



## **UNLOCKING THE BLACK BOX OF FAIR VALUE MEASUREMENT FOR FINANCIAL INSTRUMENTS:**

THE ROLE AND PERSPECTIVES OF ACCOUNTING  
FIRM-EMPLOYED SPECIALISTS

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# FOREWORD

Fair values are not only a critical component of today's financial statements but also one of the most complex and subjective. This gives rise to serious challenges to those involved, especially standard setters, regulators, preparers and auditors, all of whom rely to some degree, directly or indirectly on the role of valuation specialists. In particular, the valuation of financial instruments has been the focus of much scrutiny since the financial crisis.

Therefore, it is very welcome that this report by a research team from the University of Wisconsin-Madison, the University of Delaware, DePaul University and Bentley University, has engaged extensively with fair value measurement specialists, through a survey and interviews, to examine the processes that specialists use when preparing or evaluating fair value measurements. Importantly, they have addressed the factors that influence the specialists' analyses and the degree to which fair values can be effectively audited. This research goes on to consider some of the key environmental and situational factors which might influence the judgements and decisions of the specialists, whether acting for preparers or auditors of financial statements containing fair values.

The report, which was prepared for ICAS, the International Association of Accounting Education and Research (IAAER) and the International Audit and Assurance Standard Board (IAASB), sets out a number of insightful recommendations, including some related to mitigating any possible bias on the part of fair value measurement specialists, the strengthening of auditor awareness of budgetary and timeline pressures in order to improve audit quality. Also, they relate to the role of regulators and standard setters in making incremental improvements to integrate effectively an assessment of management competence into the audit process, and promote greater awareness of fair value measurement and its subjectivity amongst boards and audit committees.

This report and its recommendations are unquestionably relevant to the quality of corporate reporting when fair values are material to a true and fair view, and they deserve due consideration.

**Guy Jubb**

*Chair of the ICAS Research Panel*

January 2020

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## Executive Summary

This study examines the preparation and evaluation of fair value measurements (FVMs) for financial instruments (FI) reported in the financial statements, through the lens of valuation specialists (“specialists” hereafter) who play a key role in the production of FVMs. While a growing stream of research provides evidence that auditors’ use of the work of specialists influences auditor judgments related to FVMs (e.g., Cannon and Bedard, 2016; Joe, Vandervelde and Wu, 2017; Brown-Liburd, Mason, and Shelton, 2017; Joe, Wu, and Zimmerman, 2017; Griffith, 2018), little is known about the environmental and situational factors that influence valuation specialists’ fair value judgments and decisions. Using qualitative methods, this study explores the interaction between valuation specialists and their clients (auditors and/or management) to identify: 1) the factors specialists consider most influential in their judgment and decision making when preparing versus evaluating FVMs; 2) the factors that are most influential to the information and communication exchange between specialists and their clients; and 3) whether the “customer” of the valuation service (auditors and/or management) impacts the factors specialists identify as important to their information/communication exchange, and their judgment and decision making process.

This research is important for several reasons. The global market for FIs has expanded significantly, and regulators continually scrutinise the valuations used in financial reporting and valuation practitioners. For example, the Public Company Accounting Oversight Board (PCAOB) and International Forum of Independent Audit Regulators (IFIAR) cite numerous audit deficiencies each year that relate to FVMs such as failure to understand the methods, models and assumptions used by specialists. To address these research questions, this study employs a field survey completed by 62 specialists, and conducts semi-structured interviews with 21 specialists. Accounting firms in North America, Europe, and the Asia-Pacific regions employ these specialists, who serve clients globally. Participants have significant experience (70% of surveyed and interviewed specialists have at least 6 years of valuation experience), and hold senior-level positions such as Director, Managing Director, and Partner. The field survey elicits specialists’ broad perceptions and concerns related to the production of FVMs, whether developing the FVM for management or evaluating a FVM for auditors. The interviews probe deeper into survey responses, help to contextualise the survey findings, and illuminate the human factors that arise in specialists’ interactions with auditors, management, other specialists, and regulators.

Insights from interviews suggest the process used to produce FVMs is the same across geographic regions. Consistently, the interview findings suggest no distinct differences across U.S. and Non-U.S. regions. Interview responses also indicate there are four phases in the production of FVMs—encompassing both specialists’ preparation and evaluation roles—reported in financial statements: 1) project acquisition and planning; 2) scoping, valuation approach, and methodology; 3) estimate preparation and relationship management; and 4) negotiations and final estimate reporting. This report categorises findings applicable to each of these phases.

### ***1. Project Acquisition and Planning***

In the project acquisition and planning phase, specialists report facing tight deadlines and fee pressure from both types of clients—auditors and management. Specialists believe both types of clients generally focus more on the cost rather than the quality of valuation service, and that, often, attempts to forego valuation services to mitigate engagement costs led to unrealistic deadlines when the valuation team was eventually engaged. Prior research suggests that these deadline and fee pressures have negative implications for audit and financial reporting quality because they reduce judgment performance (e.g., McDaniel, 1990) and render professionals likelier to acquiesce to client preferences (e.g. Bennett, Hatfield and Stefaniak, 2015). While prior research takes an outside-in approach to evaluating the role of specialists in the production of FVMs from auditors' and management's perspectives, this study differs in that it takes an inside-out approach by examining the process from specialists' perspective.

### ***2. Scoping, Valuation approach and Methodology***

During the scoping, approach and methodology decision phase, specialists suggest that the project budget, management's valuation knowledge, and availability of model and market data, as well as auditor preference influence their decision-making in this phase. For evaluation engagements (performed for auditors), the decision whether to develop an independent measurement versus whether to re-perform or evaluate management's process is highly dependent on the availability of information on how the estimate was prepared (e.g., whether or not a proprietary model was used and shared with the specialist) and the technical competence of the preparing specialist. Auditors also have significant influence over the scoping and methodological decisions when specialists prepare and evaluate FVMs because specialists seek auditor acceptance of the valuation approach and final measurement, and prefer to minimise tensions with auditors. These findings suggest that management and auditor preferences have the potential to influence specialists' valuation decisions. Notably, specialists remark that while FVMs they prepare or evaluate comply with applicable accounting standards, they lack value relevance because they are not an approximation of the market value of the underlying financial instrument(s). Consequently, specialists perceive fair value accounting as an "artificial" concept.

