123	2017	E.F. Fama, K.R. French	28.5	114
82	Does function follow organizational form? Evidence from the lending practices of large and small banks	76	2005	A.N. Berger, N.H. Miller, M.A. Petersen, R.G. Rajan, J.C. Stein	28.4	454
83	The determinants of corporate board size and composition: An empirical analysis	85	2007	A.L. Boone, L.C. Field, J.M. Karpoff, C.G. Raheja	28.4	397

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Table 7 (*continued*)

Rank	Title	Vol	Year	Authors	Cites/Yr	Total Cites
84	Partial adjustment toward target capital structures	79	2006	M.J. Flannery, K.P. Rangan	28.3	424
85	Does governance travel around the world? Evidence from institutional investors	100	2011	R.K. Aggarwal, I. Erel, M.A. Ferreira, P.P. Matos	28.2	282
85	Corporate tax avoidance and stock price crash risk: Firm-level analysis	100	2011	J. Kim, Yinghua Li, Liandong Zhang	28.2	282
87	Understanding the determinants of managerial ownership and the link between ownership and performance	53	1999	C.P. Himmelberg, R.G. Hubbard, D. Palia	28.2	620
88	Stock market driven acquisitions	70	2003	A. Shleifer, R.W. Vishny	27.8	501
89	Why are foreign firms listed in the U.S. worth more?	71	2004	C. Doidge, G.A. Karolyi, R.M. Stulz	27.7	471
90	Costly external finance, corporate investment, and the subprime mortgage credit crisis	97	2010	R. Duchin, O. Ozbas, B.A. Sensoy	27.3	300
91	Maxing out: Stocks as lotteries and the cross-section of expected returns	99	2011	T.G. Bali, N. Cakici, R.F. Whitelaw	27.2	272
92	The dark side of analyst coverage: The case of innovation	109	2013	J. He, X. Tian	27.0	216
93	Corporate governance and firm cash holdings in the U.S.	87	2008	J. Harford, S.A. Mansi, W.F. Maxwell	26.7	347
94	How does capital affect bank performance during financial crises?	109	2013	A.N. Berger, C.H.S. Bouwman	26.4	290
95	Global, local, and contagious investor sentiment	104	2012	M. Baker, J. Wurgler, Y. Yuan	26.3	237
96	Are family firms more tax aggressive than non-family firms?	95	2010	Shuping Chen, X. Chen, Q. Cheng, T. Shevlin	26.0	286
97	Gender and corporate finance: Are male executives overconfident relative to female executives?	108	2013	Jiekun Huang, D.J. Kisgen	26.0	208
98	Dividend yields and expected stock returns	22	1988	E.F. Fama, K.R. French	25.9	854
99	Bank CEO incentives and the credit crisis	99	2011	R. Fahlenbrach, R.M. Stulz	25.7	257
100	Bank activity and funding strategies: The impact on risk and returns	98	2010	A. Demirgüç-Kunt, H. Huizinga	25.6	282

board, Chicago, Harvard, Pennsylvania, MIT, NYU, or UCLA receive higher-than-average citations, with t-statistics between 2.43 and 4.00. Expressed as percent changes, the average citations for affiliated papers are between 5% and 10% larger. The marginal effect of prize winning and article ordering remain positive and are generally reliably different from zero.

5. Secular changes at the *JFE* and other finance journals

Fig. 13a shows the number of economics, finance, and accounting journals in operation each year from 1886 through 2020. I identified the 227 economics journals with impact factors greater than 1.0 in the 2019 *JCR* and found their initial year of publication. I selected all of the finance journals from the business finance list in *JCR*, omitting journals that are primarily in accounting, tax, real estate, or monetary economics. The accounting journals were also selected from the business finance list. It is clear from the graph that the size of the academic literature in all three areas has grown substantially, especially since 1970.

Fig. 13b shows the growth in finance and accounting journals relative to economics journals from 1886 to 2020. This graph clearly shows that beginning in 1974, the number of finance journals grew much faster than the number of economics journals until the late 1990s, and they have grown at the same rate since that time. The growth in accounting journals relative to economics journals occurred between 1963 and 1982, and they have since grown at the same rate.

Together with the evidence from Figs. 1 and 11b, it is clear that the demand for publications (by readers of journals) or publication outlets (by authors) in finance has grown a lot in the past five decades. This has put considerable pressure on the pool of people who serve as referees. Fig. 14a shows the number of papers that were reviewed by the *JFE* between 1994 and 2020, along with the number of people serving as referees (on the right axis). Both of these measures grew by a factor of more than five over this period. This growth would have been more pronounced if the *JFE* had not desk rejected about 16% of submissions from 2006 through 2020. The extraordinary growth in the demand for refereeing services has been the largest strain on the operations of the *JFE* (and presumably other finance journals, since we all draw on the same pool of potential referees). In response, the *JFE* has increased the payments to referees for on-time reports at a faster rate than the growth in submission fees.

Not only has the quantity of papers to be reviewed risen, but the size and complexity of a typical paper has also increased. Fig. 14b shows the average length of published papers from 1974 through 2020 by decade (on the right axis), along with the average number of *JEL* categories identified by authors and the average number of coauthors per paper (on the left axis). All three of these measures have increased substantially: length by 46%, number of coauthors by 68%, and *JEL* categories by 89%. Thus, there is strong evidence that the complexity of published papers has also increased over time, which is likely to increase the difficulty of refereeing.

An interesting question, which is beyond the scope of this paper, is why it is so hard to create new "top-tier" journals. Fig. 13a shows that there have been 49 new finance journals started since 1974. Yet the impact factors in Fig. 11a show that only the *JFE* (started in 1974) and the *RFS* (started in 1988) have become established, along with the *JF*, as top journals in finance.

Another interesting question that is beyond the scope of this paper is what the increased competition for scarce spots in "top-tier" journals means for hiring and

Table 8
JFE prize-winning papers, 1997 through 2019

Papers that won a Fama/DFA prize in capital markets or a Jensen prize in corporate finance, 1997 through 2019. Winning papers selected based on votes from subscribers or authors and referees (voting rules have changed over time). Authors, title, volume, publication year, the order of the paper in the issue, total citations since the paper was published through 2020, and the average number of citations per year in the *Social Science Citation Index*.

