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MARTIN BUGEJA, RAYMOND DA SILVA ROSA AND TERRY WALTER

Expert Reports in Australian Takeovers: Fees and Quality

Target firms in Australian takeovers are required to commission the preparation of an independent expert report in circumstances where there is a perceived conflict of interest with the bidder. As approximately half of these reports are prepared by firms with which the target has other business dealings, concern has been expressed over the quality of these reports due to the suggestion that such reports are provided at lower fees. We examine the 191 independent expert reports provided in all 649 Australian takeover bids initiated in the period 1990 to 2000 inclusive. Using an expert-fee model, we find that the fees for reports by experts with other business dealings with the target are not lower than those of unrelated experts. In addition, the results indicate that experts with other dealings with the target provide reports with a significantly smaller valuation range, consistent with these reports being of higher, rather than lower, quality. Our findings are inconsistent with the U.S. and New Zealand experience of prohibiting audit firms from providing valuation advice in takeovers.

Key Words: Expert reports; Independent experts; Takeovers.

The Australian Corporations Law, 2000, requires a target firm in a takeover to obtain an independent expert's report where there are common directors with the bidding firm and/or the bidding firm has a 30 per cent or greater holding in the target when the bid is announced. The role of the expert is to express an opinion on the adequacy of the offer price. The independence of experts has been criticized, as approximately half of all reports are produced by experts with other dealings with the target, with a quarter prepared by the target firm's current auditor. In particular, it is suggested that experts that have other dealings with the target provide their reports at reduced fees, leading to a concern over report quality. The alleged lack of expert independence and report quality led to the Australian Securities and

MARTIN BUGEJA (m.bugeja@econ.usyd.edu.au) is a Lecturer in the Discipline of Accounting and Business Law at The University of Sydney, RAYMOND DA SILVA ROSA an Associate Professor in the Department of Accounting and Finance at The University of Western Australia and TERRY WALTER the Head, School of Banking and Finance, The University of New South Wales.

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Investments Commission (ASIC) announcing a review of its policies on expert reports in February 2005.[1]

This study uses an expert fee model to test the validity of the criticism that experts with other business dealings with the target provide their reports at lower fees. The multivariate results provide no evidence that experts with other business associations with the target provide their reports at lower fees. The results show, however, that the specialist divisions of both large and small accounting firms provide their reports at significantly lower fees.

As expert report quality cannot be directly measured, the quality of reports provided by experts with other dealings with the target is proxied using the valuation range disclosed in the expert report. Inconsistent with such reports being of lower quality, the absolute valuation range provided by these experts is significantly smaller.

LEGAL REQUIREMENT AND EXPERT INDEPENDENCE

The expert report requirement was introduced in 1980 to protect target shareholders when there is a conflict of interest between the target and bidder.[2] The expert's role is to value the target firm and state whether the offer is 'fair and reasonable'.[3] Section 648A of the Corporations Law requires the expert to disclose the report fee and any dealings or business relationships they have with the target and/or bidder.

ASIC indicates in Practice Note 42, *Independence of Experts' Reports* (1993), that an expert should decline the appointment if he or she (a) is a substantial creditor or has a financial interest in either party, (b) has participated in strategic planning work for either party, or (c) acts as lawyer, banker, financial consultant, tax adviser or accountant to either party.

The auditor of the target or offeror is not precluded from providing an expert report. In contrast, from 2000, the U.S. Securities and Exchange Commission (SEC) rules on auditor independence prohibit an auditor from providing fairness opinions, including those in mergers.[4] The Sarbanes-Oxley Act, 2002, reinforces this prohibition. Similarly, the appointment of an auditor as an independent adviser is disallowed by the New Zealand Takeovers Code. The results of this study will provide evidence as to whether the exclusion of target auditors from valuation services in takeovers is warranted.

The existence of other dealings between the expert and target has led to criticism of the 'independence' of expert reports in the financial press and professional

[1] Better experts' reports: ASIC policy proposal, Australian Securities and Investments Commission, February 2005.

[2] For a discussion of whether the expert report requirement is justified see Matolcsy (1982) and Anderson and Chalmers (1996).

[3] The target firm is responsible for hiring the expert and paying the expert's fee.

[4] SEC Revision of the Commission's Auditor Independence Requirements, File No. S7-13-00.

literature. Much of this criticism focuses on takeovers where the expert is the target's current auditor. Criticisms first appeared in the financial press in the late 1980s following court rulings that successfully challenged the independence of the expert.[5] Articles with titles including 'Shareholders Deserve Deal on Expert Reports', (Chanticleer, 1989, p. 84) and 'How Independent Are the Independent Experts?' (Lecky and Burge, 1988, pp. 25, 29). Called for experts to lift report quality. Criticism was also featured in the professional and academic literature (see English, 1989; Lonergan and Fenton, 1989; Hubbard, 1990). For example, English (1989) calls for accounting firms to raise the quality of reports to avoid regulation that excludes them from the market. In recent times, criticisms of expert independence have resurfaced following the decision in the Duke[6] case and the expert report provided in the takeover bid for GIO Australia Holdings Ltd by AMP Limited (Lecky, 1999, p. 63; Chanticleer, 1999, p. 54).