### ***3. Estimate preparation and Relationship Management***

In the estimate preparation and relationship management phase, specialists often encounter clients (both auditors and management) who understand neither the complexity of the instruments they hold nor the basic aspects of the estimation task, resulting in a lack of awareness that instruments even require FVM. One notable exception was specialists' positive perceptions of management in the financial services industry who tend to be sufficiently competent and capable of preparing the FVMs recorded in their financial statements. Specialists contend that valuation is a judgment-intensive process and that even the most competent specialists can develop estimates that differ significantly for the same financial instrument. While specialists believe that managers and auditors who are actively engaged in the preparation and evaluation processes for FVMs facilitate a more effective outcome, specialists report that significant problems are more likely when auditors and managers are inexperienced and/or disengaged. In addition, specialists express concerns about the unintended consequences that can arise from increased regulatory scrutiny.

They note that whereas regulatory attention further encourages management to take ownership of, and a more proactive approach to, the production of FVMs, this increased regulatory review emphasises documentation and creates a counterproductive environment. Specialists suggest that one potentially unintended consequence of regulatory oversight is focus on developing an audit trail that would pass regulatory scrutiny rather than developing a high quality FVM.

#### ***4. Negotiations and Final estimates***

In the final phase of the valuation process, specialists typically document their valuation judgments using narrative reports that include more details when it is an initial FVM prepared for management versus an evaluation of a FVM for auditors. The increased detail in preparation-related reports facilitates justification of management's point estimate to the external auditor. Specialists report that they rarely share their live models with either auditors or management due to their proprietary nature and concerns over misuse. However, they are more willing to share relevant details about model attributes to facilitate clients' understanding of the valuation process and to fulfill regulatory documentation requirements. Upon completion of the valuation task, specialists often resolve measurement disagreements directly with clients, especially when in the evaluation role. While specialists report that they resist pressures to acquiesce to the client's preference, they report that they often feel frustrated in the evaluation role when their own audit team supports the view of or advocates for the client's position.

#### ***Policy recommendations***

Findings from this study offer important implications for regulator and stakeholder consideration in each of the four phases of the valuation process. As specialists coordinate budgets and timing when planning for an evaluation engagement, in Phase 1 – project acquisition and planning – they weigh options to either derive an independent estimate FVM or to review and re-perform management's process. Prior research suggests there is the potential that specialists could anchor on the client's value when they re-perform management's process, which can result in suboptimal judgments such as being unduly influenced by management's preferences (Earley, Hoffman and Joe, 2008). Accordingly, auditors and regulators should consider the relative advantages versus disadvantages of adopting the independent estimate approach as a best practice for the task of evaluating clients' FVMs. The acute stress specialists feel from budgetary and deadline constraints is likely to have deleterious effects on their judgment performance (McDaniel, 1990) and to reduce audit quality (Lambert, Jones, Brazel, and Showalter, 2017). Standard-setters should also consider building auditor awareness of the effects of these pressures and encourage an organic and integrated team-based approach to remedial actions by the professional community.

In Phase 2, which describes scoping, valuation approach, and methodology, the study finds that exclusion from the scoping process, and the imposition of budgetary constraints can influence specialists' approach to the production of FVMs. Findings also suggest that specialists' ability to apply appropriate professional scepticism to the subjective aspects inherent in FVMs can be impaired when they are excluded from scoping decisions or have been given an inadequate budget. Regulators and standard-setters should consider effective means of promoting more collaboration between auditors and specialists, along with the increased guidance on the exercise of professional scepticism in this phase of the production of FVMs.

During Phase 3, estimate preparation and relationship management, specialists manage client relationships as they execute the valuation methodology to prepare and evaluate the fair value measurement. Specialists indicate that management's valuation knowledge is the crucial factor influencing their judgments related to the FVM. The conceptual framework guiding financial reporting standards suggest that management owns the financial statements and related contents. However, standard-setters should consider incorporating an evaluation of management's competence related to FVMs as a component of the auditors' risk assessment process.

Finally, during Phase 4, negotiations and final estimate reporting, where the final valuation report is generated, interviews reveal that specialists and auditors are vulnerable to client preferences, the inherent risk of material misstatement associated with the subjective nature of FVM, and the measurement uncertainty that is intrinsic to fair value estimation. Prior research (e.g., Fuller, Luippold and Joe, 2017) finds that when auditors provide detailed reports on critical matters within the audit and the audit committee is strong, management is more forthcoming with information. As a result, standard-setters should consider enhancements to corporate governance by promoting communications about the subjectivity inherent in FVMs among the board and audit committees.

### ***Conclusion***

Overall, this study presents the first examination of the role and perspectives of accounting firm-employed valuation specialists. Surveys and interviews of these specialists reveal that because they collaborate with management and auditors, as well as interact with other valuation specialists, they provide a unique perspective on the factors that influence the production of FVMs. These factors contextualise findings of prior research on the FVM process conducted using an auditor's lens and highlight challenges common across and specific to specialists' roles. While this study is not designed to evaluate or determine audit quality, the collective challenges identified have implications not only for environmental and situational factors (e.g., firm guidance, regulatory scrutiny, professional inter-relationship factors) influencing specialists' work but also for audit and financial reporting quality.

## Background

Worldwide, financial instruments (including derivatives) more than quadrupled from an estimated \$65 trillion in 1990 to more than \$312 trillion by 2013 with a significant portion valued using fair value accounting.<sup>1</sup> The new fair value accounting standards released in the first decade of the 21st century, and the concomitant explosive growth in complex financial instruments being reported at fair value in financial statements gave rise to a new market for valuation specialists. Because financial statement preparers (referred to as “management” or “managers” hereafter) and their auditors typically lack valuation expertise, both rely heavily on valuation specialists (“specialists” hereafter) to assist them in preparing and evaluating fair value measurements (FVMs hereafter) (Bratten, Gaynor, McDaniel, Montague, and Sierra, 2013; Joe, Janvrin, Barr-Pulliam, Mason, Pitman, Rezaee, Sanderson, and Wu, 2015; Harvest Investment, Inc., 2015).<sup>2</sup>

A growing stream of research increases knowledge about auditors’ interactions with, reliance on, and use of work produced by specialists (e.g., Cannon and Bedard, 2016; Glover, Taylor and Wu, 2016; Joe, Vandervelde and Wu, 2017; Brown-Liburd, Mason and Shelton, 2017; Joe, Wu and Zimmerman, 2017; Griffith, 2018, Hux, 2017). These prior studies focus on the auditor’s perspective related to the use of specialists, however, little is known about the factors that influence how specialists develop and evaluate FVMs for financial instruments (FIs hereafter) and the factors influencing their communication with managers and auditors. Accordingly, this study directly engages specialists from the major financial centers worldwide to determine:

1. What factors do specialists consider most influential in their judgment and decision-making when preparing and evaluating FVMs?
2. Which factors are most influential to the information and communication exchange between specialists and their clients (both auditors and management)?
3. Does the “customer” of the valuation service (auditor and/or management) influence specialists’ perceptions?