Prize	Title	Vol	Order in Issue	Year	Authors	Cites/Yr	Total Cites
1997 Fama/DFA 1st	Detecting long-run abnormal stock returns: The empirical power and specification of test statistics	43	2	1997	B.M. Barber, J.D. Lyon	30.5	731
1997 Fama/DFA 2nd	Analyzing investments whose histories differ in length	45	1	1997	R.F. Stambaugh	2.6	62
1998 Fama/DFA 1st	Market efficiency, long-term returns, and behavioral finance	49	1	1998	E.F. Fama	46.3	1,064
1998 Fama/DFA 2nd	An empirical analysis of NYSE specialist trading	48	3	1998	A. Madhavan, G. Sofianos	3.8	87
1998 Fama/DFA 2nd	Alternative factor specifications, security characteristics, and the cross-section of expected stock returns	49	3	1998	M.J. Brennan, T. Chordia, A. Subrahmanyam	16.1	371
1999 Fama/DFA 1st	Bank entry, competition, and the market for corporate securities underwriting	54	2	1999	A. Gande, M. Puri, A. Saunders	4.2	93
1999 Fama/DFA 2nd	Predictive regressions	54	4*	1999	R.F. Stambaugh	23.8	524
2000 Fama/DFA 1st	Commonality in liquidity	56	1	2000	T. Chordia, R. Roll, A. Subrahmanyam	19.2	403
2000 Fama/DFA 2nd	Herding among security analysts	58	2	2000	I. Welch	9.1	191
2001 Fama/DFA 1st	Following the leader: A study of individual analysts earnings forecasts	61	3	2001	R.A. Cooper, T.E. Day, C.M. Lewis	5.2	103
2001 Fama/DFA 2nd	Forecasting crashes: Trading volume, past returns and conditional skewness in stock prices	61	2	2001	J. Chen, H. Hong, J.C. Stein	16.4	328
2002 Fama/DFA 1st	Breadth of ownership and stock returns	66	1	2002	J. Chen, H. Hong, J.C. Stein	16.5	314
2002 Fama/DFA 2nd	Mutual fund performance and seemingly unrelated assets	63	1	2002	L. Pastor, R.F. Stambaugh	5.7	109
2003 Fama/DFA 1st	The great reversals: The politics of financial development in the 20th century	69	1	2003	R.G. Rajan, L. Zingales	44.4	800
2003 Fama/DFA 2nd	Voting with their feet: Institutional ownership changes around forced CEO turnover	68	1	2003	R.F. Parrino, R.W. Sias, L.T. Starks	14.9	269
2003 Fama/DFA 2nd	A multivariate model of strategic asset allocation	67	2	2003	J.Y. Campbell, Y.L. Chan, L.M. Viceira	8.2	147
2004 Fama/DFA 1st	Why are foreign firms listed in the U.S. worth more?	71	1	2004	C. Doidge, G.A. Karolyi, R.M. Stulz	27.7	471
2004 Fama/DFA 2nd	New lists: Fundamentals and survival rates	73	2	2004	E.F. Fama, K.R. French	10.4	177
2005 Fama/DFA 1st	Asset pricing with liquidity risk	77	5	2005	V.V. Acharya, L.H. Pedersen	40.8	653
2005 Fama/DFA 2nd	The risk and return of venture capital	75	1	2005	J.H. Cochrane	12.6	202
2006 Fama/DFA 1st	The conditional CAPM does not explain asset-pricing anomalies	82	2	2006	J. Lewellen, S. Nagel	13.9	209
2006 Fama/DFA 2nd	Was there a Nasdaq bubble in the late 1990s?	81	3	2006	L. Pastor, P. Veronesi	6.6	99
2006 Fama/DFA 2nd	The other January effect	82	3	2006	M.J. Cooper, J.J. McConnell, A.V. Ovtcinnikov	1.1	16
2007 Fama/DFA 1st	Laddering in initial public offerings	85	4	2007	Q. Hao	1.8	25
2007 Fama/DFA 2nd	Does industry-wide distress affect defaulted firms? Evidence from creditor recoveries	85	7	2007	V.V. Acharya, S.T. Bharath, A. Srinivasan	14.2	199
2007 Fama/DFA 2nd	Optimism and economic choice	86	3	2007	M. Puri, D.T. Robinson	14.1	198
2008 Fama/DFA 1st	Inter-firm linkages and the wealth effects of financial distress along the supply chain	87	7	2008	M.G. Hertzel, Z. Li, M.S. Officer, K.J. Rodgers	11.0	143
2008 Fama/DFA 2nd	Dumb money: mutual fund flows and the cross-section of stock returns	88	5	2008	A. Frazzini, O.A. Lamont	16.7	217
2008 Fama/DFA 2nd	Venture capital investment cycles: The impact of public markets	87	1	2008	P.A. Gompers, A. Kovner, J. Lerner, D.S. Scharfstein	8.4	109
2009 Fama/DFA 1st	Why is PIN priced?	91	1	2009	J. Duarte, L. Young	12.4	149
2009 Fama/DFA 2nd	Do liquidity measures measure liquidity?	92	1	2009	R.Y. Goyenko, C.W. Holden, C.A. Trzcinka	29.1	349
2010 Fama/DFA 1st	The good news in short interest	96	5	2010	E. Boehmer, Z.R. Huszar, B. Jordan	6.5	71
2010 Fama/DFA 2nd	A skeptical appraisal of asset-pricing tests	96	1	2010	J. Lewellen, S. Nagel, J. Shanken	24.5	294
2011 Fama/DFA 1st	Corporate bond default risk: A 150−year perspective	102	1	2011	K. Giesecke, F.A. Longstaff, S. Schaefer, I.A. Strebulaev	5.4	54

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Table 8 (*continued*)

Prize	Title	Vol	Order in Issue	Year	Authors	Cites/Yr	Total Cites
2011 Fama/DFA 2nd	Do hedge funds trade on private information? Evidence from syndicated lending and short-selling	99	1	2011	N. Massoud, D. Nandy, A. Saunders, K.R. Song	5.0	50
2012 Fama/DFA 1st	Is momentum really momentum?	103	1	2012	R. Novy-Marx	11.1	100
2012 Fama/DFA 2nd	Friends with money	103	9	2012	J.E. Engelberg, P. Gao, C.A. Parsons	12.7	114
2013 Fama/DFA 1st	The other side of value: The gross profitability premium	108	1	2013	R. Novy-Marx	38.5	308
2013 Fama/DFA 2nd	Anomalies and financial distress	108	8	2013	D. Avramov, T. Chordia, G. Jostova, A. Philipov	8.3	66
2013 Fama/DFA 2nd	Legislating stock prices	110	4	2013	L. Cohen, K. Diether, C.J. Malloy	1.0	8
2014 Fama/DFA 1st	Betting against beta	111	1	2014	A. Frazzini, L.H. Pedersen	41.0	328
2014 Fama/DFA 2nd	Limited partner performance and the maturing of the private equity industry	112	2	2014	B.A. Sensoy, Yingdi Wang, M.S. Weisbach	4.4	31
2015 Fama/DFA 1st	Scale and skill in active management	116	2	2015	L. Pastor, R.F. Stambaugh, L.A. Taylor	11.2	67
2015 Fama/DFA 2nd	Juicing the dividend yield: Mutual funds and the demand for dividends	116	1	2015	L.E. Harris, S. Hartzmark, D. Solomon	3.3	20
2016 Fama/DFA 1st	Systemic risk and the macroeconomy: An empirical evaluation	119	1	2016	S. Giglio, B.T. Kelly, S. Pruitt	15.0	75
2016 Fama/DFA 2nd	Momentum crashes	122	1	2016	K.D. Daniel, T.J. Moskowitz	30.2	151
2017 Fama/DFA 1st	Information networks: Evidence from illegal insider trading tips	125	2	2017	K.R. Ahern	7.0	28
2017 Fama/DFA 2nd	Skill and luck in private equity performance	124	5	2017	A.G. Korteweg, M. Sorensen	4.8	19
2018 Fama/DFA 1st	An intertemporal CAPM with stochastic volatility	128	1	2018	J.Y. Campbell, S. Giglio, C. Polk, R. Turley	10.8	43
2018 Fama/DFA 2nd	Carry	127	1	2018	R.S.J. Koijen, T.J. Moskowitz, L.H. Pedersen, E. Vrugt	11.0	33
2019 Fama/DFA 1st	Characteristics are covariances: A unified model of risk and return	134	1	2019	B.T. Kelly, S. Pruitt, Y. Su	7.0	14
2019 Fama/DFA 2nd	Bubbles for Fama	131	2	2019	R. Greenwood, A. Shleifer, Y. You	4.0	8
1997 Jensen 1st	The complexity of compensation contracts	43	3	1997	S.R. Kole	5.3	127
1997 Jensen 2nd	The decline of takeovers and disciplinary managerial turnover	44	2	1997	W.H. Mikkelson, M.M. Partch	4.3	102
1998 Jensen 1st	Risk management, capital budgeting, and capital structure policy for financial institutions: An integrated approach	47	2	1998	K.A. Froot, J.C. Stein	8.1	186
1998 Jensen 2nd	Why firms issued convertible bonds: The matching of financial and real investment options	47	3	1998	D. Mayers	4.7	107
1999 Jensen 1st	The determinants and implications of corporate cash holdings	52	1	1999	T. Opler, L. Pinkowitz, R.M. Stulz, R. Williamson	32.9	724
1999 Jensen 2nd	Deregulation and the adaptation of governance structure: The case of the U.S. airline industry	52	3	1999	S.R. Kole, K.M. Lehn	3.4	74
1999 Jensen 2nd	Measuring investment distortions arising from stockholder-bondholder conflicts	53	1	1999	R.F. Parrino, M.S. Weisbach	4.5	99
2000 Jensen 1st	On the optimality of resetting executive stock options	57	3	2000	V.V. Acharya, K. John, R.K. Sundaram	2.9	60
2000 Jensen 2nd	Investor protection and corporate governance	58	1	2000	R. LaPorta, F. Lopez-de-Silanes, A. Shleifer, R.W. Vishny	62.4	1,310
2001 Jensen 1st	The theory and practice of corporate finance: Evidence from the field	60	2	2001	J.R. Graham, C.R. Harvey	55.4	1,107
2001 Jensen 2nd	Disappearing dividends: Changing firm characteristics or lower propensity to pay?	60	1	2001	E.F. Fama, K.R. French	31.7	633
2002 Jensen 1st	Does diversification destroy value? Evidence from industry shocks	63	2	2002	O.A. Lamont, C. Polk	4.6	88
2002 Jensen 2nd	Investor protection and equity markets	66	1	2002	A. Shleifer, D. Wolfenzon	14.7	280
2003 Jensen 1st	Stock market driven acquisitions	70	1	2003	A. Shleifer, R.W. Vishny	27.8	501
2003 Jensen 2nd	Testing the pecking order theory of capital structure	67	2	2003	M.Z. Frank, V.K. Goyal	21.4	385
2004 Jensen 1st	Are dividends disappearing? Dividend concentration and the consolidation of earnings	72	1	2004	H. DeAngelo, L. DeAngelo, D.J. Skinner	8.7	148
2004 Jensen 2nd	Is the IPO pricing process efficient?	71	1	2004	M. Lowry, G.W. Schwert	5.6	95
2005 Jensen 1st	Payout policy in the 21st century	77	1	2005	A. Brav, J.R. Graham, R. Michaely, C.R. Harvey	30.0	480
2005 Jensen 2nd	The effect of external finance on the equilibrium allocation of capital	75	5	2005	H. Almeida, D. Wolfenzon	1.6	25
2006 Jensen 1st	Tax shelters and corporate debt policy	81	4	2006	J.R. Graham, A.L. Tucker	9.7	145