One criticism is that experts with other dealings with the target produce their reports at a lower than commercial fee, in effect cross-subsidizing the report's preparation from other income received from the target. For example, the Chanticleer section of the *Australian Financial Review* (1989) states that 'accountants, merchant banks and stockbrokers are able to provide cheap expert reports because they get good fees from the same companies for providing other services' (Chanticleer, 1989, p. 84). The article argues that companies that are required to provide expert reports should pay the 'full-price' for the reports and not have the fee subsidized from fees paid for other services. Similarly, Lonergan and Fenton (1989) recommend that experts be paid a fee 'on an hourly basis, at a remuneration level sufficient for them to do their job properly' (Lonergan and Fenton, 1989, p. 25). Although offering customers a discount for repeat business is an acceptable and common business practice, it is suggested that in this case the lower fee may be reflected in a lower quality report.[7] This article tests the validity of this type of criticism.

PRIOR RESEARCH

Eddey (1993) finds no significant difference between takeover premiums in cash bids with and without expert reports. In contrast, using a sample containing both cash and equity bids, Bugeja (2005a) finds that takeover premiums are significantly

[5] These cases include *ANZ Nominees Pty Ltd v Wormald International Ltd* (13 ACLR 698, 1987) and *Phosphate Co-operative Co of Aust Ltd v Shears & Anor* (14 ACLR 323, 1988). The expert in the first case was Schroders Australia Ltd, while Arthur Andersen prepared the report in the second case.

[6] The Duke Case arose out of the 1987 takeover by Kia Ora Gold Corporation NL (subsequently renamed to the Duke Group) of Western United Limited. When the Duke Group collapsed in 1989, the liquidator successfully recovered damages from the directors and the independent expert, Nelson Wheeler (Duke Group Limited (In Liquidation) v Pilmer & Ors [1999] SASC 97, 73 SASR 64).

[7] An expert without any links to the target firm may also provide reports at a reduced fee if it increases the possibility of obtaining future business from the target.

lower in offers with expert reports. The results in Eddey (1993) also indicate that 'fair and reasonable' reports cost less and are shorter than unfavourable reports, consistent with experts providing more detail to justify a 'not fair and reasonable' opinion. The study does not, however, examine whether expert independence influences expert fees or opinions.

Bugeja (2005b) studies whether experts that have other business dealings with the target are more likely to provide an opinion that agrees with the recommendation of target firm directors. The results show that expert independence does not influence the frequency with which experts agree with target directors. However, the market reaction to the release of the expert report indicates that reports authored by the specialist division of the target firm auditor lack credibility.

HYPOTHESIS DEVELOPMENT

Expert Fee Cross-Subsidization

This study first tests the criticism that experts with other dealings with the target charge lower fees.

H1: Fees charged for independent expert reports are lower when there are other business dealings between the expert and target firm.

There are a number of potential explanations of a negative association between report fees and other dealings. For example, the fee may be lower due to knowledge transfers from the expert's other dealings with the target. This explanation is likely to be plausible, however, only for certain types of prior dealings with the target (e.g., prior valuation services). In the vast majority of cases, information transfer is unlikely as the expert report is authored by a different division of the firm and the information obtained in the other dealings (e.g., auditing) would not be of use in valuation services.

An alternative explanation for a negative relation between expert fees and prior dealings is that experts that provide expert services as a one-only service to existing clients incorrectly price the service due to inexperience in this area of consulting. The validity of this argument requires the majority of pricing errors to be in the client's favour.

Prior research in auditing has found that the provision of other services to clients generally increases rather than decreases the audit fee (see Simunic, 1984; Palmrose, 1986; Davis *et al.*, 1993). Davis *et al.*, (1993) find that the increased fee is a result of greater audit effort, measured by hours, when the auditor is also providing non-audit services. It is possible that the market for expert reports exhibits a similar effect on fees due to concerns over independence. Experts that provide other services to the target firm may charge higher and not lower fees if they respond to independence concerns by increasing the amount of effort or care taken in the report's preparation.

The testing of H1 requires the development of an expert fee model, as it is necessary to control for other influences on fees. The expert's fee is likely to reflect the complexity and risk involved in preparing the report. The complexity of the

expert report will be affected by the size of the target firm since larger firms are likely to have more complex operations. Size is measured as the market capitalization of the target firm at the financial year-end prior to the takeover announcement. The degree of decentralization (i.e., number of subsidiaries) and the degree of diversification (i.e., number of industry segments in which the target firm operates) of the target firm will also affect complexity. An additional measure of complexity is the length of the expert report, as more complex valuations will require the production of a longer report.