<sup>1</sup> Estimates are that these assets grew worldwide from \$65 trillion in 1990 to \$312 trillion (Deutsche Bank, 2014) with 29% of the large banks each holding more than \$100 billion in Level 3 Assets (EY, 2012).

<sup>2</sup> This report uses the terms fair value measurement, complex estimates, estimates, and valuations interchangeably.

## Research Approach

To address the three research questions, the study uses qualitative methods, including a field survey of and semi-structured interviews with specialists.<sup>3</sup> The field survey helps to identify broad categories of specialists' perceptions related to the production of FVMs, which includes developing a FVM for management and evaluating a FVM for auditors. The interviews delve deeper into survey responses, help to contextualise the challenges, and illuminate the human factors that arise in specialists' interactions with their primary clients (both auditors and management) as well as other specialists and regulators. The specialists who serve as participants in this study provide a global perspective on production of FVMs because they operate in offices generally located in major financial centers and derive FVMs for auditors and managers.

### *A. Interviews*

The semi-structured interview is a qualitative method of inquiry combining a set of pre-determined open-ended questions designed to prompt discussion with the opportunity for the interviewer(s) to delve deeper into specific themes or responses during the interview. Participants receive pre-determined questions ahead of the actual interview to ensure they are prepared and provide responses that are more meaningful. Follow-up questions help to gather specialists' in-depth beliefs and perceptions about the factors that most influence the production of FVMs. Based on participants' backgrounds and their role in the production of FVMs they perform most often, interviews focus on that role. Because accounting firm-employed specialists at some frequency perform both roles, some interview questions ask participants to indicate how responses to those questions would differ when operating in the opposite role. Twelve participants answer questions from the evaluation perspective while nine answer questions from the preparation perspective.

To illustrate the level of complexity that this study investigates, participants first review case facts adapted from an actual financial instrument previously issued during a period of high market volatility. The case presents a complex Level 3 collateralised debt obligation (CDO) secured by commercial and residential mortgages of differing qualities such as credit rating, subordination, and margin percentage. The case includes factors such as a LIBOR floating interest rate, senior and subordinate cash flow tranches, prepayment and default rates, and credit enhancement features related to overcollateralisation. Participants estimate that on average deriving a FVM in either their preparation or evaluation role would require at least 40 hours. As a result, participants use the case facts as a reference to calibrate their responses to the context and related client experiences, which are the focus of the interview.

<sup>3</sup> While the field survey includes responses from specialists employed by accounting firms, independent valuation firms, and public and private companies, for comparability to interview findings, the results exclude survey responses from independents and in-house specialists.

**TABLE 1: Descriptive Statistics of Interview Participants**

**Panel A: Evaluator Perspective<sup>a</sup>**

ID	Firm Size	Location <sup>b</sup>	Title	Certification(s) <sup>b</sup>	Years' Experience <sup>c</sup>	Instruments Valued <sup>d</sup>
P1	Non-Big4	North America	Managing Director	FINRA 79/63	6 to 10 years	200
P2	Non-Big4	North America	Director	CFA	11 to 15 years	150
P3	Big4	North America	Managing Director	CFA, CPA	11 to 15 years	55
P4	Big4	Asia Pacific	Manager	Not provided	More than 15 years	100
P5	Non-Big4	Europe	Manager	ASA, CFA, FRM	6 to 10 years	103
P6	Non-Big4	Europe	Manager	FIA, CERA	6 to 10 years	56
P7	Non-Big4	North America	Partner	Not provided	11 to 15 years	150
P8	Big4	North America	Partner	ABV, CFA, CPA, FRM	6 to 10 years	200
P9	Big4	North America	Senior Manager	CFA, CGMA, CPA	11 to 15 years	250
P10	Non-Big4	North America	Senior Manager	CFA	11 to 15 years	315
P11	Big4	Europe	Audit Senior Manager	ACA, CFA, MCSI	6 to 10 years	700
P12	Big4	Europe	Audit Senior Manager	CPA	6 to 10 years	300

**Panel B: Preparer Perspective<sup>a</sup>**

ID	Firm Size	Location <sup>b</sup>	Title	Certification(s) <sup>b</sup>	Years' Experience <sup>c</sup>	Instruments Valued <sup>d</sup>
P13	Non-Big4	North America	Director	CVA,CFA	6 to 10 years	60
P14	Non-Big4	North America	Director	CFA	11 to 15 years	150
P15	Big4	North America	Managing Director	CPA,CFA	11 to 15 years	250
P16	Non-Big4	North America	Managing Director	CFA	6 to 10 years	35
P17	Non-Big4	North America	Manager	CFA	6 to 10 years	100
P18	Big4	Europe	Partner	ACA	More than 15 years	50
P19	Big4	North America	Partner	FRM	11 to 15 years	112.5
P20	Big4	North America	Partner	CFA	More than 15 years	200
P21	Non-Big4	North America	Senior Manager	ASA	11 to 15 years	10

<sup>a</sup> Evaluator (Preparer) Perspective = Participants respond to interview questions based on experiences when evaluating (preparing) financial instruments for the audit team (management).

<sup>b</sup> Descriptions of locations and certifications appear in Table 2.

<sup>c</sup> Number of years of valuation experience.

<sup>d</sup> Reported average number of ASC 820 Hierarchy Level 2 and Level 3 instruments valued over an annual period (FASB, 2006).

Table 1 presents the descriptive data for the 21 interview participants that form the basis of the results included in the next section of this report. These participants have a global presence representing operations in the North American, Asia-Pacific, and European regions. Participants report that their accounting firms largely adopt a centralised approach to FVM whereby services are provided to management and auditors based on the specialist's expertise with the FI or product being fair valued rather than the client location. Thus, these participants provide a global perspective on FVMs reported in financial statements. Fifteen (71.43%) participants have at least 6 to 10 years of valuation experience and nineteen (90.48%) hold at least one professional certificate, of which Certified Financial Analyst (CFA) (11, 52%) and Certified Public Accountant (CPA) (5, 24%) had the highest frequency. On average, participants report that they complete 169 FVMs annually in either a preparer or an evaluator role. Big4 accounting firms employ 10 (47.62%) of the interviewees and all hold senior positions such as Managing Director and Partner. Interviewees are 76% male, which reflects the profile of the valuation profession.