(*continued on next page*)

Table 8 (*continued*)

Prize	Title	Vol	Order in Issue	Year	Authors	Cites/Yr	Total Cites
2006 Jensen 2nd	Profitability, investment and average returns	82	1	2006	E.F. Fama, K.R. French	13.8	207
2006 Jensen 2nd	Are perks purely managerial excess?	79	1	2006	R.G. Rajan, J. Wulf	5.6	84
2007 Jensen 1st	Does backdating explain the stock price pattern around executive stock option grants?	83	1	2007	R.A. Heron, E. Lie	9.2	129
2007 Jensen 2nd	Financial fraud, director reputation, and shareholder wealth	86	2	2007	E.M. Fich, A. Shivdasani	16.1	226
2007 Jensen 2nd	Theft and taxes	84	1	2007	M.A. Desai, A. Dyck, L. Zingales	11.4	160
2008 Jensen 1st	Why do private acquirers pay so little compared to public acquirers?	89	1	2008	L.L. Bargeron, F.P. Schlingemann, R.M. Stulz, C.J. Zutter	7.5	97
2008 Jensen 2nd	Managerial incentives, capital reallocation, and the business cycle	87	8	2008	A.L. Eisfeldt, A.A. Rampini	3.7	48
2009 Jensen 1st	Share issuance and cross-sectional returns: International evidence	94	1	2009	R.D. McLean, J. Pontiff, A. Watanabe	5.6	67
2009 Jensen 2nd	Are elite universities losing their competitive edge?	93	1	2009	E.H. Kim, A. Morse, L. Zingales	4.4	53
2010 Jensen 1st	The marketing of seasoned equity offerings	97	3	2010	X. Gao, J.R. Ritter	9.1	100
2010 Jensen 2nd	Seasoned equity offerings, market timing, and the corporate lifecycle	95	1	2010	H. DeAngelo, L. DeAngelo, R.M. Stulz	9.8	118
2011 Jensen 1st	Ownership structure and the cost of corporate borrowing	100	1	2011	Chen Lin, Yue Ma, P.H. Malatesta, Y. Xuan	16.5	165
2011 Jensen 2nd	The causes and consequences of venture capital stage financing	101	7	2011	X. Tian	8.1	81
2012 Jensen 1st	Securitized banking and the run on repo	104	2	2012	G. Gorton, A. Metrick	41.6	416
2012 Jensen 2nd	Cash flows and leverage adjustments	103	11	2012	M.W. Faulkender, M.J. Flannery, K.W. Hankins, J.M. Smith	10.6	106
2012 Jensen 2nd	The effect of reference point prices on mergers and acquisitions	106	3	2012	M. Baker, X. Pan, J. Wurgler	10.6	95
2013 Jensen 1st	Managerial attitudes and corporate actions	109	6	2013	J.R. Graham, C.R. Harvey, M. Puri	25.3	202
2013 Jensen 1st	Do personal taxes affect capital structure: Evidence from the 2003 tax cut	109	13	2013	L. Lin, M.J. Flannery	0.9	7
2014 Jensen 1st	Firm boundaries matter: Evidence from conglomerates and R&D activity	111	6	2014	A. Seru	14.3	129
2014 Jensen 2nd	Refinancing, profitability and capital structure	114	2	2014	A. Danis, D.A. Rettl, T.M. Whited	2.9	20
2015 Jensen 1st	A century of capital structure: The leveraging of corporate America	118	7	2015	J.R. Graham, M.T. Leary, M.R. Roberts	12.0	72
2015 Jensen 2nd	Lost in translation? The effect of cultural values on mergers around the world	117	10	2015	K.R. Ahern, D. Daminelli, C. Fracassi	22.5	180
2016 Jensen 1st	Target revaluation after failed takeover attempts - Cash versus stock	119	5	2016	U.M. Malmendier, M. Opp, F. Saidi	4.6	23
2016 Jensen 2nd	The ownership and trading of debt claims in Chapter 11 restructurings	119	4	2016	V.P. Ivashina, B. Iverson, D.C. Smith	4.4	22
2017 Jensen 1st	The U.S. listing gap	123	2	2017	C. Doidge, G.A. Karolyi, R.M. Stulz	9.3	37
2017 Jensen 2nd	Growth through rigidity: An explanation for the rise in CEO pay	123	1	2017	K. Shue, R.R. Townsend	3.0	12
2017 Jensen 2nd	Are corporate inversions good for shareholders?	126	1	2017	A. Babkin, B. Glover, O. Levine	2.0	6
2018 Jensen 1st	How does hedge fund activism reshape corporate innovation?	130	2	2018	A. Brav, W. Jiang, S. Ma, X. Tian	10.7	32
2018 Jensen 2nd	Fintech, regulatory arbitrage, and the rise of shadow banks	130	1	2018	G. Buchak, G. Matvos, T. Piskorski, A. Seru	8.0	24
2019 Jensen 1st	What's in a (school) name? Racial discrimination in higher education bond markets	134	4	2019	C. Dougal, P. Gao, W.J. Mayew, C.A. Parsons	2.0	4
2019 Jensen 2nd	Are lemons sold first? Dynamic signaling in the mortgage market	132	1	2019	M. Adelino, K. Gerardi, B. Hartman-Glaser	1.0	2

* Stambaugh's 1999 paper was supposed to be the first article in the issue, but was mistakenly printed as the fourth paper out of five in the issue.