Valuation complexity will also be a function of whether target firm value relies on assets-in-place or growth options. The valuation of growth options is more difficult and is likely to lead to a higher fee. In addition, as the valuation of growth options is subject to more uncertainty, the risk of a valuation error increases. The target firm's market-to-book ratio is used as a proxy for growth options.

Eddey (1993) finds fees are lower where a 'fair and reasonable' opinion is provided, indicating the importance of controlling for opinion type. The payment method will also impact on valuation complexity as where equity is used as payment, the expert may choose to value the acquiring firm rather than rely on current market price. The length of time the expert has to work on the report will increase with the number of days between the takeover announcement and the report release. A longer length of time is expected to increase expert fees.

The final two variables control for whether the report preparer is affiliated to an accounting firm. Research in the auditing literature has shown consistently that large auditing firms earn a fee premium in the provision of audit services (see Simunic, 1980; Francis and Simon, 1987; Anderson and Zeghal, 1994; Craswell *et al.*, 1995; DeFond *et al.*, 2000; Ferguson and Stokes, 2002). As it is possible that Big 6/5 firms earn a fee premium when providing expert valuation services, an indicator variable is added to the model.[8] To determine if fees charged by small accounting firms also differ to fees charged by other experts, an indicator variable is included in model (1).

The following expert fee model incorporating the above controls is used to test H1[9]:

$$\begin{aligned} lnFee_i = {} & \alpha + \beta_1 Expaud_i + \beta_2 Exprel_i + \beta_3 lnMktcap_i + \beta_4 Subs_i + \beta_5 Ind_i \\ & + \beta_6 lnPage_i + \beta_7 MB_i + \beta_8 Payt_i + \beta_9 Opinion_i + \beta_{10} Days_i \\ & + \beta_{11} ExptB6_i + \beta_{12} ExptNB6_i + \varepsilon_i; \end{aligned} \quad (1)$$

where *lnFee* = natural logarithm of the expert fee;
Expaud = indicator variable coded as 1 if the expert is also the auditor of the target;
Exprel = indicator variable coded as 1 if the expert has non-audit dealings with the target;
lnMktcap = natural logarithm of the target firm's market capitalization as at the financial year-end prior to the takeover announcement;

[8] During the period of this study (i.e., 1990–2000) the number of large accounting firms decreased from six to five with the merger of Coopers and Lybrand with Price Waterhouse in 1997.

[9] To control for heteroscedasticity the expert fee, market capitalization and expert report length are transformed into their natural logarithm. Re-estimating the model without transforming these variables does not change the results of this study.

Subs = number of subsidiaries reported by the target firm as at the financial year-end prior to the takeover announcement;
Ind = number of industry segments reported by the target firm as at the financial year-end prior to the takeover announcement;
lnPage = natural logarithm of the number of pages in the expert report;
MB = target firm's market-to-book ratio measured at the financial year-end prior to the takeover announcement;
Payt = indicator variable coded as 1 if the consideration offered by the bidder is exclusively cash;
Opinion = indicator variable coded as 1 if the expert opinion indicates that the offer price is 'fair and reasonable';
Days = number of days between the takeover announcement and release of the expert report;
ExptB6 = indicator variable coded as 1 if the expert is the specialist division of a Big 6/5 accounting firm; and
ExptNB6 = indicator variable coded as 1 if the expert is a non Big 6/5 accounting firm.

Given the heightened criticism of expert reports prepared by target auditors, model (1) includes two variables to test H1. The first variable is an indicator variable that signifies expert reports produced by the specialist division of the target's auditor (i.e., Expaud). The second variable is an indicator variable that is coded as one for experts with non-audit business dealings with the target (i.e., Exprel). H1 indicates that these variables are expected to have a negative association with fees.

Expert Report Quality

Critics of expert independence claim that reports produced by experts with other dealings with the target are of lower quality than those with no other dealings. This study tests the validity of this claim, using the expert's valuation range as a proxy for report quality. It is necessary to use a proxy because the measurement of report quality is problematic. Given that the statutory role for the expert is to compare the assessed value of a target share with the offer price, his or her ability to determine this value with accuracy will be critical in determining their opinion and should be an accurate measure of report quality. If the criticisms of experts with other dealings with the target are correct, it is expected that their reports will present a larger valuation range than other experts. This leads to Hypothesis 2:

H2: The valuation range disclosed in the expert report is greater when there are other business dealings between the expert and target firm.