### ***B. Surveys***

Survey participants include specialists employed by the largest global accounting firms and represent a wider sample of specialists than represented by the interview participants.<sup>4</sup> Accounting firms and professional organisations granted access to participants during their continuing professional education (CPE) programs or by an electronic announcement. Participants provided responses via paper administration for CPE programs and online administration for other forms of access. No systematic differences exist across key demographic factors, completion times, or participant responses across the type of administration.

<sup>4</sup> PCAOB inspection frequency terminology is used to differentiate firm size. Annually-inspected accounting firms include the top ten firms who audit at least 100 issuer clients, while all other firms are triennially-inspected. Where necessary, the study differentiates between Big4 and Non-Big4 within the annually-inspected firms.

**TABLE 2: Descriptive Statistics of Survey Participants**

**Panel A: Type of Firm Employing Participants**

Firm Size	Frequency	Percentage
Big4 Firm	18	29.03
Non-Big4 Firm	44	70.97
Total	62	100

**Panel B: Geographic Distribution of Participants**

Region	Frequency	Percentage
North America (US and Canada)	55	88.71
Europe (Greece, Netherlands, and United Kingdom)	5	8.06
Asia Pacific (Singapore)	1	1.61
Other (Brazil)	1	1.61
Total	62	100

**Panel C: Education**

Highest Degree Attained	Frequency	Percentage
Bachelor	22	35.48
Master	16	25.81
MBA	19	30.65
PhD	1	1.61
Other or Declined to Answer	4	6.45
Total	62	100

**Panel D: Valuation Experience**

Years of Experience	Big4		Non Big4 Firm		Total*	
	n	%	n	%	n	%
5 years or less	5	27.78	15	34.09	20	32.26
6 to 10 years	6	33.33	10	22.73	16	25.81
11 to 15 years	1	5.56	7	15.91	8	12.90
More than 15 years	5	27.78	10	22.73	15	24.19

\* Three participants did not complete this survey question

**TABLE 2: Descriptive Statistics of Survey Participants (continued)**

**Panel E: Professional Certification**

Certification	Number	Percentage
Certified Financial Analyst (CFA)	16	25.81
Certified Public Accountant (CPA) and/or Association of Chartered Accountants (ACA)	14	22.58
American Society of Appraisers (ASA)	10	16.13
Accredited in Business Valuation (ABV)	5	8.06
Certified Valuation Analyst (CVA)	1	1.61
Financial Risk Manager (FRM)	3	4.84
Other	8	12.90

Note: Other includes Certified in Financial Forensics (CFF), Member of the Appraisal Institute, and Member of the Chartered Institute for Securities and Investment. Five participants did not indicate a certification.

**Panel F: ASC 820 Hierarchy Experience as Preparer vs. Evaluator of Financial Instruments\***

Number and Type of Financial Instruments Valued	Big4 Firm	Non-Big4 Firm	Total
<b>Prepared for Management</b>			
Level 2	25 (0)	5 (0)	10 (0)
Level 3	54 (20)	141 (20)	116 (20)
Total	75 (27)	143 (20)	123 (20)
<b>Evaluated for Auditors</b>			
Level 2	183 (30)	255 (1)	234 (5)
Level 3	158 (80)	240 (30)	216 (35)
Total	322 (110)	467 (38)	425 (48)

\*Mean (Median) number of financial instruments valued for either management or the auditor on an annual basis.

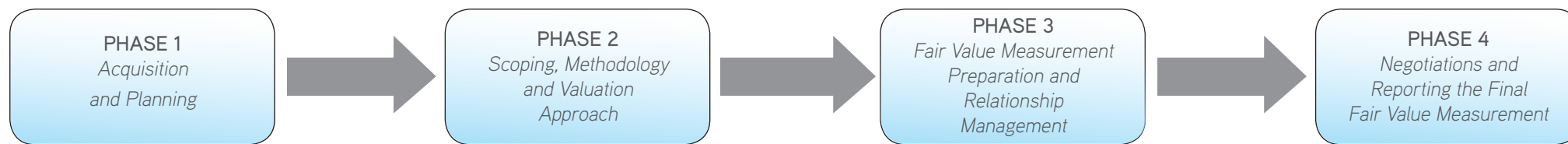
**Demographics of Survey Participants**

Table 2 presents descriptive data for 62 survey participants. Eighteen (29.03%) participants are employed by Big4 accounting firms and 44 (70.97%) by Non-Big4 accounting firms (Panel A). Participants are predominantly domiciled in North America, Europe and Asia (Panel B). Similar to interviewees, most are male with only 13 (20.97%) who are female (not tabulated).

Survey participants have significant educational and professional credentials and significant experience valuing FIs. While 58 (93.54%) participants have at least a Bachelor’s degree, 36 (58.06%) also have a graduate degree (Table 2, Panel C). Thirty-nine (62.90%) participants have at least six years of valuation experience (Table 2, Panel D), and 45 (72.58%) hold leadership roles within their organisation with titles such as Manager, Director, Principal, and President (not tabulated). The most common types of FIs valued are derivatives (33 specialists; 53.23%) and debt/equity securities (34 specialists; 54.84%) (not tabulated). Table 2 Panel E shows that 16 (25.81%) participants hold the CFA designation, 14 (22.58%) hold the CPA or Association of Chartered Accountants (ACA) designation and 10 (16.13%) hold the American Society of Appraisers (ASA) designation.<sup>5</sup> On average, participants annually prepare 123 FIs for management and evaluate 425 for auditors across Levels 2 and 3 (Table 2 Panel F). Specialists produce FVMs for industries such as financial services, technology, and manufacturing (not tabulated).

<sup>5</sup> Three participants hold both CPA and CFA certifications.