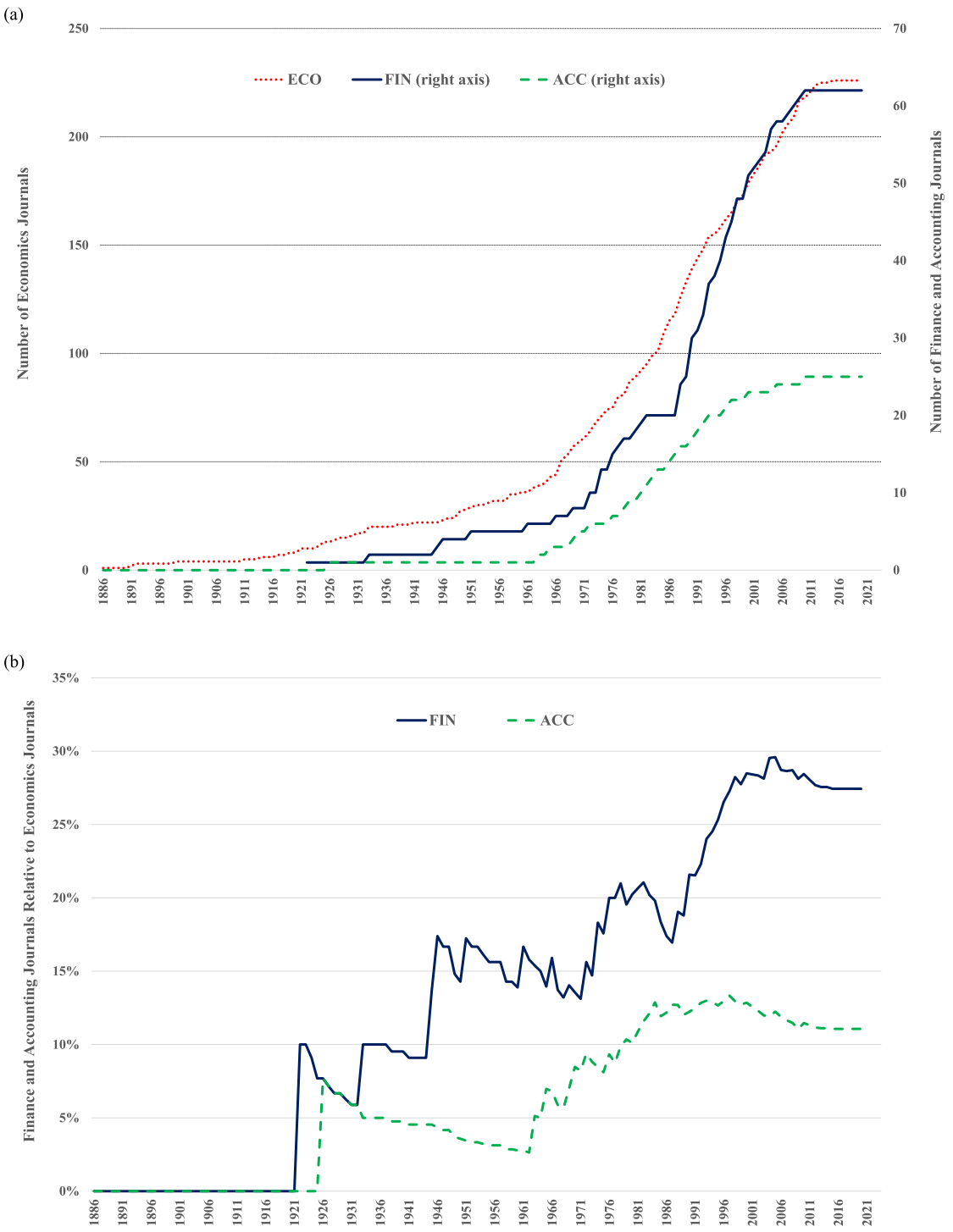

Fig. 13. (a) Number of economics, finance, and accounting journals in operation per year, 1886 through 2020. (b) Number of finance and accounting journals relative to economics journals in operation per year, 1886 through 2020.

promotion decisions by universities. My casual impression is that the quantitative standards for achieving tenure have gradually lowered over time as the rejection rates of top journals have risen. Of course, it is also possible that the increased complexity of papers means that universities give more weight to modern papers rather than older, simpler papers in evaluating the research portfolios of faculty candidates.

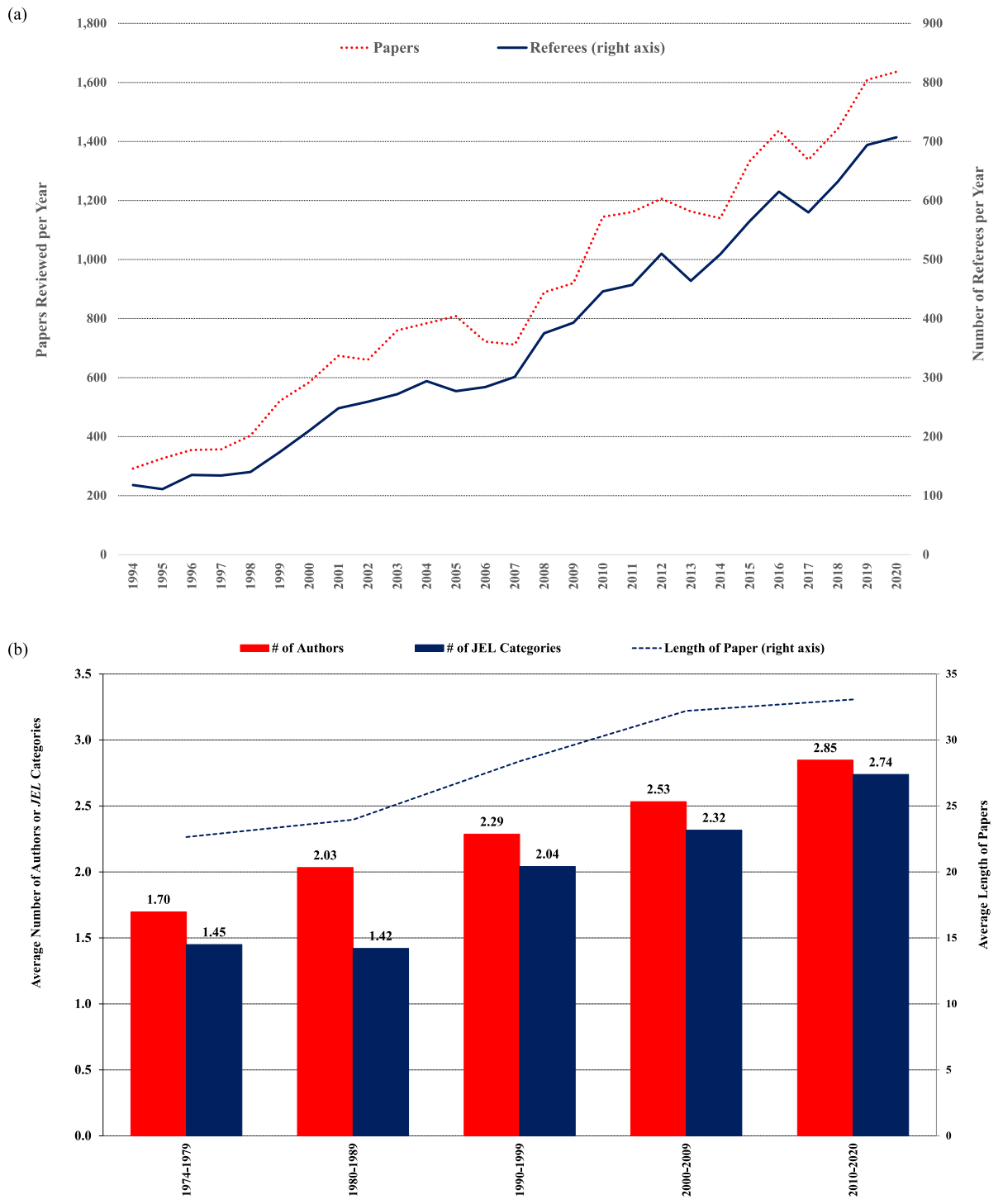

Fig. 14. (a) Number of papers reviewed and referees used by the *JFE*, 1994 through 2020. (b) Average number of authors per paper and *JEL* categories per paper along with the average length of *JFE* papers by decade, 1974 through 2020.

