



THE IMPACT OF ACCOUNTING RESEARCH ON FINANCE

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This paper assesses the impact of accounting research on finance using citational methods and content analysis. The data are 715 articles published in seven finance journals. In contrast to previous research of the influence of finance research on accounting, the results show relatively little impact of accounting research on finance. The limited impact of accounting on finance is principally provided by four accounting journals and a small group of accounting authors. The impact found is often the result of bridging papers, in which either finance articles have accounting authors, or vice versa. These results suggest a substantial disregard of ostensibly pertinent capital-markets accounting research by finance scholars. The reasons for finance's disregard of this work, whether for reasons of perceived value, quality, or for other reasons, is unclear. However, it is apparent that accounting capital-markets research is not as influential in finance as might be expected.

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Introduction

One of the widely acknowledged goals of science-like disciplines is the accumulation and communication of knowledge. It can be argued that the development and accumulation of knowledge in a discipline can be fostered by borrowing and importing pertinent models, theories, and methods from other disciplines, particularly between related fields. Many accounting scholars perceive a close relationship between accounting and finance, and particularly between accounting and financial capital markets research. Prior research by [Bricker \(1993\)](#) has suggested that research from the field of finance has been important in the development of accounting

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Received 2 October 1997; revised 5 April 1999; accepted 7 June 1999

thought. If capital-markets accounting research is perceived to have value, then it might similarly be expected to be influential in and adopted by financial research and thought.

In this paper, we report the results of a study of the impact of accounting research on academic finance research using citational data from over 700 articles published in seven finance journals. The selection of this time period corresponds to the publication of the [Dopuch and Ronen \(1991\)](#) "State of Accounting Research" white paper, which summarised the concerns of several high-profile accounting academics and raised the issue of the progress and relevance of accounting research. This research in part addresses that issue in terms of the relevance of accounting research to finance. First, we use our data to: (1) quantify the reliance of finance research on accounting research, and (2) identify particular accounting articles and journals that have been relatively influential in finance. Second, we select a subset of finance articles that rely most heavily on accounting research and explore the qualitative characteristics of the reliance of finance on accounting research.

Our results show, first, that finance relies on accounting research to a limited extent in the time period studied. Furthermore, much of this reliance occurs as a result of accounting faculty with finance-related research interests publishing articles in finance journals, or finance faculty publishing in accounting journals. We refer to the corresponding articles as *bridging papers*. Second, finance journals' reliance on accounting research is principally associated with four accounting journals and accounting faculty with doctorates from a set of elite doctoral programmes. Third, very few accounting articles are cited frequently by finance studies. Fourth, the topic areas of financial research most impacted by accounting are asset and financial restructurings and, to a far smaller extent, financial variables and performance, finance distress, executive compensation, corporate control, and the effects of legislation on firm value. The finance studies in these areas draw theoretical motivations, testable hypotheses, methods, and empirical evidence from the accounting literature.

Research Questions and Data

We posed the following research questions to investigate.

- Q1: *To what extent does contemporary finance research rely on accounting literature?*
- Q2: *How do finance journals differ in their reliance on accounting literature?*
- Q3: *How do accounting journals differ in their impact on finance research?*
- Q4: *Which accounting articles have the largest impact in finance research?*
- Q5: *What specific contributions have accounting studies made to finance research?*
- Q6: *What author characteristics are common to the most influential accounting articles?*

Table 1 Finance citations of accounting

	Total citations	Accounting citations	Citations to:				Other
			JAE	JAF	JAR	TAR	
Panel A: Raw citations to accounting from seven finance journals							
Finance journal							
Journal of Financial Economics	1999	47	12	0	14	7	14
Journal of Banking and Finance	2928	49	17	3	20	6	3
Journal of Business	1251	12	4	1	6	1	0
Journal of Finance	4412	61	29	5	16	7	3
Financial Management	1686	40	24	2	6	9	0
Journal of Financial and Quantitative Analysis	586	6	1	0	1	4	0
Journal of Financial Research	789	17	3	0	9	4	1
Total	13,651	232	90	11	72	38	22
Panel B: Citation rates to accounting ^a from seven finance journals							
Finance journal							
Journal of Financial Economics	1999	2.35	0.60	0.00	0.70	0.35	0.70
Journal of Banking and Finance	2928	1.67	0.58	0.10	0.68	0.20	0.10
Journal of Business	1251	0.96	0.32	0.08	0.48	0.08	0.00
Journal of Finance	4412	1.38	0.66	0.11	0.36	0.16	0.07
Financial Management	1686	2.37	1.42	0.12	0.36	0.53	0.00
Journal of Financial and Quantitative Analysis	586	1.02	0.17	0.00	0.17	0.68	0.00
Journal of Financial Research	789	2.15	0.38	0.00	1.14	0.51	0.13
Overall	13,651	1.70	0.66	0.08	0.53	0.28	0.16

^a Citation rate = citations/total citations × 100.

We used citational data and methods and content analysis to address these questions. First, we identified leading finance journals covered by the social science citation index (SSCI). We selected the non-specialised finance academic journals with the highest impact factors (relative influence) covered by the SSCI. The seven journals selected are listed in [Table 1](#). We then extracted all of the journal set's 715 articles and their 13,651 citations published in 1990 and 1991, which formed the basis for our subsequent analysis. Our data sample is summarised in [Table 1](#).