Figure 1: Phases in the Production of Fair Value Measurements (FVMs)



AUDITOR FACTORS			
Fee Pressure (Tight Budgets) and Timely Engagement Competence and Supervision Involvement During Estimate Preparation	Referral of Specific Specialists and Quality of Management's Auditor (P) Setting the Scope Without Specialist Input (E) Auditor Supervision	Lack of Engagement and Sufficient Communication	Audit Adjustments Memo Provided to Auditors
MANAGEMENT FACTORS			
Competence and Involvement Fee Pressure Timely Engagement	Fee Pressure Pressure to Arrive at a Specific Value Valuation Competence and Industry Expertise	Competence to Construct Financial Forecasts Lack of Understanding of Instrument Complexity Industry Expertise and Competence Lack of Understanding of Model Inputs	Reporting Process to Management Detail in Report to Management
SPECIALIST FACTORS			
Perception of Quality of the Other Specialist	Resistance to Standardisation of Valuation Approaches Control of Valuation Methodology (P) Independent Recalculation vs. Reperformance (E)	Quality Variance of Management's Specialist (E) Subjectivity and Judgment Differences (B) Specialists and Auditors Skill Integration	Model Disclosure to Management and Auditors Valuation Negotiation
ENVIRONMENTAL AND PROFESSIONAL INTER-RELATIONSHIP FACTORS			
None	Inconsistent Firm Guidance on Valuation Approach Increased Regulatory Scrutiny Valuation Range vs. Point Estimate Market vs. Fair Value Perception Difference	Regulatory Oversight – Documentation and Quality Factors that Influence Valuation Judgments Regulatory Oversight – PCAOB/IFIAR Inspectors' Knowledge Professional Relationships	None

\*Preparation Role (P); Evaluator Role (E); or Both Roles (B)

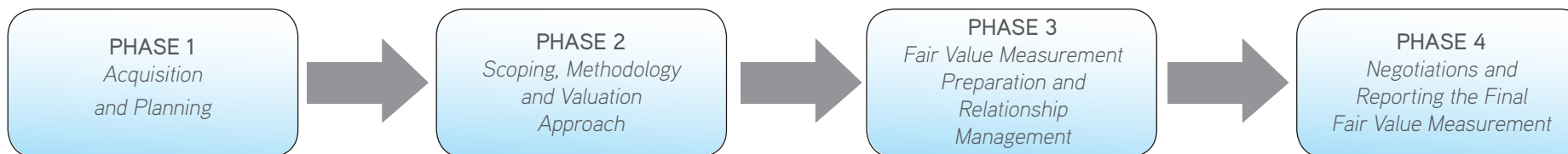
## Research Findings

### *Interview and Survey Findings*

Interviews with specialists reveal that 1) the process employed to produce FVMs for FIs is the same across geographic markets and 2) typically follows four phases (see Figure 1) regardless of whether specialists are preparing FVMs for management or evaluating the reasonableness of FVMs for auditors. During Phase 1, specialists focus on planning the engagement, which generally includes outlining the objectives of the valuation service, establishing a timeline, agreeing on fees, and determining the client's preferences for the format of the final deliverable. In Phase 2, specialists identify the scope, methodology, and the valuation approach best suited for each FI under consideration. Phase 3 focuses on implementing the valuation methodology outlined in Phase 2. During this stage, specialists often communicate with key players including management, auditors, and other specialists to ensure the FVM meets the expectations of all interested parties.<sup>6</sup> Last, in Phase 4 specialists are often involved in negotiations with management, auditors, and other specialists to settle on the final FVM that will appear in the company's financial statements. Table 3 describes and summarises four categories of factors and the three key stakeholders who play a significant role in determining the FVM (specialists, auditors and management) and, where applicable, environmental and professional inter-relationships among these factors. Next, this report describes challenges identified by the specialists (summarised in Figure 1 and Table 3).

<sup>6</sup> The management of relationships often spans all phases of the specialist process. However, for ease of discussion and presentation, we include it in the third phase because it is at this point, where differences between the perspectives of the audit versus the valuation profession emerge. Also, professional conflicts within the valuation community and differences of opinions often arise in the determination of the estimates.

TABLE 3: Key Findings and the Associated Research Question and Phase in the Production of Fair Value Measurements (FVMs)

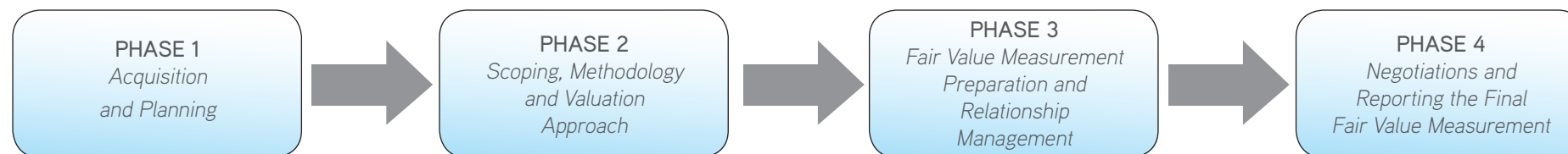


Panel A: Research Question 1

What factors do specialists consider most influential in their judgment and decision-making when preparing versus evaluating FVMs?

Key Categories and Stakeholders	Process Phase	Specific Factors
<b><i>Evaluation-Related Factors</i></b>		
Auditor Factors	Phase 1	Fee Pressure (Tight Budgets)
Auditor Factors	Phase 2	Pressure to Arrive at a Specific Value
Auditor Factors	Phase 4	Pressure to Minimise Audit Adjustments (Often Side with Management)
<b><i>Preparation-Related Factors</i></b>		
Management Factors	Phase 1	Competence and Involvement
Management Factors	Phase 1	Fee Pressure
Management Factors	Phase 1	Timely Engagement
Management Factors	Phase 2	Fee Pressure
Management Factors	Phase 2	Pressure to Arrive at a Specific Value
Management Factors	Phase 3	Inability to Construct Sufficient Financial Forecasts and Projections
Management Factors	Phase 3	Lack of Understanding of Complexity of Instruments to be Valued
<b><i>Factors Affecting Both Roles</i></b>		
Specialist Factors	Phase 1	Perception of Quality of the Other Specialist
Specialist Factors	Phase 2	Resistance to Standardisation of Valuation Approaches
Specialist Factors	Phase 3	Judgment Differences Between the Specialists
Specialist Factors	Phase 3	Subjectivity Inherent in Valuation
Environmental and Professional Inter-relationships	Phase 2	Inconsistent Firm Guidance on Valuation Approach
Environmental and Professional Inter-relationships	Phase 2	Increased Regulatory Scrutiny

TABLE 3: Key Findings and the Associated Research Question and Phase in the Production of Fair Value Measurements (FVMs) (continued)