The testing of this hypothesis requires controls for other factors that determine the valuation range. These factors are expected to be dominated by the complexity of the valuation task. As a result, the same variables used to measure complexity in regression model (1) are used in the following model of the expert's valuation range:

$$Range_i = \alpha + \beta_1 Expaud_i + \beta_2 Exprel_i + \beta_3 lnMktcap_i + \beta_4 Subs_i + \beta_5 Ind_i + \beta_6 lnPage_i + \beta_7 MB_i + \beta_8 Days_i + \beta_9 ExptB6_i + \beta_{10} ExptNB6_i + \varepsilon_i; \quad (2)$$

The dependent variable is the difference between the maximum and minimum value attributed to a target share by the expert. We also scale this range by

expressing it as a percentage of the target share price three months prior to the takeover announcement.[10] All other variables are as previously defined. If the criticisms of expert reports are correct, then the indicator variables signifying that the expert is the target auditor or has non-audit dealings with the target should be positive. It would be expected that the coefficient on the variable indicating the number of days the expert has to complete the report will be negative as the longer time period available to complete the report will allow a more precise valuation to be calculated.

There is evidence from the auditing literature indicating that audit quality is related to audit firm size (see Balvers *et al.*, 1988; Palmrose, 1988; Beatty, 1989; Teoh and Wong, 1993). As it is possible that large accounting firms also provide higher quality non-audit services, a dummy variable is added to regression model (2) to indicate expert reports prepared by the specialist division of large accounting firms. A dummy variable is also added for reports prepared by non-Big 6/5 accounting firms to assess if these reports differ in quality from reports prepared by other providers. All other variables in model (2) proxy for the complexity of completing the valuation and are expected to be positively related to the valuation range.

DATA COLLECTION AND DESCRIPTIVE STATISTICS

All takeover announcements for publicly listed companies during the period 1990 to 2000 were identified using the Current Takeovers' section of the *Australian Financial Review*.[11] The Connect 4 Mergers and Acquisitions Database and SDC Platinum were used to cross-check the takeover listing with any omissions added to the sample. This search identified 649 takeover announcements. Target firm financial information required to estimate model (1) was manually collected from the annual report for the financial year ending immediately prior to the bid announcement.

The presence of an expert report was determined by reading the Part B/Target Statement provided to the ASX. Where an expert report was prepared, the following information was collected: the reason for the report's preparation, the expert's opinion, the page length of the report, the report fee, and any business dealings between the expert and target. Table 1 shows the distribution of expert reports and expert fees in each year of the study. Across the sample period, approximately 45 per cent of target firms commissioned the preparation of an independent expert report.[12] The data show an increase in expert fees over the sample period, although the increase is not gradual over time.

[10] The regression was also estimated using alternatively the low-point and mid-point of the valuation range as the scalar. The results did not change.

[11] The *Australian Financial Review* lists current takeovers in the Monday edition every week.

[12] The number of expert reports reported in the table is restricted to those provided in takeovers for reasons specified in the Corporations Law. It is recognized that expert reports and valuation services are provided for other reasons so that the table understates the total number of reports provided.

TABLE 1

EXPERT REPORTS AND EXPERT FEE BY YEAR[a]

Year of takeover	No. of expert reports	No. of takeovers	Mean fee $	Median fee $	*SD* fee $	Mean (CPI adjusted) $	Median (CPI adjusted) $
1990	40	87	45,712	25,000	50,643	57,003	31,175
1991	29	80	20,926	15,000	16,548	24,781	17,764
1992	16	48	36,469	25,500	43,677	42,383	29,635
1993	18	56	31,167	23,500	21,160	35,853	27,034
1994	9	34	67,500	44,250	60,849	76,243	49,982
1995	18	63	65,176	30,000	80,144	71,357	32,845
1996	18	62	71,433	40,000	69,878	75,044	42,022
1997	8	46	43,250	26,000	41,675	44,832	26,951
1998	11	58	112,500	92,500	90,745	116,615	95,833
1999	11	51	71,000	35,000	61,836	72,690	35,833
2000	13	64	178,042	126,500	179,023	178,042	126,500
Total	191	649	59,336	30,000	78,795		

[a] Expert reports are identified from the target firm documents lodged with the ASX. The year of takeover refers to the year in which the takeover was announced. Fees charged for the preparation of expert reports and any dealings between the target and expert are collected from the target documents lodged with the ASX. The last two columns present fees adjusted for inflation using the Consumer Price Index (CPI) published by the Australian Bureau of Statistics.

Table 2 presents descriptive statistics on the sample. The size distribution of target firms varies widely, with the median size being much smaller than the mean. The mean profit of the target firms in the year prior to the bid is $1.7 million. Further investigation reveals that 43 per cent of targets made a loss in the year before the offer compared to 29 per cent of the bidders. The payment form is exclusively cash in 63 per cent of offers. On average, the expert's valuation range is 27 cents, or 31 per cent of the target firm's share price three months prior to the takeover announcement. Due to the skewed nature of the data the averages overstate the typical valuation range with the median absolute and relative ranges being 10 cents and 18 per cent, respectively.[13]

Table 3 provides a breakdown of the type of association disclosed by the expert for each year in the sample. The majority of experts (53 per cent) disclose no dealings with the target firm, while 27 per cent are the specialist division of the target firm's current auditor. Of those experts that are the current auditor of the target firm, just under half also supply non-audit services to the target.