Method and Findings

To what extent does accounting research impact on contemporary finance research?

To investigate the extent of impact of accounting research on contemporary finance research (Q1), we searched the citation sample and identified, by finance journal, all citations to accounting documents, as shown in [Table 1](#).

[Table 1](#) shows each finance journal's overall citations, citations to accounting documents, and the distribution of accounting documents among journals and other sources. Panel A shows raw citations and Panel B shows citation rates. Of the 13,651 citations, 232 refer to 140 individual accounting documents—about 1.7%. This compares with the approximately 9% reliance of accounting on finance found in [Bricker's \(1993\)](#) study of 22 accounting journals in the 1991–1992 time period, his ([Bricker,](#)

1987) study of six accounting journals in the 1983–1986 time period, and the implied approximately 14% found by Hofstedt (1976) in the 1964–1973 category. That is, accounting research cites finance research at least five times as frequently as finance research cites accounting. We also estimated finance's reliance on other disciplines by studying the disciplinary sources of journals cited in our sample. We found that about 20% of the citations were to economics, about 2% to management and statistics each. To confirm these results, we examined Zivney and Reichenstein's (1994) analysis of the 1990 citations of 18 finance journals. Their Exhibit 1 shows the 60 most frequently cited journals. By classifying the disciplinary origin of the journals, we roughly estimated the proportion of finance's interdisciplinary citations. The analysis shows that finance principally borrows from economics (24% of citations). After economics, accounting accounts for about 3% of citations, statistics about 2%, and management, about 1%.

The situations of accounting and finance may also be given some perspective by reference to Rigney and Barnes' (1980) study of the interdisciplinary citations of five social sciences. Using a taxonomy of cited disciplines, they found that Anthropology's citations to other disciplinary areas ranged from 2.1 to 8.7%, Economics 0.7 to 3.2%, Political Science 2.6 to 12.0%, Psychology 2.4 to 8.8%, and Sociology 1.1 to 8.0%.

How do finance journals differ in their reliance on accounting literature?

The citation patterns in Table 1 reveal differences in the rates of citation of accounting literature by finance journals (Q2). Table 1's Panel A shows that accounting documents were cited between 6 and 61 times by the finance journals in our data set, most frequently by the Journal of Finance. Citations *rates* (accounting citations/total citations \times 100) vary from 0.96 to 2.37%, as shown in Panel B. The Journal of Financial Economics, Journal of Finance, and Journal of Financial Research each cite accounting most frequently, above 2% each. The Journal of Business and Journal of Financial and Quantitative Analysis cite accounting least frequently in terms of both raw citations and citation rates. We used a chi-square test to compare observed citation frequencies with average citation frequencies across finance journals. We found statistically significant differences in the citation frequencies of the finance journals ($P < 0.001$) using both raw citations and citations normalised for the citation base of each journal. Normalised for differences in overall citations, The Journal of Financial Economics and Financial Management both cited accounting far more frequently than the average, while The Journal of Finance and Journal of Business both cited accounting far less frequently than expected.

How do accounting journals differ in their impact on finance research?

In addressing Q3, Table 1 also shows that finance studies rely relatively most heavily on the Journal of Accounting and Economics (90 citations) and the Journal of Accounting Research (72 citations), together comprising about 71% of the citations to accounting. The inclusion of citations to the Accounting Review (38) increases this coverage to 88%. The only other accounting journal cited more than once is the Journal of Accounting, Auditing and Finance. Ninety-one percent of all finance cita-

Table 2 Distribution of frequency of citation of accounting documents

Citation frequency	Number of accounting documents
1	91
2	30
3	10
4	4
5	0
6	2
7	2
8	0
9	1
Total	140

tions to accounting were to one of these four journals; most academic accounting journals, including many which publish capital-markets type research, are not cited at all. Other journals cited (once each) were Accounting, Organisations and Society, Journal of Accounting and Public Policy, and Journal of Accounting Literature. We obtain similar results by studying [Zivney and Reichenstein's \(1994\)](#) analysis of journals frequently cited by 18 finance journals in 1990; they find only (in order) the Journal of Accounting Research, Journal of Accounting and Economics, and Accounting Review among the 60 most frequently cited journals¹.

Which accounting articles have the largest impact on finance research?

To address Q4 we first identified all cited accounting articles and then determined the most frequently cited accounting articles. Overall, the 232 citations refer to 140 accounting documents. The distribution of citation frequencies over these documents is given in [Table 2](#). Most documents were only cited once.

The 19 accounting documents cited three or more times are listed alphabetically by first author in [Table 3](#) (full publication information for each article is listed in the references). All of these documents were articles published in academic accounting journals, principally in the Journal of Accounting and Economics (nine articles) and the Journal of Accounting Research (six articles). Column 2 shows the number of citations of each article and column three shows the ranking of the article in the top 100 most cited as measured by [Brown \(1996\)](#)—studies frequently cited by finance but unranked by accounting are marked “N.R.”. Brown’s study allows us to compare the articles most frequently cited by finance with those most frequently cited by accounting. Interestingly, only 8 of the 19 articles frequently cited by finance journals were among this group. This seems somewhat surprising, as 66 of Brown’s top 100 appear to be of possible interest to finance. Perhaps the difference reflects the specific topical or methodological interests of finance, as discussed later.