5.1. Trends in the quantity and complexity of papers

Panel A of Table 10 shows summary statistics for the three measures of complexity from Fig. 14b, along with the log of average citations per year (plus 1) for 3,003 papers published from 1974 to 2020. The complexity measures—length, number of authors, and *JEL* codes—are all positively correlated, and length is positively correlated with citations. Panel B of Table 10 shows the estimates of regression models of citations as a function of the complexity

Table 9
Predictors of average citations per year, 1997 through 2020

The dependent variable is the log of the average number of citations per year since publication plus 1. Fama/DFA 1st and 2nd are the papers that won the first and second place prizes among capital markets papers. Jensen 1st and 2nd are the papers that won the first and second place prizes among corporate finance papers. First, Second, and Third are indicator variables if the paper was first, second or third in the issue. JFE, Chicago, Harvard, Penn, MIT, NYU and UCLA are variables that measure the proportion of coauthors of the papers who are on the JFE editorial board, or are faculty member at the respective schools. T-statistics based on White (1980) heteroskedastic-consistent standard errors are in parentheses.

Variable	(1) Coefficient (t-statistic)	(2) Coefficient (t-statistic)	(3) Coefficient (t-statistic)
Constant	1.576	1.486	1.434
	(89.73)	(70.58)	(65.73)
Fama/DFA 1st	1.121	0.956	0.902
	(6.94)	**(6.02)**	**(5.68)**
Fama/DFA 2nd	0.690	0.567	0.459
	(5.13)	**(4.15)**	**(3.03)**
Jensen 1st	0.849	0.736	0.671
	(5.00)	**(4.53)**	**(4.21)**
Jensen 2nd	0.540	0.399	0.265
	(3.50)	**(2.58)**	(1.85)
First		0.325	0.191
		(5.73)	**(3.33)**
Second		0.292	0.217
		(5.37)	**(4.13)**
Third		0.168	0.136
		(3.22)	**(2.62)**
JFE			0.267
			(4.00)
Chicago			0.212
			(3.22)
Harvard			0.156
			(3.11)
Penn			0.254
			(3.77)
MIT			0.210
			(2.95)
NYU			0.154
			(2.62)
UCLA			0.152
			(2.43)
R-squared	0.040	0.064	0.097
S.E. of regression	0.823	0.814	0.800
Observations	2,312	2,312	2,312

Table 10
Citations to JFE papers related to measures of complexity, 1974 through 2020

The dependent variable is the log of the average number of citations per year since publication plus 1 for 3003 papers published in the JFE between 1974 and 2020. Length is the number of pages for each paper (adjusted after 2008 to be on a consistent basis as the papers before 2008). Number_authors is the number of coauthors for the paper. JEL is the number of JEL categories chosen by authors for the paper. T-statistics based on White (1980) heteroskedastic-consistent standard errors are in parentheses.

Panel A. Summary statistics, $N = 3003$

	Log (cites+1)	Length	Number authors	*JEL*
Mean	1.557	30.784	2.242	2.326
Standard Deviation	0.856	8.951	0.896	1.164
Maximum	5.682	102	6	9
Median	1.520	31	2	2
Minimum	0.000	1	1	0
Corr with Length	0.179			
Corr with Number_authors	-0.002	0.132		
Corr with *JEL*	-0.004	0.144	0.112	

Panel B. Regression explaining citations, Log(cites±1)

Variable	(1) Coefficient (T-statistic)	(2) Coefficient (T-statistic)
Constant	1.109	0.110
	(16.19)	(1.05)
Length	0.018	0.019
	(9.59)	**(9.50)**
Number_authors	-0.022	-0.012
	(-1.26)	(-0.75)
JEL	-0.021	-0.009
	(-1.62)	(-0.66)
Year dummy variables?	N	Y
R-squared	0.034	0.183
S.E. of regression	0.842	0.780
Observations	2,997	2,997

measures. There is a reliable relation between citations and article length, with small negative partial relations with the number of authors and *JEL* codes that are not reliably different from zero. A direct interpretation of these estimates is that longer papers contain more information that is worth citing in subsequent research.

Laband and Tollison (2000) find that coauthorship in economics journals increased significantly between 1886 and 1995 and that coauthorship is positively related both to article length and to the quantitative content of the paper. They also find that coauthorship among authors working in different geographic locations has grown over time.

Card and Della Vigna, (2013, p. 151, Fig. 4) show that the average length of papers in five leading economics journals has risen at a rate similar to what the *JFE* has experienced, shown in Fig. 6b. Thus, it is reasonable to believe that the trend in this measure of complexity is not peculiar to the *JFE,* or to finance.

The secular increase in the number of coauthors has been noted and studied many times before. Hamermesh (2013) argues that coauthorship is likely the result of: (1) increased complexity of research, (2) lower costs of communication through technological advances, (3) enjoyment from author interaction, and (4) a built-in critical reader of the paper. Of course, these factors are not mutually exclusive and could all occur together. He writes (p. 166, fn 10), "One school offers salary bonus X for publications, graded by the quality of the journal, with the bonus equaling an amount $X/\sqrt{N}$, where N is the number of authors. One young economist told me that, in recognition of the profession's unwillingness to divide by N, a friend and he now put each other's names on each paper."

Sauer (1988) studies the relation between citations and salaries for 140 economists in seven top economics departments in 1982. He concludes that coauthored papers are discounted by approximately 1/n, where n is the number of coauthors, in predicting salary.

Hilmer et al. (2015) study 1,009 members of economics departments from 53 public universities in the US in 2007.

They conclude that there is no discount for coauthorship in the relation between salaries and publications or citations.

Ellison (2013) studies the relation between citations and university employment using a variety of measures of citations. He estimates a discrete choice model to determine how the labor market measures quality as reflected in various citation measures and how departments should be ranked. Using a sample of 513 young, tenured economists from 50 departments, he concludes that the market gives more than 1/n credit, which implies a "strong incentive for coauthoring" (p. 79).

Liebowitz (2014) argues that proration of credit for publication is important to avoid "excessive coauthoring." He conducted a survey of 47 economics departments to learn about their attitudes toward coauthoring. More than one-third of departments do not prorate credit among coauthors. For each author, on average, a paper with two authors was worth about 89% as much as a paper with one author.

Card and Della Vigna (2013, p. 160) argue that "both lower acceptance rates and longer delays, however, make it increasingly difficult for any one author to achieve a given set of publication benchmarks. Authors have clearly responded by forming bigger teams, and to the extent that coauthored papers are treated as equivalent to single authored papers . . . they have been able to partially mitigate the adverse effects of lower acceptance rates and longer delays."

Sarsons (2017) and Sarsons et al. (2021) find that among Ph.D. economists from 30 economics departments between 1985 and 2014, women who coauthor with men receive less credit toward tenure decisions than if they write sole-authored papers or coauthor with other women. They find no evidence of discounting for men who coauthor.

Seltzer and Hamermesh (2018) compare coauthorship trends in economic history with general history, where sole-authored papers are the norm. They find that coauthorship has risen, particularly among younger authors. They also find that coauthors in economic history are further apart in age than for economics generally. They conclude that the rise in coauthorship cannot be attributed to the content of the papers, as measured by the use of econometrics, large datasets, or citation of economics journals.

Another factor that has contributed to the rise in coauthorship is the dramatic reduction in the costs of long-distance communication and collaboration.[8] Similarly, the costs of computing have fallen substantially, which has resulted in much more empirical work.[9] Kim et al. (2009, Fig. 2, p. 378) find that there has been a strong upward trend in the number of papers coauthored by teams that include people from both "elite" (top-25) and "non-elite" universities from 1971 through 2004. They attribute this change to the lower costs of computing and communication. They also note that the size of finance faculty for the top 25 schools grew cumulatively by 69% from 1973 to 2001 (p. 360, fn 17).