[13] The valuation range was also calculated as a percentage of the low end of the valuation range. The mean and median range were, respectively, 29.6 per cent and 14.8 per cent of the low point of the valuation range.

TABLE 2

DESCRIPTIVE STATISTICS

Variable	N^a	Mean	Median	*SD*	Min.	Max.
Total assets ($000)	641	182,642	29,472	560,203	1	7,724,200
Market-to-book ratio	641	1.31	0.94	1.75	–12.04	15.65
Total liabilities ($000)	641	98,733	11,299	385,478	7	6,265,700
Total equity ($000)	641	83,909	16,486	213,825	–30,579	1,942,700
Sales revenue ($000)	641	150,840	19,847	443,466	0	4,886,553
Operating profit after tax ($000)	641	1,708	299	30,701	–240,249	371,500
Number of subsidiaries	641	11	6	18	0	205
Number of industry segments	641	1.5	1	1.01	1	8
Days to report production	191	51	41	32.75	12	195
Expert valuation range (cents)	191	26.7	10.0	44.6	0	265
Expert valuation range (% of share price)	191	30.9	17.6	37.8	0	204.5
Page length of expert report	191	47.9	38.0	42.0	5	375

[a] The annual report for eight target firms was not available for the year prior to the takeover announcement. Five of these firms were listed on the ASX in the year of the takeover, two firms did not issue annual reports as their listing was suspended, while the file for one firm could not be located. *Note*: Financial information is collected from the financial statements prepared in the year immediately preceding the takeover announcement. Information on the expert reports is collected from the target firm documents lodged with the ASX.

RESULTS

Tests of Hypothesis 1

Table 4 presents univariate tests of H1. In Panel A, average fees for experts without any prior dealings with the target are compared to those with any dealings with the target. In Panel B, average expert fees charged by target auditors are compared to those charged by non-audit experts. The results indicate that fees are significantly lower where the expert has any type of business dealing with the target. In addition, target auditors charge significantly lower fees than other experts. Although these results are consistent with H1, as shown below they are sensitive to the inclusion of control variables in the expert fee model.

The results of estimating regression model (1) are presented in column (1) of Table 5. All reported *t*-statistics are based on White's (1980) consistent covariance estimator. The results do not support H1, with insignificant coefficients on the indicator variables for both audit and non-audit dealings with the target. The coefficients on the control variables indicate that expert fees are significantly positively related to the size of the target firm, expert report length and the number of days the expert takes to complete the report. The results also indicate that accounting firms, irrespective of size, charge lower fees for expert reports than do

TABLE 3

BUSINESS DEALINGS BETWEEN THE EXPERT AND TARGET FIRM[a]

Year of takeover	Auditors only	Auditors and other non-audit services	Tax/accounting services	One-off consulting services	Share registry	Previous expert reports	Underwriter/ stockbroker	Banker	Director related links	Nil	Total
1990	11	2	1	1		4	1		1	19	40
1991	4	5	2			3				15	29
1992	2	5			1	1				7	16
1993	2	2		2		2				10	18
1994	1	2		1		1				4	9
1995	1	3		4		1				9	18
1996	3	3	1							11	18
1997	1									7	8
1998						1		1	1	8	11
1999			1			3		1		6	11
2000	1	3	1			3				5	13
Total	26	25	6	8	1	19	1	2	2	101	191
%	14	13	3	4	0.5	10	0.5	1	1	53	100

[a] Business dealings between the expert and target firm are identified from the takeover documents lodged by the target with the ASX. The year of takeover refers to the year in which the takeover was announced.

TABLE 4

ASSOCIATION BETWEEN EXPERT FEE AND ANY PRIOR DEALINGS BETWEEN THE EXPERT AND TARGET FIRM[a]

Panel A: Any dealings vs no dealings

	Any dealings with the target (n = 90)		No dealings with the target (n = 101)
Average expert fee	$50,434		$67,271
z-statistic (H0: means of subgroups are equal)		–1.44*	

Panel B: Audit vs non-audit experts

	Expert is the current auditor (n = 51)		Expert is not the current auditor (n = 140)
	$32,367		$68,759
Average expert fee		–3.90***	
z-statistic (H0: means of subgroups are equal)			

* $p < 0.10$ (two-tailed), *** $p < 0.01$ (two-tailed).

[a] The fee charged by the expert and any previous dealings are collected from the expert report supplied by the target firm in its takeover documents lodged with the ASX.

other providers.[14] The coefficients on all other control variables are insignificant. Inconsistent with Eddey (1993), we fail to find an association between the type of opinion and expert fees. The adjusted R^2 indicates that the expert fee model explains approximately 69 per cent of the variation in expert fees. Additionally, the F-statistic shows that the significance of the regression model is high.[15]

An analysis of expert report providers over the study period indicates that the market for statutory expert reports is dominated by Grant Samuel and Associates and the specialist divisions of large accounting firms.[16] In aggregate these firms prepared 59 per cent of the 191 expert reports, and earned 72 per cent of total fees. Regression model (1) is modified to examine if any of these firms are

[14] The fee model was re-estimated excluding the controls for large and small accounting firms. In this specification the coefficient on Expaud was negative and significant at the 5 per cent level. Given the insignificant findings on the auditor variable in the full model, this negative relationship is driven by the lower fees charged by accounting firms per se.