What specific contributions have accounting studies made to finance research?

To explore the specific contributions of accounting research to finance (Q5), we studied the content of each of the 27 finance articles citing three or more ac-

Table 3 Accounting articles cited three or more times

First author	Cites	Brown rank	Finance area influenced	Document title (year)
Amihud (F)	3	N.R.	Market microstructure	Liquidity, volatility, and exchange automation (1988)
Antle	3	71	Executive compensation	An empirical investigation of the relative performance evaluation of corporate executives (1986)
Atiase	3	14	Restructurings	Predisclosure information, firm capitalization, and security price behaviour around earnings announcements (1985)
Beaver (F)	4	N.R.	Restructurings, financial variables	The association between market determined and accounting determined risk measures (1970)
Benston	3	N.R.	Restructurings	The self-serving management hypothesis: some evidence (1985)
Bernard	3	17	Financial variables, legislation	Cross-sectional dependence and problems in inference in market-based accounting research (1987)
Brickley (F)	5	N.R.	Executive compensation, corporate control	The impact of long-range managerial compensation programs on shareholder wealth (1985)
Brown	3	10	Restructurings	Security analysts' superiority relative to univariate time series models in forecasting quarterly earnings (1987)
Collins (F)	3	N.R.	Legislation	A comparison of alternative testing models used in capital markets research (1984)
DeAngelo	3	N.R.	Restructurings	Accounting numbers as market valuation substitutes: a study of management buyouts of public stockholders (1986)
Foster	3	95	Restructurings	Intra-industry information transfers associated with earnings releases (1981)
Healy	3	N.R.	Restructurings	Earnings and risk changes surrounding primary stock offerings (1990)
Lewellen (F)	4	N.R.	Corporate control	Merger decisions and executive stock ownership in acquiring firms (1985)
Lewellen (F)	3	N.R.	Executive compensation	Executive compensation and executive incentive problems: an empirical analysis (1987)
Murphy (F)	3	N.R.	Executive compensation, corporate control	Corporate performance and managerial remuneration: an empirical analysis (1985)
Palepu	6	N.R.	Restructurings, financial distress	Predicting takeover targets: a methodological and empirical analysis (1986)
Patell	8	9	Restructurings, financial variables	Corporate forecasts of earnings per share and stock price behaviour: empirical tests (1976)
Schipper (F)	6	70	Financial distress, legislation	The impact of merger related regulations on the shareholders of the acquiring firms (1983)
Titman (F)	5	99	Restructurings	Information quality and the valuation of new issues (1986)

(F) denotes articles with one or more authors not listed in Hasselback.

Table 4 Finance articles citing three or more accounting documents, by finance journal

Journal and first author	Title and year
Financial Management	
Agrawal	Executive-compensation and corporate performance (1991)
Copeland	Exchange offers and stock swaps (1991)
Defusco	The association between executive stock option plan changes and managerial decision-making (1991)
Furtado (A)	Causes, consequences, and shareholder wealth effects of management turnover (1991)
Journal of Banking and Finance	
Allen	Bank acquisitions and ownership structure (1991)
Asness	A note on REIT bankruptcy and intra-industry information transfers (1991)
Berger	The limitations of market value accounting and a more realistic alternative (1991)
Platt (A)	A note on the use of industry-relative ratios in bankruptcy prediction (1991)
Slovin	Restructuring transactions by bank holding companies (1991)
Slovin	The information-content of multiple seasoned common-stock offerings by bank-holding companies (1991)
Journal of Business	
Beneish (A)	Stock-prices and the dissemination of analysts recommendations (1991)
Givoly (A)	The aggregate and distributional effects of the tax reform act of 1986 on firm valuation (1991)
Journal of Finance	
Brennan (A)	Stock prices and the supply of information (1991)
Cornett	An examination of the impact of the Garn-St. Germain Depository Institutions Act of 1982 on commercial-banks and savings and loans (1990)
DeFusco	The effect of executive stock option plans on stockholders and bondholders (1990)
Hertzel	The effects of stock repurchases on rival firms (1991)
McNichols (A)	Stock dividends, stock splits, and signalling (1990)
Slovin	The intra-industry effects of going-private transactions (1991)
Journal of Financial Economics	
Boehmer	Event-study methodology under conditions of event-induced variance (1991)
Chan	Corporate research-and-development expenditures and share value (1990)
DeAngelo (A)	Union negotiations and corporate-policy (1991)
Kaen	Information effects in financial distress (1990)
Lang (A)	A test of the free cash flow hypothesis (1991)
Journal of Financial Research	
Klein (A)	PE ratios, earnings expectations, and abnormal returns (1991)
Wiggins	The earnings-price and standardized unexpected earnings effect (1991)
Journal of Financial and Quantitative Analysis	
Young (A)	Macroeconomic forces, systematic-risk, and financial variables (1991)

(A) denotes articles with one or more authors listed as accounting faculty members in Hasselback.

counting documents². These finance articles are shown in [Table 4](#). Our analysis of each paper's content focused on determining the topic area of each article and the specific contribution made by each cited accounting document. We grouped the 27 finance studies into six common areas based principally on research topic and a seventh that we entitled "other". First, "restructurings" includes seven stud-

ies involving asset or financial restructurings. Second, four “Financial Variables” studies examine the relationship between financial variables and some measure of performance. Third, “Financial Distress” contains four studies of bankruptcies or bankruptcy prediction. Fourth, the link between firm performance and payments to management is examined by the three studies in “Executive Compensation”. Fifth, “Corporate Control” includes three studies that examine changes in management or ownership. Finally, “Legislation” consists of two articles that look at changes in firm value caused by changes in legislation. The four remaining studies are classified as “Other”. Later, we discuss the impact of accounting research on finance in the seven groupings identified earlier in terms of these cited documents, beginning with restructurings.