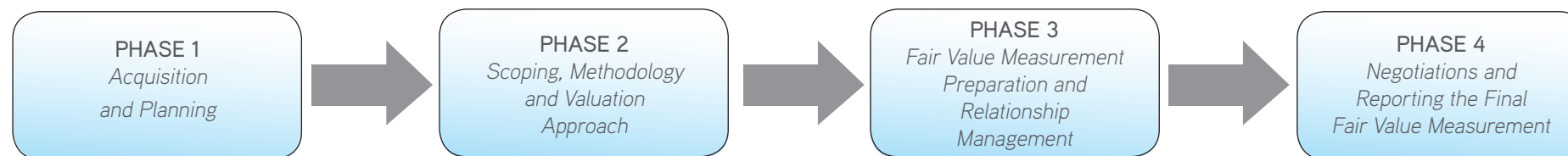
Panel B: Research Question 2

Which factors are most influential to the information and communication exchange between specialists and their clients?<sup>a</sup>

Key Categories and Stakeholders	Process Phase	Specific Factors
Auditor Factors	Phase 1	Competence and Supervisory Ability
Auditor Factors	Phase 1	Involvement During Estimate Preparation
Auditor Factors	Phase 1	Timely Engagement
Auditor Factors	Phase 3	Lack of Engagement and Sufficient Communication
Auditor Factors	Phase 3	Treating the Valuation as a Commodity
Management Factors	Phase 2	Competence About Valuation
Management Factors	Phase 2	Industry Expertise
Management Factors	Phase 3	Financial Industry Expertise Creates a Knowledge Gap
Management Factors	Phase 3	Lack of Understanding of Model Inputs
Specialist Factors	Phase 3	Judgment Differences Between Specialist and the Client (Both Roles)
Specialist Factors	Phase 3	Specialists and Auditors Need Greater Appreciation of Each other's Role and Expertise (Rotational Programs)
Specialist Factors	Phase 4	Prefer Auditors Let Specialists Lead the Negotiation
Environmental and Professional Inter-relationships	Phase 2	Valuation Range vs. Point Estimate
Environmental and Professional Inter-relationships	Phase 3	Regulatory Oversight (Disagreement about Benefits of More Documentation)
Environmental and Professional Inter-relationships	Phase 3	Regulatory Oversight (Has Improved Overall Audit Quality)
Environmental and Professional Inter-relationships	Phase 3	Regulatory Oversight (Inspectors Have Varying Valuation Knowledge)
Environmental and Professional Inter-relationships	Phase 3	Specialists Want to be Perceived and Valued as Experts

<sup>a</sup> Customers (or clients) in this context are either auditors or management.

TABLE 3: Key Findings and the Associated Research Question and Phase in the Production of Fair Value Measurements (FVMs) (continued)



Panel C: Research Question 3

Does the “customer” of the valuation service influence specialists’ perceptions? <sup>a</sup>

Key Categories and Stakeholders	Process Phase	Specific Factors
<b><i>Auditor as the Customer</i></b>		
Auditor Factors	Phase 2	Quality of the Management’s Auditor (A)
Auditor Factors	Phase 2	Setting the Scope Without Specialist Input (A)
Auditor Factors	Phase 4	Confirmation Bias (A)
Specialist Factors	Phase 2	Independent Recalculation vs. Reperformance (A)
Specialist Factors	Phase 3	Variance in Quality of Management’s Engaged Specialist (A)
Specialist Factors	Phase 4	More Likely to be Involved in Negotiations (A)
Specialist Factors	Phase 4	More Likely to Make Adjustments to Valuation (A)
<b><i>Management as the Customer</i></b>		
Auditor Factors	Phase 2	Referral of Specific Specialists to Management (M)
Specialist Factors	Phase 2	Control of Valuation Methodology (M)
<b><i>Both as Customers</i></b>		
Auditor Factors	Phase 4	Memo Provided to Auditors
Specialist Factors	Phase 4	More Likely to Provide Details of Live Models to Auditors vs. Management
Environmental and Professional Inter-relationships	Phase 2	Market vs. Fair Value Perception Difference
Management Factors	Phase 4	Auditors Receive a Draft of the Report Before Final Issued
Management Factors	Phase 4	Detailed Report Provided to Management that Creates an Audit Trail

<sup>a</sup> Customers (or clients) in this context are either auditors (A) or management (M). Where no distinction exists, the challenge applies to both roles.

### **Phase 1: Acquisition and Planning**

Specialists employed by accounting and independent valuation firms compete in a free market for clients who require support to prepare their FVMs. Auditors employed by the larger accounting firms typically rely on their own firm-employed specialists while auditors at smaller firms typically engage third-party specialists. Similarly, corporate management either rely on company-employed specialists or engage third-party specialists. Management retains specialists either directly or through referrals from their external auditor. Following are the influential factors in Phase 1 of the valuation task related to specialists' interaction with management, auditors, other specialists, and the environmental and professional interrelationships. Table 3 summarises Phase 1 factors and maps each to the applicable research question.

#### **Management Factors**

- *Fee Pressure.* Specialists indicate that fee pressures can have a negative impact on the quality of the FVM. The participants report that clients are often budget conscious, and "unaware of their own limitations," incorrectly believing that they can prepare FVMs without specialist assistance. In the context of FVM for financial reporting, specialists view these clients as selecting specialists based on amount of their fees rather than the specialist's expertise in the type of FI(s) under consideration. Management tends to be less budget conscious when the purpose of the FVM is used for contracting rather than financial reporting.

##### ***Reluctance to pay for the preparation of FV estimation***

*It's very simple; they don't want to spend any money.*

P16<sup>7</sup> – Managing Director – Non-Big4 Accounting Firm – US

##### ***Focus on cost rather than quality***

*I can't tell you how many times I hear them say, "Well, I used to do valuations, so I know how to do it...but I'm just calling you to make sure everything's okay."*

*It's very nice of [them] to put my accreditation at risk. No thank you!*

P17 – Senior Manager – Non-Big4 Accounting Firm – US

##### ***Paying for financial statement preparation vs. for contracting***

*It's different, say, if you're doing valuation that may help with a deal [than valuation for] an audit and financial reports [where] they're just going, "I need this done...to get my financial statements out. I don't expect to pay a lot for it." Our biggest competition in the U.K. market isn't someone else in the Big4 or another boutique, it's the client themselves. Because the client will go, "No, I can do this myself."*

P18 – Partner – Big4 – INTL

- *Competence and Involvement.* Management is responsible for the FVMs and related disclosures included in the financial statements [ISA 545, ¶4 (IAASB, 2003); AU §328.4 (PCAOB, 2003)]. Specialists note that while most managers understand how to account for FVMs, they often lack competence and/or expertise fully to appreciate how the inputs and assumptions, and sometimes even the small variations in the inputs selected can affect the ultimate FVM. Specialists view such clients as high risk and prefer to avoid them.