[15] As shown in Table 1, the distribution of expert fees is skewed with the median being less than the mean. To examine if the results presented in Tables 4 and 5 are sensitive to outliers, the analysis was conducted again after eliminating observations in the top and bottom 5 per cent of the distribution. The results were unchanged.

[16] Grant Samuel & Associates is an Australian and New Zealand advisory firm specializing in corporate valuations and mergers and acquisition advice.

TABLE 5

EXPERT FEE MODEL REGRESSION[a]

Variables	Coefficient *t*-statistic (1)	Coefficient *t*-statistic (2)	Coefficient *t*-statistic (3)
Intercept	4.9943 (9.69***)	5.0968 (9.39***)	4.7355 (8.75***)
Expaud	−0.0969 (−0.83)	−0.0961 (−0.83)	−0.1325 (−1.24)
Exprel	0.0842 (0.60)	0.0959 (0.69)	0.0265 (0.18)
LnMktcap	0.2030 (5.33***)	0.1948 (4.79***)	0.2077 (5.23***)
Subs	0.0059 (1.13)	0.0059 (1.14)	0.0037 (0.71)
Ind	0.0154 (0.28)	0.0162 (0.29)	0.0181 (0.34)
lnPage	0.6123 (5.87***)	0.6048 (5.76***)	0.6306 (6.03***)
MB	−0.0258 (−0.60)	−0.0222 (−0.52)	−0.0165 (−0.40)
Payt	0.1172 (0.91)	0.1090 (0.85)	0.1295 (1.01)
Opinion	−0.0477 (−0.48)	−0.0418 (−0.42)	−0.0049 (−0.05)
Days	0.0032 (1.98**)	0.0033 (2.04**)	0.0030 (1.92**)
ExptB6	−0.4555 (−3.66***)	−0.4035 (−2.38**)	—
ExptNB6	−0.8748 (−4.74***)	−0.8365 (−4.10***)	−0.7296 (−3.70***)
AA	—	—	−0.6072 (−3.11***)
EY	—	—	−0.3686 (−1.76*)
DEL	—	—	−0.5677 (−2.92***)
KPMG	—	—	−0.4942 (−2.65***)
PWC	—	—	−0.0440 (−0.25)
GSam	—	0.1339 (0.57)	0.1633 (0.48)
F-statistic	30.88***	28.41***	22.23***
Adjusted R^2	0.6901	0.6888	0.6915
N	191	191	191

* $p < 0.10$ (two-tailed), ** $p < 0.05$ (two-tailed),*** $p < 0.01$ (two-tailed).

[a] Results of testing the expert fee model (1). The test variables are indicator variables coded as 1 where the expert is the target firm's auditor (i.e., Expaud) or the expert has non-audit dealings with the target (i.e., Exprel). Controls are included in the model for whether the expert is a Big 6/5 accounting firm (i.e., ExptB6) or a non-Big 6/5 accounting firm (i.e., ExptNB6). The risk and complexity of preparing the expert report are proxied by: the natural log of the target firm market capitalization (i.e., LnMktCap), the number of subsidiaries (i.e., Sub) and industry segments reported by the target firm (i.e., Ind), the page length of the expert report (i.e., LnPage), the target firm market-to-book ratio (i.e., MB), an indicator variable coded as one where the method of payment is exclusively cash (i.e. Payt), an indicator variable coded as one where the expert opinion indicates the offer is 'fair and reasonable' (i.e., Opinion), and the number of days between the takeover announcement and release of the expert report (i.e., Days).

rewarded for their expertise in preparing expert reports with a fee premium. In the second column of Table 5, an indicator variable is added to the model where a report is prepared by Grant Samuel, while in column (3), additional indicator variables are added for each of the large accounting firms. The results show that Grant Samuel does not earn a fee premium, while all the accounting firms with the exception of PricewaterhouseCoopers earn significantly lower fees.[17]

The finding that large and small accounting firms (other than Pricewaterhouse-Coopers) charge lower fees can be interpreted in a number of ways. One possibility is that accounting firms have greater expertise in providing valuation services, which allows them to be more efficient in the preparation of expert reports. Alternatively, given that accounting firms dominate the expert report market, the lower fees may reflect competition between firms to attract business. Another explanation is that accounting firms reduce expert fees to convince the target to purchase other business from the firm. This explanation is less likely as a successful bid will mean it is the acquiring firm that makes the decision on which firms to appoint as consultants and auditors. It is also possible that accounting firms complete valuations on the smaller takeover deals and the fee model has not adequately controlled for the effect of size.