Restructurings

Restructurings include seven event studies that address corporate restructuring of either assets or financial securities. Several are bridging papers (have one or more accounting authors). Two papers examine the effects of stock splits on firm value, two look at the intra-industry effects on firm value of specific restructuring events, and two study the effects of restructuring by bank holding companies. The remaining paper, by [Copeland and Lee \(1991\)](#), examines market reactions to exchange offers and stock swaps. This paper refers to [Brown *et al.* \(1987a,b\)](#) to find the best estimator for earnings per share. They then turn to [Healy and Palepu's \(1990\)](#) findings that betas increase after primary stock offerings to help explain their evidence on exchange offers and swaps.

[Brennan and Hughes \(1991\)](#) and [McNichols and Dravid \(1990\)](#), both bridging papers, address stock splits. [Brennan and Hughes \(1991\)](#) establish their study's fit in the literature by referring to earlier work on stock splits by [Asquith *et al.* \(1989\)](#) and [Doran and Nachtmann \(1988\)](#). Their data is similar to that used by [Brown *et al.* \(1985\)](#) and [O'Brien \(1988\)](#), and they refer to these papers for characteristics of the data. [Brennan and Hughes \(1991\)](#) most closely parallel the work of [Bhushan \(1989\)](#), who is also a bridging author. They choose variables based on Bhushan's findings that stock returns are positively related to the number of analysts following the firm. Their finding that the number of analysts following a firm is related to firm size is consistent with Bhushan. Also, Bhushan's suggestion that large firms generate more transactions provides an explanation for some of their findings. Brennan and Hughes also find evidence on the relationship between information reaching the market and the variance of stock returns that is consistent with a theory proposed by [Holthausen and Verrecchia \(1990\)](#).

[McNichols and Dravid \(1990\)](#) develop a testable hypothesis based on evidence of the relationship between earnings and firm value reported by [Ball and Brown \(1968\)](#), [Beaver *et al.* \(1979\)](#), and [Beaver *et al.* \(1980\)](#). Next, they adopt a method that employs a logit model similar to that developed by [Palepu \(1986\)](#), and a standardized prediction error estimator developed by [Patell \(1976\)](#). They choose variables based on the findings that stock prices anticipate public announcements of earnings ([Ball and Brown, 1968](#); [Beaver *et al.* \(1979\)](#); [Atiase, 1985](#); [Brown *et al.* \(1985\)](#); [O'Brien, 1988](#)), and that analysts' forecasts are superior to time-series models in predicting earnings ([Fried & Givoly, 1982](#); [Brown *et al.*, 1985](#); [O'Brien, 1988](#)). The results

of the study are consistent with the findings of Defeo and Jain (1989) that share volume declines after a stock split. The study also finds a more significant association between earnings forecasts and stock returns than did O'Brien (1988). Wilson's (1986) work on the information content of accruals and cash flows is also cited as general background information.

Hertzel's (1991) and Slovin *et al.*'s (1991a) papers of intra-industry effects set the stage for their research by referring to Foster (1981). Hertzel's study of the intra-industry effects of stock repurchases refers to Baginski's (1987) earlier work. Methodologically, Hertzel employs a test of significance of cumulative standardized returns developed by Patell (1976). Slovin *et al.*'s study of the intra-industry effects of going-private transactions relies on Clinch and Sinclair (1987). It draws hypotheses from the accounting literature that (1) information dissemination is a function of firm value, from Atiase (1985), and (2) the reputation of outside agents ameliorates problems associated with securities issuance, from the findings of Slovin *et al.* (1990). Slovin *et al.* also uses DeAngelo's (1986) work on accounting numbers as market valuation substitutes as background literature.

The two papers involving bank holding companies share the same authors. Slovin *et al.* (1991a) is an examination of the relationship between stock prices and multiple seasoned offerings. Their certification hypothesis is suggested by the extensive work on the certifying effects of outside auditors another agents by Simunic (1980), DeAngelo (1981), Dopuch and Simunic (1982), Benston (1985a), Titman and Trueman (1986), and Slovin *et al.* (1990).

The study of the market's valuation of sale-and-lease backs and divestitures by Slovin *et al.* (1991b) is a direct extension of accounting research in the same area. Atiase (1985) proposes that more information is available for large than for small firms and that predislosure information is an increasing function of the capitalized value of the firm. A previous study by Grant (1980) found evidence consistent with that hypothesis, as well as studies conducted by Collins *et al.* (1987) and Freeman (1987). Slovin *et al.* employing a multivariate regression model not used in the previous studies, report findings inconsistent with Atiase (1985).