<sup>7</sup> All participants are delineated in Table 1: *Descriptive Statistics of Interview Participants*

*You do want to see what procedures management has done to take ownership of the value. Ultimately, its management's value [because] at the end of the day, management can't say "we just outsource this."*

P2 – Director – Non-Big4 Accounting Firm – US

*Because they didn't actually understand what they were valuing, we wouldn't want to work with [them] again.*

P1 – Managing Director – Non-Big4 Accounting Firm – US

Many specialists further indicate that managers in the financial services industry tend to be more competent and involved. Specialists believe these qualities contribute to a higher quality FVM. For example, a specialist commenting on the audit support role noted:

*[Quality and involvement] depend on the type of industry, so if we are auditing a bank, most of the banks we audit come up with the fair value themselves.*

P11 – Audit Senior Manager – Big4 – INTL

- *Timely Engagement.* Delays in engaging specialists is a pervasive concern among specialists. Specialists suggest that these delays have negative implications for the final FVM because they preclude the specialist from being able to plan effectively and allocate adequate effort to the valuation task. Some specialists report charging a "fast-track premium" to induce changes in client behavior but acknowledged that this strategy is often ineffective.

*Probably the biggest thing, is a lot of stuff just gets caught at the end and we get pushed really hard to meet unreasonable deadlines. There's a certain amount of time you need to really do this right and to minimise errors... we need a certain amount of time.*

P14 – Director – Non-Big4 Accounting Firm – US

*We still have instances where we are consulted very late in the day... it'd be nice if we didn't get any of those six o'clock calls on a Friday going, "Help."*

P18 – Partner – Big4 – INTL

### **Auditor Factors**

- *Fee Pressure (Tight Budgets) and Timely Engagement.* Budget pressure and delays in auditors engaging specialists also affect the production of FVMs in Phase 1. Similar to the fee issues observed with managers, specialists indicate concerns about audit budget restrictions. They acknowledge, however, that stagnant audit fees serve to constrain the budget available for the specialist's services. In addition, they observe that audit partners are particularly reluctant to share their fees with the specialists because the specialists' hourly rates exceed auditors' hourly rates.

*I think that [it's] even true with the big firms too. [Auditors] plug in a number, like, "Oh, it's a \$20,000 audit then I'll need \$5,000 [for] my valuation guy." Then they come back [and] cry poverty like, "Next time I'll have you involved." But we're not involved.*

P17 – Senior Manager – Non-Big4 Accounting Firm – US

Relatedly, tight deadlines imposed by the auditor can also have a negative impact on the specialist's ability to evaluate a FVM. Specialists feel pressure to deliver a higher-quality product than they believe is reasonable under these severe time constraints.

*They [auditors] kind of underestimate the work involved. Other times, it is last minute ... they say "oh, we just found this contract lying around in a drawer..." [Our problem is] however, that as far as an audit goes, we can't not do the work.*

P12 – Audit Senior Manager – Big4 – INTL

- *Competence and Supervision.* During the preparation of FVMs for management, specialists note that if they anticipate higher scrutiny of their work when the client's auditors evaluate the FVM they prepared, they increase their budget and/or fees.

*If you're doing work and the auditor is a Big4, you price in extra because you know the work is going to be really heavily scrutinised and it's going to take a lot of time.*

P10 – Senior Manager – Non-Big4 Accounting Firm – US

- *Involvement during Estimate Preparation.* When preparing an estimate, specialists believe that early communication and interaction with the auditor makes their planning more efficient because they can assess the auditor's position, which helps them to avoid time and effort for subsequent revisions to their planned methodology.

*A kind of kick off call if you will, closes the gap in terms of any disagreements we might have.... and [then] we come up with our methodology.*

P16 – Managing Director – Non-Big4 Accounting Firm – US

### Specialist Factors

- *Quality Perception of the Other Specialist.* Specialists in the preparation role often consider the quality of the specialist assisting auditors in the evaluation of the FVMs they provide to management, and vice versa. A pervasive concern that the specialists voice is the wide variability in the quality and competence of the specialists engaged by both auditors and management.

*If I'm [the evaluator then] based on the reputation of the other side I would vary the fees... I wouldn't say I'm doubling the fees but, [it] would vary.*

P19 – Partner – Big4 – INTL

*It just depends naturally on who that third party [specialist] is. If it's a smaller [valuation] firm, where perhaps they're not experienced... it can spiral into a very long process. So when we're giving audit teams a quote, for our time, it's very heavily caveated because [that specialist] is just an unknown.*

P5 – Manager – Non-Big4 Accounting Firm – INTL

### **Phase 1 Summary:**

The quality of the work product specialists provide can be influenced by time and fee constraints imposed by both auditors and management. Auditing research suggests that such pressures can reduce judgment performance (e.g., McDaniel, 1990) and make professionals more likely to acquiesce to client-preferred positions (e.g. Bennett, Hatfield and Stefaniak, 2015). Further, specialists indicate that the competence, involvement, and timely engagement by auditors and managers, as well as low specialist quality on the other side of the deal could negatively influence their work. Sentiments expressed by specialists interviewed note significant work scope reduction and increased stress in light of these constraints. Accordingly, these constraints could impair specialists' judgment and therefore have negative implications for audit and financial reporting quality when the FVMs are significant on the financial statements.

### **Phase 2: Scoping, Methodology and Valuation Approach**

In Phase 2, specialists set the scope of work and establish the methodology or approach for the FIs under consideration. Below we discuss the factors related to management, auditors, other specialists, and professional inter-relationships that influence the quality of the final FVM provided to either auditors or management.

#### **Management Factors**

- *Fee Pressure.* The fees managers are willing to allocate to the valuation of FIs have a direct and material impact on the scope of specialists' work. Specialists adjust the level of detail included in their valuation methodology to correspond with the client's budget.

*The way we tend to scope it out is we say, "This is what we could do in terms of a price...okay we can either fully price your position right now [or] we can take things away and put things in"...We effectively talk through it to get to what [management] think they need in terms of support.*

P19 – Partner – Big4 – INTL

- *Pressure to Arrive at a Specific Value.* Specialists suggest that some managers focus on and seek to communicate a desired number or range for the FVM before the specialists perform their valuation work. Specialists also however note that only a minority of clients attempt to exert overt control in the FVM and that they are less likely to encounter that type of client after the Global Financial Crisis.