Tests of Hypothesis 2

The mean valuation range for experts without other dealings with the target is 34 cents, in comparison to a range of 25 cents for experts with non-audit dealings with the target. A *t*-test indicates that these valuation ranges are insignificantly different from each other ($p = 0.16$). The average valuation range for experts that are target auditors is 13 cents. Inconsistent with H2, a *t*-test shows that this valuation range is significantly smaller than for experts with no dealings with the target ($p = 0.01$).

The results of estimating regression model (2) using the absolute valuation range as the dependent variable are presented in column (1) of Table 6. Contrary to the criticism levelled at experts and inconsistent with H2, the valuation range is significantly smaller when the expert has either audit or non-audit dealings with the target. As expected, the valuation range is lower when the expert has additional time to work on the report. The complexity of the valuation task increases the valuation range, with significant positive coefficients found for target firm size and the page length of the report.[18]

In column 2 of Table 6, the dependent variable in model (2) is re-specified as the valuation range expressed as a percentage of target share price three months prior to the takeover announcement. The only variable that is significant is the

[17] The variable for PricewaterhouseCoopers represents the aggregation of expert reports prepared pre-merger by Price Waterhouse and Coopers and Lybrand. The regression was re-estimated with separate indicator variables for reports prepared by Price Waterhouse and Coopers and Lybrand. The coefficients on both variables were insignificant.

[18] Matolcsy (1995) advocates that experts use discounted cash flows as their valuation method. Regression model (2) was re-estimated after including an indicator variable coded as 1 for those reports where the expert used discounted cash flows as one of their valuation techniques. The coefficient on this variable was insignificant.

TABLE 6

EXPERT VALUATION RANGE REGRESSION[a]

	Coefficient *t*-statistic	
Variables	Absolute range (1)	Scaled range (2)
Intercept	−0.2645	−0.2306
	−1.24	−1.16
Expaud	−0.1213	0.0620
	−1.91*	0.78
Exprel	−0.1269	−0.0562
	−1.73*	−0.90
LnMktcap	0.0165	−0.0018
	3.41***	−0.26
Subs	0.0033	−0.0030
	1.34	−1.39
Ind	−0.0216	−0.0140
	−0.87	−0.38
lnPage	0.1011	0.1598
	1.73*	3.60***
MB	0.0332	−0.02438
	1.54	−1.27
Days	−0.0014	0.0009
	−2.35**	1.11
ExptB6	0.0126	−0.0232
	0.14	−0.39
ExptNB6	−0.0889	0.0539
	−1.24	0.68
F-statistic	4.418***	1.835*
Adjusted R^2	0.1650	0.0461
N	191	191

* $p < 0.10$ (two-tailed), ** $p < 0.05$ (two-tailed),*** $p < 0.01$ (two-tailed).

[a] Results of testing expert valuation range model (2). The test variables are indicator variables coded as 1 where the expert is the target firm's auditor (i.e., Expaud) or the expert has non-audit dealings with the target (i.e., Exprel). Controls are included in the model for whether the expert is a Big 6/5 accounting firm (i.e., ExptB6) or a non-Big 6/5 accounting firm (i.e., ExptNB6). The risk and complexity of preparing the expert report are proxied by: the natural log of the target firm market capitalization (i.e., LnMktCap), the number of subsidiaries (i.e., Sub) and industry segments reported by the target firm (i.e., Ind), the length of the expert report (i.e., LnPage), the target market-to-book ratio (i.e., MB), and the number of days between the takeover announcement and release of the expert report (i.e., Days).

page length of the expert report. The coefficients on the two dummy variables denoting experts that have other dealings with the target are both insignificant.[19]

Assuming that the valuation range is a reasonable proxy for report quality, there is no evidence to support the criticism that experts with other dealings with the target provide lower quality reports. In contrast, the results indicate that the reports provided by these experts have either a reduced valuation range (when the unscaled dependent variable is used) or are insignificantly different from those of the other experts (for the scaled dependent variable).

CONCLUSIONS AND FUTURE RESEARCH

This study investigates the validity of the criticism that experts with other dealings with the target prepare reports at lower fees. The multivariate results show no association between expert dealings with the target and report fees. Accounting firms are found to charge lower fees in the expert report market, consistent with competition between these firms. The quality of reports provided by experts with other business with the target is examined using the valuation range as a proxy for quality. The results indicate that experts with other dealings with the target provide reports that have a significantly lower absolute valuation range. This finding is consistent with these reports being of higher and not lower quality. These results indicate that calls to prohibit auditors and other firms with dealings with the target from providing expert reports are unjustified. The exclusion of these firms may actually result in lower quality reports.

The measurement of expert report quality is subjective and any proxy used is by definition an imperfect measure. Future research can perhaps examine expert report quality and its relationship to expert independence using alternative measures. For example, it may be possible to assess quality using the accuracy of the expert's valuation relative to the final offer price. Such an approach, however, needs to control for the recommendation of directors and takeover outcome as it is possible that experts tailor their value to agree with the director's view on the adequacy of the offer. Alternatively, the expert's value could be compared to an independent valuation calculated by the researcher. This method avoids the problem of the expert's valuation being targeted at a known price.