Financial variables

The four financial variable studies primarily address the predictive capabilities of financial variables. Bridging papers are again evident. Two articles are event studies that relate abnormal returns to price-earnings ratios and (un)expected earnings (Klein & Rosenfeld, 1991; Wiggins, 1991). One event study explores the relationship between research and development expenditures and firm value (Chan *et al.*, 1990). The final study investigates financial variables as predictors of risk (Young *et al.*, 1991).

Klein and Rosenfeld (1991), a bridging paper, refer to Givoly (1985) to establish that analysts' forecasts are unbiased predictors of corporate earnings. Their model design addresses the time-clustering problems discussed in Bernard (1987), and the expected changes in variance of abnormal returns suggested by Patell and Wolfson (1979). They then describe how their findings are consistent with the evidence of Brown *et al.* (1987a) and Fried and Givoly (1985) on the close association between abnormal returns and analysts' forecast errors.

Wiggins (1991) uses accounting literature for supporting empirical evidence and for a model of standardized unexpected earnings that is similar to the one used in Foster *et al.* (1984). This model is chosen over Foster (1977) based on the results of comparative tests reported in Foster *et al.* (1984). The evidence from Bernard and Thomas (1989) shows positive relationships between abnormal returns and standardized unexpected quarterly earnings, and returns and stock price. These findings are consistent with those of Wiggins (1991).

Chan *et al.* (1990) gather data for their study of the market's response to announcements of research and development expenditures from the Dow Jones News Retrieval Service rather than from the Wall Street Journal Index. Thompson *et al.* (1987) find the News Retrieval Service to be the more complete source. The model of investor expectations formation, used by Chan *et al.*, is commonly accepted in accounting research and is similar to ones used by Foster (1973), Patell (1976), and Penman (1980).

Young *et al.* (1991), a bridging paper, draw hypotheses for their examination of the relationship between financial variables and systematic risk from the works of Beaver *et al.* (1970) and Elgers (1980). Beaver *et al.* argue that financial statement data is useful in predicting market model betas. Elgers responds that such data is no better at beta prediction than Bayesian adjustments of prior-period data. Young *et al.* addressing evidence in Elgers on the effectiveness of financial risk measures as predictors, adapts an instrumental variables approach developed by Beaver *et al.* to test the hypotheses.

Financial distress

All four financial distress studies examine actual or potential bankruptcy. Espahbodi (1991), a bridging paper, and Platt and Platt (1991) develop models to predict potential bank failures. Asness and Smirlock (1991) examine the intra-industry effects of a failed real estate investment trust (REIT), while Kaen and Tehranian (1990) conduct a case study of the failure of Seabrook Station. With the exception of the latter study, this area draws heavily on accounting literature.

Although both Espahbodi (1991) and Platt and Platt (1991) develop bankruptcy prediction models, their approaches are so dissimilar that they have no accounting references in common. Espahbodi tests both logit and discriminant models using publicly available data while Platt and Platt use industry-relative ratios.

The works cited by Espahbodi fall generally into two generations of research on bank and corporate failures. The first generation consists of studies using multiple discriminant analysis. These studies include Blum (1974), Deakin (1972), Libby (1975), and Ohlson (1980). The second generation consists of studies using probit models. They include Casey *et al.* (1986), Dopuch *et al.* (1987), and Pastena and Ruland (1986). After discussing the limitations of the models used in these studies, Espahbodi develops a logit model while noting its limitations as described by Palepu (1986).

Platt and Platt (1991) extends the work on the predictive capabilities of industry-relative bankruptcy models begun in Platt and Platt (1990). The former study refers to the latter for a discussion of the properties of industry-relative ratios, and to Jones (1987) for a literature review on corporate failures. The evidence on the industry-

specific distributional properties of ratios found in [Deakin \(1976\)](#) and [Frecka and Hopwood \(1983\)](#) is cited by [Platt and Platt \(1991\)](#) as support for their industry-specific approach to bankruptcy prediction. [Lev \(1969\)](#) provides the industry-relative framework.

[Asness and Smirlock \(1991\)](#) establish the rationale for their event-study of intra-industry effects by referring to similar research by [Baginski \(1987\)](#), [Clinch and Sinclair \(1987\)](#), [Foster \(1981\)](#), and [Han et al. \(1989\)](#). They then adopt a seemingly unrelated regression approach for testing their hypotheses that was developed by [Schipper and Thompson \(1983, 1985\)](#). The approach overcomes problems with regression residuals that are not independent or identically distributed.

[Kaen and Tehranian \(1990\)](#) rely less on accounting research in their case study, specifically mentioning only the findings of [Stickel \(1986\)](#) that there are no abnormal returns around preferred stock ratings changes. While, [Dodd et al. \(1984\)](#), [Dopuch et al. \(1986\)](#), and [Schipper and Thompson \(1983\)](#) are listed as references, but are not mentioned in the text.

Two of the finance studies in this area, [Espahbodi \(1991\)](#) and [Platt and Platt \(1991\)](#), may be considered as extensions of prior accounting research. The rationale for [Asness and Smirlock's \(1991\)](#) study of intra-industry effects is strongly rooted in accounting research.