5.2. Secular changes in the relation between citations and author characteristics

Table 11 shows how the relations between citations and author characteristics have changed in the five decades that the *JFE* has been in existence. The positive relation between paper length and the average citation rate has been declining over time, but it is reliably different from zero in most periods. The relation between papers written by authors who are either referees or members of the editorial board and average citation rates is reliably positive in almost all decades. There do not seem to be any reliable relations between the geographic locations of authors and average citations per year. There is also no stable relation between the gender of authors and average citations per year.

6. What factors might explain the growth in the demand for journal services?

Despite the increase in submission fees for the *JFE,* the number of submissions and the number of papers published have grown substantially from 1974 to 2020, as shown in Figs. 1 and 11b. Part of this growth is undoubtedly due to the expansion of the set of potential authors to include more women and more people who work outside the US, as shown in Fig. 15. Although the size of finance faculties in the US has grown significantly (Kim et al., 2009), the growth in finance faculties in Europe and Asia has been even faster, as shown for published papers in Fig. 15 and for submissions in Fig. 8a.

The pricing policy followed by the *JFE* editors is reflected in the cross-correlations between changes in submissions and changes in submission fees, shown in Fig. 16. These correlations indicate that when submissions have increased in the prior two years, it is likely that submission fees are increased. In the year following the increase in submission fees, there is a modest decrease in the growth rate of submissions. Thus, the pricing policy has been reactive to the behavior of submissions, but any success in using fees to reduce the flow of submissions is short-lived.

What factors might explain the unusual growth in the demand for *JFE* services? One obvious answer is that the value of publishing a paper in the *JFE* has grown substantially since 1974. There have been numerous attempts to try to measure the value of high-quality academic publications, including Sauer (1988) and Hilmer et al. (2015). Hamermesh (2018, Table 9, p. 145) summarizes 13 articles that have studied the relation between compensation and citations for academic economists. A common and sensible finding is that influential journal articles are related both to salaries and to the quality of the department where authors are employed. However, that cross-sectional

[8] My first recollection of the effects of the internet on long distance research was Ken French, who was at Chicago, telling me about working with Bob McCormick, who was at Clemson, using FTP in 1983.

[9] My first microcomputer was a Compaq 386 with a 40MB hard disk, which I acquired in late 1986. Prior to that time, all of my empirical work was performed using FORTRAN on time-sharing mainframe computers. Another innovation was the decision of Wharton Research Data Services (WRDS) to provide computer support services and access to large commercial databases to other universities in 1997, mostly over the internet.

Table 11
Average citations per year related to author characteristics, 1974 through 2020

The dependent variable is the log of the average number of citations per year since publication plus 1. Number_authors is the number of coauthors of the paper. Author_referee is the proportion of the coauthors who also serve as JFE referees. Author_JFE is the proportion of the coauthors who have been on the JFE editorial board at any time between 1974 and 2020. Author_women is the proportion of the coauthors for a paper who are women. Author_US is the proportion of the coauthors who work in the US. Author_Europe is the proportion of coauthors who work in Europe. Author_Asia is the proportion of coauthors who work in Asia. T-statistics based on White (1980) heteroskedastic-consistent standard errors are in parentheses.

Variable	Constant	Length	Number_authors	JEL codes	Author_referee	Author_JFE	Author_women	Author_US	Author_Europe	Author_Asia	R-squared	S.E. of regression	Obs
						1974–2020							
Coefficient	0.606	0.016	-0.009	-0.009	0.465	0.314	0.062	0.159	0.091	0.312	0.108	0.810	2,997
(t-statistic)	(6.37)	**(9.10)**	(-0.54)	(-0.68)	**(11.51)**	**(6.28)**	(1.02)	(2.17)	(1.05)	**(2.85)**			
						1974–1979							
Coefficient	0.031	0.034	0.059	-0.155	0.002	0.512	-1.934	0.372	1.432	0.167	0.265	0.909	120
(t-statistic)	(0.07)	**(3.48)**	(0.47)	(-1.05)	(0.01)	**(3.13)**	**(-6.70)**	(1.28)	(2.11)	(0.28)			
						1980–1989							
Coefficient	0.087	0.028	0.064	0.038	0.338	0.383	-0.375	0.179	0.186	-0.117	0.225	0.777	323
(t-statistic)	(0.30)	**(5.21)**	(0.96)	(0.47)	**(2.79)**	**(3.94)**	(-2.04)	(0.85)	(0.36)	(-0.41)			
						1990–1999							
Coefficient	0.634	0.011	-0.040	0.067	0.407	0.458	-0.374	0.175	0.584	0.275	0.156	0.791	407
(t-statistic)	(2.20)	(1.98)	(-0.80)	(1.77)	**(3.92)**	**(3.53)**	**(-2.53)**	(0.68)	(1.54)	(0.81)			
						2000–2009							
Coefficient	0.950	0.011	0.013	-0.043	0.517	0.271	0.215	0.194	0.078	0.516	0.110	0.785	770
(t-statistic)	(4.47)	**(3.18)**	(0.40)	(-1.75)	**(6.69)**	**(2.86)**	(1.99)	(1.22)	(0.43)	(2.14)			
						2010–2020							
Coefficient	1.106	0.007	-0.056	-0.035	0.463	0.282	0.063	0.110	0.006	0.251	0.073	0.789	1,377
(t-statistic)	(7.03)	**(2.55)**	**(-2.34)**	(-1.93)	**(7.67)**	**(2.83)**	(0.73)	(1.06)	(0.06)	(1.75)			

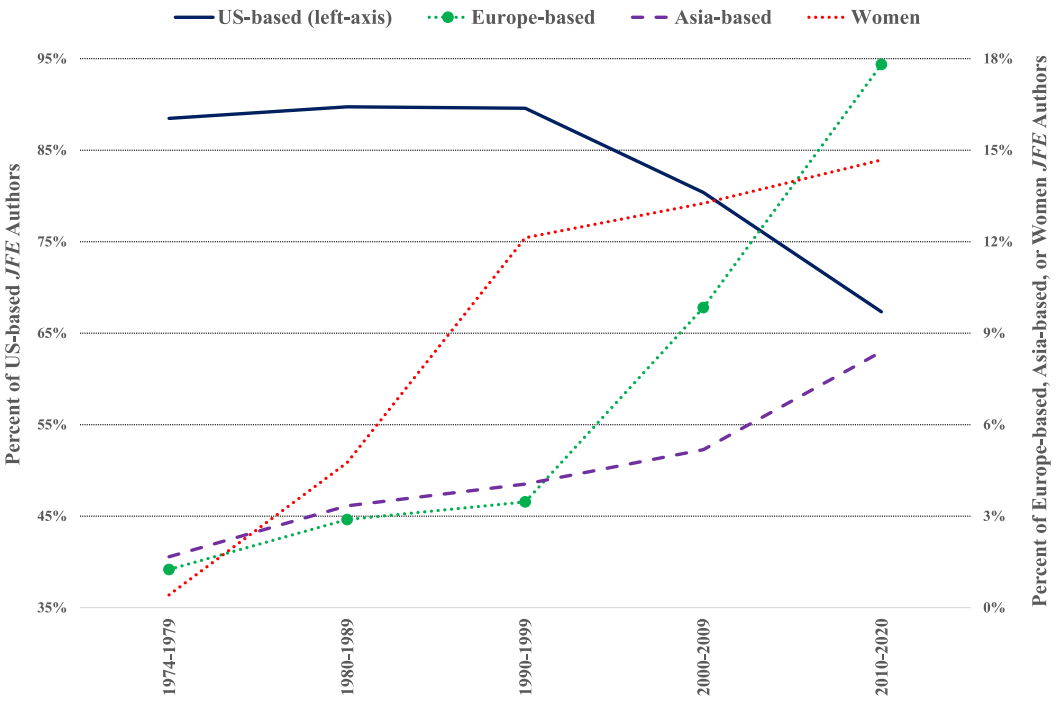

Fig. 15. Proportion of authors in *JFE* published papers who work in the US, or Europe, or Asia, or who are women, by decade, 1974 through 2020.