REFERENCES

Anderson, D., and K. Chalmers, 'The Role of the Expert's Report in Corporate Takeovers', *Current Commercial Law*, Vol. 4, No. 2, 1996.

[19] It is interesting to note that the coefficients on the large and small accounting firm variables change sign (albeit insignificantly) between the unscaled and scaled versions of regression model (2). A possible explanation for this result is that small accounting firms provide expert reports to targets that are significantly smaller in size ($p = 0.08$) and which have significantly lower share prices ($p = 0.01$) than large accounting firms. As a result of this difference in target firm size, the valuations of small/(large) accounting firms have a lower/(higher) absolute range but higher/(lower) relative range than other experts.

Anderson, T., and D. Zeghal, 'The Pricing of Audit Services: Further Evidence From the Canadian Market', *Accounting and Business Research*, Summer 1994.

Balvers, R., B. McDonald and R. Miller, 'Underpricing of New Issues and the Choice of Auditor as a Signal of Investment Banker Reputation', *The Accounting Review*, October 1988.

Beatty R., 'Auditor Reputation and the Pricing of Initial Public Offerings', *The Accounting Review*, Vol. 64, No. 4, 1989.

Bugeja, M., 'The Effect of Independent Expert Reports in Australian Takeovers', *Accounting and Finance*, forthcoming, 2005a.

——, 'The Independence of Expert Opinions in Corporate Takeovers: Agreeing With Directors' Recommendations', *Journal of Business, Finance and Accounting*, forthcoming, 2005b.

Chanticleer, 'Shareholders Deserve Deal on Expert Reports', *Australian Financial Review*, 23 June 1989.

——, 'Controversial Value of Experts' Reports', *Australian Financial Review*, 3 September 1999.

Craswell, A., J. Francis and S. Taylor, 'Auditor Brand Name Reputations and Industry Specializations', *Journal of Accounting and Economics*, Vol. 20, No. 3, 1995.

Davis, L., D. Ricchiute and G. Trompeter, 'Audit Effort, Audit Fees, and the Provision of Nonaudit Services to Audit Clients', *The Accounting Review*, January 1993.

DeFond, M., J. Francis and T. Wong, 'Auditor Industry Specialization and Market Segmentation: Evidence from Hong Kong', *Auditing*, Vol. 19, No. 1, 2000.

Eddey, P., 'Independent Expert's Reports in Takeover Bids', *Accounting and Finance*, May 1993.

English, L., 'Experts' Reports Under Fire', *Australian Accountant*, February 1989.

Ferguson, A., and D. Stokes, 'Brand Name Audit Pricing, Industry Specialization, and Leadership Premiums Post-Big 8 and Big 6 Mergers', *Contemporary Accounting Research*, Vol. 19, No. 1, 2002.

Francis, J., and D. Simon, 'A Test of Audit Pricing in the Small-Client Segment of the U.S. Audit Market', *The Accounting Review*, Vol. 62, No. 1, 1987.

Hubbard, G., 'What's in an Expert Report?', *Australian Accountant*, September 1990.

Lecky, S., and G. Burge, 'How Independent are the Independent Experts?', *Sydney Morning Herald*, 7 April 1988.

——, 'A Matter of Opinion', *Sydney Morning Herald*, 20 March 1999.

Lonergan, W., and T. Fenton, 'Making Sure the Price is Right: How Expert Are the Independent Experts?', *JASSA*, September 1989.

Matolcsy, Z., 'The Evaluation of Independent Expert's Advice on Takeover Offers: An Economic Finance Perspective', *Australian Business Law Review*, April 1982.

——, 'Are Independent Experts Worth the Cost?: Targeting the Great Pretenders', *JASSA*, March 1995.

Palmrose, Z., 'The Effect of Non-Audit Services on the Pricing of Audit Services: Further Evidence', *Journal of Accounting Research*, Vol. 24, No. 2, 1986.

——, 'An Analysis of Auditor Litigation and Audit Service Quality', *The Accounting Review*, January 1988.

Securities and Exchange Commission, Revision of the Commission's Auditor Independence Requirements, S7-13-00, 2000.

Simunic, D., 'The Pricing of Audit Services: Theory and Evidence', *Journal of Accounting Research*, Spring 1980.

——, 'Auditing, Consulting, and Auditor Independence', *Journal of Accounting Research*, Autumn 1984.

Teoh, S., and T. Wong, 'Perceived Auditor Quality and the Earnings Response Coefficient', *The Accounting Review*, April 1993.

White, H., 'A Heteroscedasticity Consistent Covariance Matrix Estimator and a Direct Test of Heteroscedasticity', *Econometrica*, Vol. 48, No. 4, 1980.