Executive compensation

The three studies in this area examine the relationship between executive compensation and firm performance. [DeFusco et al. \(1991\)](#) measure performance using financial variables. [Agrawal et al. \(1991\)](#) develop a model that uses both industry- and firm-specific variables to measure performance. [DeFusco et al. \(1990\)](#) conduct an event-study that examines the effect of executive stock option plans on stockholders and bondholders. All three studies refer to [Brickley et al.'s \(1985\)](#) finding of a strong positive relationship between executive compensation and stockholder returns. [Agrawal et al. \(1991\)](#) and [DeFusco et al. \(1990\)](#) cite [Murphy's \(1985\)](#) similar findings.

[DeFusco et al. \(1991\)](#) refers to [Larcker \(1983\)](#) for evidence on the relationships between performance plan adoption and capital investment and market reaction. [DeFusco et al. \(1990\)](#) draws on [Hite and Long's \(1982\)](#) tax argument to explain the shift from qualified to non-qualified stock option plans for management in the 1970s. They also use [Brickley et al.'s \(1985\)](#) finding that stockholders invariably approve changes to executive compensation plans and adopt their definition of "clean" events relating to executive compensation changes. Both studies find that the market's reaction to the adoption of managerial compensation plans occurs over the interval between the board meeting date and the day following the SEC stamp date. These findings lead to a rejection of the use of such single event dates as those used by [Lambert and Larcker \(1985\)](#), [Larcker \(1983\)](#), and [Tehranian and Waegelein \(1985\)](#).

[Agrawal et al. \(1991\)](#) draw additional evidence on the relationship between executive compensation and stockholder returns from [Antle and Smith \(1986\)](#) and [Benston \(1985b\)](#). Their first-difference model controls for heteroscedasticity and autocorrelation, and is similar to those developed by [Christie \(1987\)](#) and [Dechow and Sloan](#)

(1991). It is used because Agrawal *et al.* disagree with Murphy's (1985) conclusion on the acceptability of time-series regression for individual compensation. They do, however, adopt Murphy's assumption that the pay-performance relationship is the same for all executives. Lewellen *et al.* (1988) show that compensation plans can be complicated in order to control agency problems.

Corporate control

This broad area of corporate control contains a review article on management turnover (Furtado & Karan, 1991, a bridging article), a study of free cash flows in takeovers (Lang *et al.*, 1991) and a study of the relationship between bank acquisitions and ownership structure (Allen & Cebenoyan, 1991). The first two studies refer to Lewellen *et al.* (1985) for evidence that bidder returns increase with the fraction of bidder equity held by management. The first and last studies cite Benston (1985b), but for different reasons. Otherwise, there is no common reference to accounting research.

Furtado and Karan (1991) review empirical evidence and thus cite the findings (rather than theory, hypotheses or methodology) of Antle and Smith (1986), Coughlan and Schmidt (1985), and Murphy (1985), who find that directors act in the shareholders' interests. Karan is an accounting bridging author, while Murphy is a finance bridging author. Coughlan and Schmidt also find a relationship between CEO turnover and stock performance. They also review Benston's (1985b) finding that managers are most likely to leave conglomerates whose stock returns declined, and those of both DeAngelo (1989) and Moore (1973) who find that new management takes an earnings "bath" after gaining control. Other accounting studies referenced include Bonnier and Bruner (1989), who look at management turnover in under-performing firms, and Johnson *et al.* (1985) who examine the market's reaction to the deaths of CEOs. Although Healy (1985) and Leftwich (1983) are listed as references, they are not specifically mentioned in the text.

Lang *et al.* (1991) are primarily interested in the calculation of cash flows. They turn to Bowen *et al.* (1986) and Drtina and Largay (1985) for the proper calculations as well as for guidance in picking an appropriate measure of cash flow.

Allen and Cebenoyan (1991) use Benston's (1985b) suggestion about the relationship between the exercise of management's stock options and commitment to the firm to model management's short-run optimization. They then use Raviv's (1985) suggestion that management signals through exercising options and holding stock to extend the model. Brickley *et al.* (1985) is listed as a reference, but are not specifically mentioned in the text.

Legislation

The two event studies in this area examine the effects of the 1986 Tax Reform Act on firm value (Givoly & Hayn, 1991) and the effect of the Garn-St. Germain Act on the value of Commercial Banks and Savings and Loans (Cornet & Tehranian, 1990). The accounting literature's influence on Givoly (another bridging paper) and Hayn is purely methodological. Their choice of method is influenced by the evidence on cross-sectional dependence in residuals found by Bernard (1987), Christie (1987), and Collins and Dent (1984). They then employ the randomized procedure for testing

regression coefficients in non-event periods previously used by [Leftwich \(1981\)](#) and [Lys \(1984\)](#).

Cornet and Tehranian cite the findings of [Binder \(1985\)](#), [Espahbodi and Tehranian \(1989\)](#), and [Schipper and Thompson \(1983\)](#) on the market's reaction to regulatory changes, FASB changes and merger-related changes, respectively. They employ a multivariate regression model to incorporate heteroscedasticity across equations and contemporaneous dependence of the disturbances into the hypothesis tests as do [Binder \(1985\)](#) and [Schipper and Thompson \(1983\)](#). Additionally, they employ the same F -test found in Binder and the same Wald test found in Schipper and Thompson for joint hypotheses in the multivariate regression model. While this area is small, the methodological impact of accounting research is unmistakable, particularly related to the following:

- cross-sectional dependence in residuals;
- randomized procedure for testing regression coefficients in non-event periods;
- multivariate regression model incorporating heteroscedasticity across equations and contemporaneous dependencies of the disturbances into the hypothesis test;
- F -tests and Wald tests for joint hypotheses in multivariate regression.