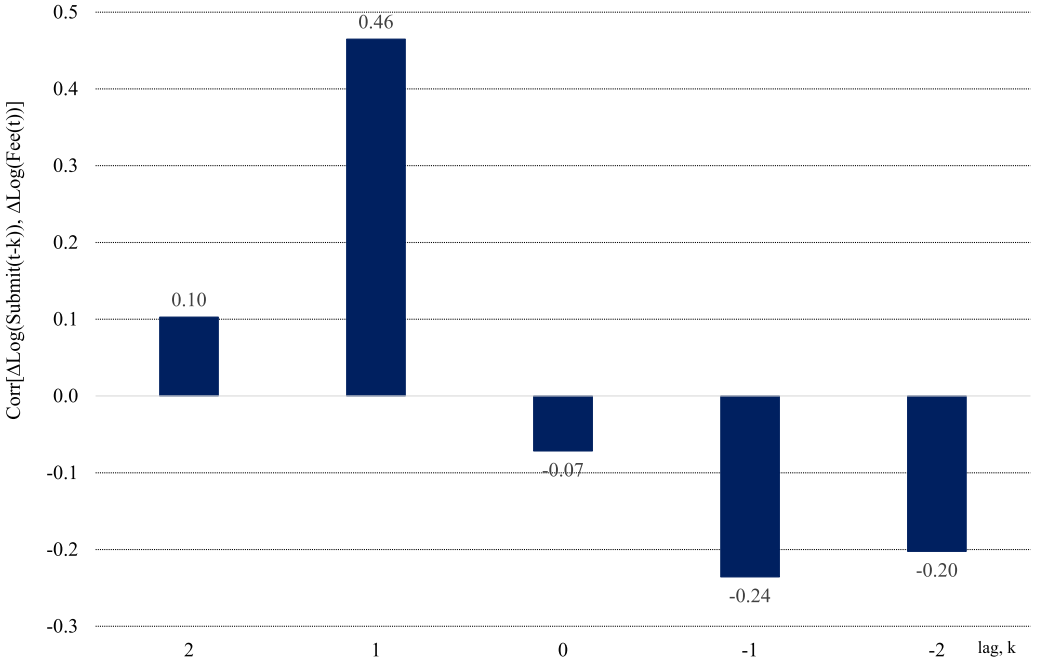

Fig. 16. Cross-correlations between changes in the logs of annual submissions DLog(Submit(t-k)) and changes in the logs of submission real fees Log(Fee(t)) for the *JFE*, 1974 through 2020. The asymptotic standard error for these correlations is 0.15.

relation cannot explain why the demand for *JFE* services has changed so much over time.

To measure the salaries of *JFE* authors over time, I solicited information on starting salaries from 328 people who entered the finance job market between 1974 and 2011. I received 251 answers. I also received information on "typical" offers made to new assistant professors of finance from several leading business schools for the post-2011 period. Using these data, I constructed an index number starting at $15,000 in 1974 and ending at $240,000 in 2020 that represents nine-month starting salaries for assistant professors of finance (Asst_sal), ignoring other features of compensation such as summer compensation, relocation bonuses, and research budgets. Starting

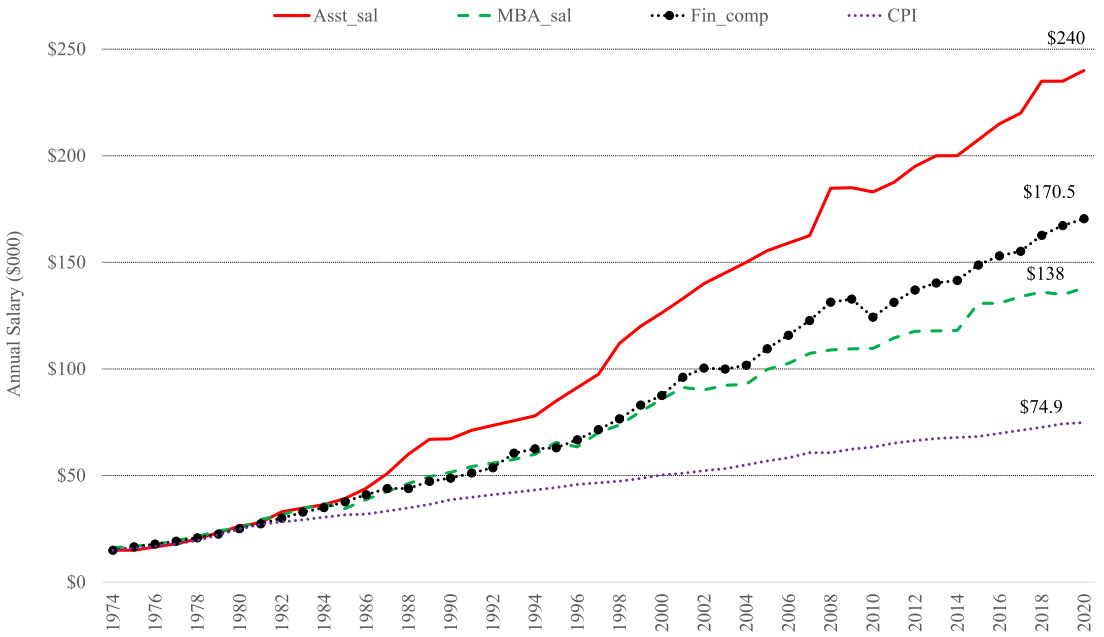

Fig. 17. Salaries for a new assistant professor of finance (Asst_sal), 1974 through 2020, along with comparable indexes for starting salaries of MBA graduates (MBA_sal), per capita compensation in the finance industry (Fin_comp), and the Consumer Price Index (CPI).

salaries have risen at a rate of about 6.2% per year, on average.

Fig. 17 shows some benchmarks to evaluate the growth in academic finance salaries. MBA_sal represents a measure of starting salaries for MBA graduates. I asked several leading business schools to share information on the average starting salaries of their MBA graduates, again without signing bonuses or moving allowances, from 1974 to 2020. Five schools agreed to share data with me on the condition of anonymity. From these responses, I created an index number starting at $15,000 in 1974 (which is slightly lower than the average MBA salary for that year) and ending with $138,000 in 2020, which is an annual growth rate of 4.8%. Of course, these are nominal salaries, which undoubtedly rose in part because of inflation. In Fig. 17, CPI represents an index number that grows from $15,000 in 1974 to $74,885 in 2020 reflecting the 3.5% average annual growth in the Consumer Price Index for All Urban Consumers, not seasonally adjusted. Finally, Fin_comp represents per capita compensation of employees in finance, insurance, and real estate (from Tables 6.2A–6.2D and 6.5A–6.5D of the National Income and Product Accounts maintained by the Bureau of Economic Analysis), scaled to begin at $15,000 in 1974. The 2020 value for this series is $170,472, representing an annual growth rate of 5.4%.

Several things are notable from Fig. 17. First, in the mid-1980s starting salaries for finance faculty began to rise substantially faster than the other benchmarks. This has been noted and analyzed several times in the popular press. Uchitelle (1989) notes that academic salaries in finance jumped relative both to their past values and to salaries in economics departments. Lappen (1998) describes many of the lucrative non-academic activities that compete for the scarce time of leading finance academics, and Byrne (2018) documents high salaries for some finance

Table 12
Error correction models for annual JFE submissions, 1976 through 2020

The dependent variable is the change in the log of the number of submissions to the JFE per year, $\Delta(\text{Submit}_t)$. $\text{Log}(\text{Turn}_t)$ is the log of the median turnaround time for the prior 12 months. $\text{Log}(\text{Fee}_t)$ is the log of the real submission fee for JFE submissions. $\text{Log}(\text{Reject}_t)$ is the log of the rejection rate for the prior 12 months. $\text{Log}(\text{Asst\_sal}_t)$ is the log of the real salary for starting assistant professors. T-statistics based on Newey and West (1987) autocorrelation-heteroskedastic-consistent standard errors are in parentheses. Engle and Granger (1987) introduce and discuss regressions of this type.

Variable	(1) Coefficient (t-statistic)	(2) Coefficient (t-statistic)	(3) Coefficient (t-statistic)
Constant	1.633	0.129	1.107
	(1.56)	(0.14)	(1.43)
$\text{Log}(\text{Submit}_{t-1})$	-0.267	-0.133	-0.198
	(-2.08)	(-1.41)	**(-2.26)**
$\Delta\text{Log}(\text{Turn}_{t-1})$	0.057		
	(0.22)		
$\text{Log}(\text{Turn}_{t-1})$	-0.357	-0.047	-0.270
	(-1.75)	(-0.21)	(-1.35)
$\Delta\text{Log}(\text{Fee}_{t-1})$	0.010		
	(0.09)		
$\text{Log}(\text{Fee}_{t-1})$	-0.163	-0.170	-0.131
	(-2.02)	**(-2.24)**	**(-2.00)**
$\Delta\text{Log}(\text{Reject}_{t-1})$	-0.947		-0.850
	(-2.75)		**(-3.31)**
$\text{Log}(\text{Reject}_{t-1})$	0.584	-0.121	
	(0.66)	(-0.19)	
$\Delta\text{Log}(\text{Asst\_sal}_{t-1})$	0.456		
	(1.73)		
$\text{Log}(\text{Asst\_sal}_{t-1})$	0.614	0.476	0.493
	(3.13)	**(4.26)**	**(4.50)**
R-squared	0.397	0.252	0.362
S.E. of regression	0.089	0.093	0.086
Observations	45	45	45

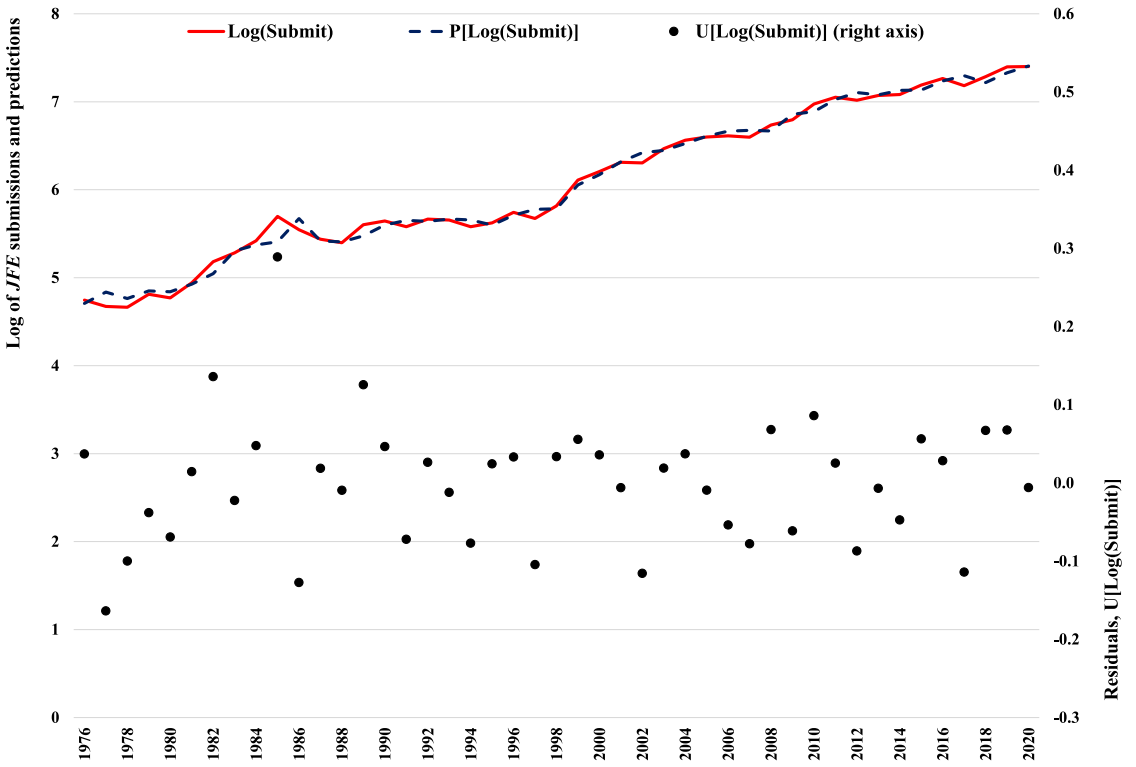

Fig. 18. Graph of log submissions, Log(Submit), predictions of log submissions, P[Log(Submit)] from Table 12, col. 3, and residuals, U[Log(Submit)], 1976 through 2020. The apparent randomness of the residuals shows that the regression model in Table 12 predicts the log of *JFE* submissions well.

professors from public universities (where faculty compensation is published). Even ignoring outside opportunities for finance Ph.D. graduates, Martin (2020) observes that the ratio of the number of undergraduate and masters students who take business courses to Ph.D. graduates from business schools who would teach those courses is much higher than for any other major academic field, which at least partly explains the high and rising salaries of finance faculty.

Table 12 contains estimates of an error correction model (Engle and Granger, 1987) to explain the annual changes in the log of *JFE* submissions, ΔLog(Submit$_t$), as a function of lagged log submissions as well as lagged changes and levels of the log of median *JFE* turnaround times for the prior 12 months, Log(Turn$_t$), lagged changes and lagged levels of the real submission fee, Log(Fee$_t$), lagged changes and lagged levels of the rejection rate for the prior 12 months, Log(Reject$_t$), and lagged changes and lagged levels of the real assistant professor salary for finance professors, Log(Asst_sal$_t$). Columns 2 and 3 in Table 12 show simplified variants of this model that are implied by the estimates in column 1.

The main conclusions from Table 12 are that higher real pay for finance professors is associated with increases in the growth rate of submissions (with a t-statistic of 4.50 in column 3), and higher real submission fees slow the growth rate of submissions (with a t-statistic of –2.00 in column 3). There is also evidence that increases in rejection rates are associated with decreased growth rates of submissions (with a t-statistic of -3.31 in column 3). Fig. 18 shows a graph of the log of submissions, the predictions of the log of submissions implied by the model in column 3 in Table 12, and the residuals from that model. The residuals appear to be random and seem to have constant variance, suggesting that the model is well specified.

Thus, the regression model in Table 12 supports many of the qualitative observations about submission fees in Section 2, as well as the discussion of academic finance salaries earlier in this section.

7. Conclusions

This paper uses detailed data from the *Journal of Financial Economics* and other sources to examine the extraordinary growth in the quantity and quality of academic finance research in the past 47 years. Cross-sectional analysis of the characteristics of papers and their authors helps explain the selection process that yields published papers from the large flow of papers submitted for consideration. It also helps characterize the influence that papers have in terms of subsequent citations from other published papers.

Time-series data from the *JFE*, as well as from other finance, economics, and accounting journals, show the growth in the production of academic finance research. The set of people who serve as authors, referees, and editors has grown as academic finance has evolved to span a much larger geographic footprint and as women have come to play a larger role in all aspects of academic finance. Technological improvements in computing and communications have resulted in more complex empirical analysis and

have allowed more collaboration by diverse teams of coauthors.

My opinion is that the largest challenge for the industry in the future is to manage the growth of journals in such a way that the demands on referees do not become so onerous that talented academics decide to withdraw from the peer review process (e.g., Ellison, 2010). I believe that the *JFE* has attempted to address this problem at least somewhat through its policies. I also believe that the role of peer review in helping authors write better papers and helping readers focus on a high-quality subset of the vast number of working papers that are produced has never been more valuable.

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