Other

The remaining four financial studies did not fit into a group, and more frequently are bridging papers. These studies are explored here individually. [DeAngelo and DeAngelo \(1991\)](#), a bridging paper, examine income adjusted for cash flows, dividends and managerial pay during union negotiations. They calculate operating cash flows per [Bowen et al. \(1986\)](#). [Elliot and Shaw \(1988\)](#), also a bridging paper, provide a discussion on management's choices in taking charges for plant closures. These charges, among others, may provide management with means to manipulate accounting figures. While [Liberty and Zimmerman \(1986\)](#) find no evidence of income-decreasing accounting choices by firms in routine labour negotiations, DeAngelo and DeAngelo do.

The commonality of the event-study in both accounting and finance research is evident in [Boehmer et al.'s \(1991\)](#) article on event-study methodology. They cite the findings of [Beaver \(1968\)](#) and [Patell and Wolfson \(1979\)](#) that returns variance increases around announcement dates. Following directly from this evidence, they adopt, in part, a standardized-residual method developed by [Patell \(1976\)](#) to test event-induced variance. Tests are conducted employing a generalized least squares procedure. [Collins and Dent \(1984\)](#) show that such a procedure is superior to ordinary least squares when there is event-date clustering.

[Beniesh \(1991\)](#), a bridging paper, conducts a study of the market's reaction to stock analysts' recommendations, an area in which accounting research had been done. As background, Beniesh cites [Hoskin et al. \(1986\)](#) for their finding that management's comments at the time of earnings announcements have incremental information content. Beniesh's findings of a significant market reaction to earnings announcements

and analysts' forecast revisions are consistent with the prior findings of [Hagerman *et al.* \(1984\)](#) and [Imhoff and Lobo \(1984\)](#), respectively.

In the final study, [Berger *et al.* \(1991\)](#), again a bridging paper, look at the limitations of market value accounting and propose an alternative. They use the [Financial Accounting Standards Board \(1987\)](#) proposal to have firms report portfolio components at market value as an example of how complicated market value accounting can be. They point to a [General Accounting Office \(1990\)](#) report that failed and poorly rated banks had under-reported loan loss reserves and non-performance measures to support their conclusions about the value of such variables. Finally, they disregard sales of loans in their study because [Gorton and Pennachi \(1989\)](#) find that such sales have little informational value.

What author characteristics are common to the most influential accounting articles?

To address Q6 we studied common traits of both citing and cited articles. From our earlier analysis, we determined that a large proportion of the impact of accounting research on finance occurs in bridging papers—those paper published in finance journals having one or more accounting authors. Furthermore, many of the influential accounting papers are also bridging—having one or more finance authors. In combination with the overall low citation levels found, these findings lead to the impression that finance papers and faculty rarely draw on non-bridging accounting studies. To the extent that accounting research is influential in finance studies, this impact occurs principally in the area of corporate restructuring. [Table 3](#) shows that 10 of the most frequently cited accounting documents impacted this area. Again from [Table 3](#), other areas of accounting impact are executive compensation with four accounting documents, financial variables with three accounting documents, corporate control with three accounting documents, and financial distress and legislation with two documents each. We did *not* find that the finance papers tended to focus on methodologically-oriented accounting studies.

To more fully explore the bridging phenomenon we observed, we studied the affiliations of the authors of the articles listed in [Tables 3 and 4](#) by consulting [Hasselback's \(1998\)](#) accounting and finance faculty directories. We categorized authors as either "accounting" or "finance" based on their [Hasselback](#) listing—that is, whether they were a member of an accounting or a finance faculty. We defined bridging papers as those articles publishing in finance journals having accounting authors or articles published in accounting journals having finance authors. Nine of the 19 accounting articles listed in [Table 3](#) (accounting articles cited by finance) are bridging papers (papers having an "F" following the first author). Ten of the 26 finance articles listed in [Table 4](#) (finance articles citing accounting documents) are bridging papers (papers having an "A" following the first author). Overall, 19 of the 45 papers listed in [Tables 3 and 4](#) are bridging. These findings suggest the importance of bridging papers in the impact of accounting on finance.

[Rodgers and Williams \(1996\)](#) argue that graduates of doctoral programs form networks of influence, and that among elite programs, such networks can form the basis for the domination of publications. Correspondingly, we study the doctoral granting institutions of the accounting articles' authors. [Rodgers and Williams \(1996\)](#) found a

Table 5 Accounting and finance authors' Ph.D. granting institutions

Ph.D. granting university	Finance Ph.D. degrees	Accounting Ph.D. degrees	Rodgers and Williams (1996) rank
Berkeley	0	1	10
Carnegie Mellon	1	1	11
Chicago	2	3	2
Columbia	0	1	—
Cornell	0	1	13
Illinois	0	1	1
Indiana	0	1	19
Iowa	0	1	16
MIT	1	1	—
NYU	2	0	15
Ohio State	0	1	3
Oregon	1	0	—
Purdue	2	0	20
Rochester	2	2	—
Stanford	0	2	4
SUNY—Buffalo	0	1	—
Texas—Austin	0	1	5
University of Washington	1	1	8
Unidentified	3	0	n.a.
Total	15	19	—

set of 20 elite accounting doctoral programmes in their study of the doctoral institutions of authors publishing in *The Accounting Review*. The doctoral institutions of the accounting authors listed in Table 3 are quite similar to the Rodgers and Williams list, as shown in Table 5. Excluding the 15 authors having finance doctoral degrees, 14 of the 19 accounting authors earned dissertations from Rodgers and Williams “elite” schools. This suggests that the publication domination exerted by elite accounting programmes is reflected in its use by finance. On the finance side, the evidence is also supportive of an elite school influence—of the 15 finance authors, we were able to determine the doctoral institution for 12. Of these, 10 were graduates of universities having elite accounting doctoral programmes. Whether this reflects an extension to finance of the knowledge production power function argued by Rodgers and Williams to exist in accounting, or that accounting’s most highly-regarded journals are also simply those most likely to be cited by leading finance journals, is unclear.

Concluding Remarks

This study examined the impact of accounting literature on a set of 715 articles published in seven finance journals in 1990–1991. Perhaps a more appropriate title would have been “The Insignificance of Accounting Research to Finance”. Indeed, it was surprising to us to find the apparent disregard of finance for accounting research; less than 2% of finance’s citations are to accounting documents, compared with a 9% citation of finance by accounting. These results are similar to those we found using data from Zivney and Reichenstein (1994). Clearly the interdisciplinary borrowing between the disciplines is unequal.

But is the citation rate of accounting documents by finance articles disproportionately small. It is true that even a cursory examination of finance article bibliographies suggests that research of few disciplines other than economics is frequently cited. Indeed it appears that finance may be more insular in its outlook than accounting. However, the high rate of citation of economics by finance suggests that finance does not discount research that is useful and relevant. Therefore, we find it striking that so little reference is apparent to accounting research that is so similar to (and indeed sometimes indistinguishable from) finance.

The *Journal of Economics* and the *Journal of Accounting Research* are the most highly cited accounting journals, and the citation rates of even these journals are surprisingly low (around 0.5%). Only two other accounting journals are cited more than once, and yet two more cited exactly once each. Many other accounting journals were not cited at all. Furthermore, most individual accounting documents are cited only once; only 19 are cited three or more times. We found that most of the accounting authors of these papers had earned doctoral degrees at [Rodgers and Williams' \(1996\)](#) "elite" schools, not surprising given the high publication rates of the graduates of these programmes, and this pattern was echoed in the finance papers found to most frequently cite accounting. The domination of publication by graduates of elite accounting doctoral programme in leading accounting journals may be a factor in the low overall impact of accounting on finance. This is a conjecture that needs further study.

Overall, much of the citation of the accounting literature occurs in bridging papers, that is, by finance papers having accounting authors. This finding is reinforced by studying accounting papers cited. Nearly one-third are also bridging papers, that is, papers published in accounting journals having one or more finance authors. These findings suggest that the impact of accounting on finance beyond such scholars is even more dismal than indicated by our other results.

Using content analysis, we developed a set of categories of financial research and comprehensively determined the specific contribution of a set of frequently cited accounting studies to these categories. Corporate restructurings is the finance area most impacted by accounting. Other areas of accounting impact are financial variables, corporate control, financial distress, executive compensation, and legislation. We note that the influence of accounting on finance, limited though it may be, is not limited to methodological borrowing, but also extends to theory development and findings.

Our results might have differed using other time periods or other sets of journals. Similarly, our exploration of the qualitative characteristics of the reliance by financial research on accounting employed only the finance studies most impacted by accounting research. Therefore, we did not comprehensively study the specific influence of accounting (if any) on each of the 715 finance studies³. Also, we classified articles as "finance" based upon their source journal, although some of these articles had bridging authors. It can be argued that distinguishing between finance and accounting documents in this way is somewhat arbitrary, given the closely related nature of the two discipline's subject matter. Finally, future-related research might explore the extent to which finance research is influenced by other disciplines, and the extent to which accounting research influences disciplines other than finance.

These caveats aside, our results may give pause to some accounting scholars. Whether finance scholars find accounting capital markets research to be uninformative or for some reason generally not useful, or whether finance research simply has not developed a tradition of using accounting research, the only conclusion that can be drawn is that the impact of accounting research on finance is very slight indeed.

Acknowledgments

We are grateful to Paul Williams, of North Carolina State University, and Joe Weintrop, CUNY Baruch, for their detailed critiques and suggestions on earlier versions of this paper.

Notes

1. A fourth journal, the *Journal of Business, Finance and Accounting*, is included by the authors as a finance *citing* journal, and it shows up as a frequently cited journal, but only because of its self-citations.
2. A citation frequency of 3 is commonly used in citation studies to eliminate randomly occurring influences (see Garfield, 1979). While this threshold has traditionally been applied to individual documents (i.e., to eliminate documents that occur with a citation frequency of less than 3 from an analysis), we here extend this concept to interdisciplinary (accounting) citation frequencies.
3. However, we did calculate the occurrence of references to accounting articles to ensure that our analysis did not systematically overlook studies that were widely referenced by finance, but never by finance studies that referred to three or more accounting articles. We found, however, that every widely referenced accounting study was included in our analysis of the 27 finance articles.

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