*When I first started in valuation for Firm[X] there was definitely more of this concept of we need to agree on a value... [now it's] morphed into we need to agree on a value based on the objective evidence"*

P15 – Managing Director – Big4 – US

- *Valuation Competence and Industry Expertise.* Even if management imposes no direct pressure for a value, specialists note that management is keenly focused on how the FVM will affect the bottom line. Specialists report that they use these opportunities when they arise as teachable moments.

*There are cases where you could tell the client wants to go in one particular direction but then you educate them about the risk.... I don't think we would take on that kind of [client]. But it is very, very, real, actually [in the] U.S.*

P20 – Partner – Big4 – US

However, as suggested in the following quote and discussed further in Phase 3, specialists often defer to management's judgment when the manager is an industry expert.

*I think [management influence attempts are] definitely more pronounced on the business valuation side [of our practice]. If we're in my world of financial instruments, there's typically someone working at the client **who has a better understanding than we do ...simply because they're in that business.*** [Emphasis added]. P15 – Managing Director – Big4 – US

#### Auditor Factors

- *Referral of Specific Specialists and Quality of Management's Auditor.* When specialists have been referred to for preparation service by their client's auditor, they prefer to consult with the auditor throughout Phases 1 and 2 of the FVM process. The goal is to minimise the likelihood that their work would not be satisfactory not only to management but also to the external auditor.<sup>8</sup>

*What we want to avoid is putting together a model and a month later... our work gets reviewed and then it's like, "Oh, we don't agree with this..." We want to have [an] upfront conversation with the client and the audit firm, so that we're on the same page. A lot of times the auditor...will say "this is the instrument that needs to be valued and most likely this is the methodology."* P17 – Manager – Non-Big4 Accounting Firm – US

Even when the auditor is not directly involved upfront, specialists consider how the client's auditor might react and whether or not they will approve the final FVM:

*Clients are completely aware of the fact that, they can have an opinion on value, I can have an opinion on value, but the opinion of neither one of us matters if we can't justify it to their external auditor.* P15 – Managing Director – Big4 – US

- *Setting Scope without Specialist Input.* When specialists assist auditors in evaluating the reasonableness of FVMs included in an audit client's financial statements, most specialists agree that the auditors dictate the scope of their work. In some instances, specialists have input, but in most, the core audit team independently makes scoping decisions without consultation with the specialist.

*If they have a small budget, we say, "We'll do this for you, but it's going to cost you £10,000," auditors are like, "No! We can't charge [the client] that..." In times like that, we have to do as little as possible to be able to give them the necessary comfort.* P19 – Partner – Big4 – INTL

- *Auditor Supervision.* Consistent with interview findings, surveyed specialists have a positive view of auditors' oversight of the scoping process (Table 4 Panel A). Specialists hired to evaluate a client's FVMs rate auditors' ability to supervise their work as high – statistically above the mid-point of the response scale. Across the firms, specialists employed by Big4 firms have a more positive assessment of auditors' supervision than specialists employed by Non-Big4 firms.

<sup>8</sup> Auditors typically recommend multiple qualified specialists from which management selects one. The influence of the auditor over the choice among the options is beyond the scope of this study.

**TABLE 4: Specialists' Perceptions of Interactions with Management, Auditors and Regulators**

**Panel A: Perceptions of Specialists in the Evaluator Role by Firm Type<sup>a</sup>**

<i>When Reviewing for Audit Team...<sup>b, c</sup></i>	<b>Big4</b> <i>(n=16)</i>	<b>Non-Big4</b> <i>(n=37)</i>	<b>Overall</b> <i>(n=53)</i>	<b>p-Value</b>
Auditors adequately supervise my work related to the scope of the work to be performed.	5.06***	4.30	4.53	< 0.01
Auditors adequately supervise my work related to the adequacy of the work actually performed.	5.06***	4.14	4.42	< 0.01
When working with the audit team to assess a valuation estimate that the client prepared (in-house), I frequently have to follow-up with client management on significant issues identified.	4.94	5.19	5.11	< 0.01
When working with the audit team to assess a valuation estimate that a third-party prepared for the client, I frequently have to follow-up with client management on significant issues identified.	4.38	4.51	4.47	< 0.01
My firm provides specific guidelines or decision aids to assist valuation specialists in assessing valuation estimates for audit teams.	5.00	4.36	4.56	< 0.01
Regulatory oversight (e.g., SEC or PCAOB) influences how I approach my work in assessing valuation estimates for financial instruments.	5.35	5.30	5.31	< 0.01

<sup>a</sup> This table only presents responses from valuation specialists who routinely serve in the support function of assisting auditors to evaluate fair value measurements prepared by the client. Nine participants did not respond these questions.

<sup>b</sup> Participants responded to the prompts listed in the description using a scale where 1 = Strongly disagree and 6 = Strongly agree. The introductory statement was: *In the context where the valuation specialist is hired by and works with the audit team to evaluate a client's fair value measurement, indicate your agreement with the following statements.*

<sup>c</sup> The p-value represents the level of significance of the difference of the overall mean from the scale midpoint.

\*\*\* Difference between Big4 and Non-Big4 significant at the .01 level.

**TABLE 4: Specialists' Perceptions of Interactions with Management, Auditors and Regulators (continued)**

**Panel B: Perceptions of Specialists in the Preparer Role by Firm Type<sup>a</sup>**

<i>When Preparing for Management...<sup>b, c</sup></i>	<b>Big4</b> <i>(n=14)</i>	<b>Non-Big4</b> <i>(n=40)</i>	<b>Overall</b> <i>(n=54)</i>	<i>p-Value</i>
When working with management to prepare a valuation estimate, I frequently have to follow-up with management regarding critical elements of the estimate.	5.50	5.18	5.26	< 0.01
During the annual audit of the financial statements, the external auditor frequently follows-up with me regarding critical elements of the estimate that I prepared for management.	5.29	4.65	4.81	< 0.01
My firm provides specific guidelines or decision aids for valuation specialists to use in preparing valuation estimates for management.	5.21*	4.38	4.59	< 0.01
Regulatory oversight (e.g., SEC or PCAOB) influences how I approach my work in preparing valuation estimates for financial instruments.	5.79**	5.05	5.25	< 0.01

<sup>a</sup> This table only presents responses from valuation specialists who routinely serve in the function of preparing fair valuation measurements for management. Eight participants did not respond to these questions.

<sup>b</sup> Participants responded to the prompts listed in the description using a scale where 1 = Strongly disagree and 6 = Strongly agree. The introductory statement was: *In the context where the valuation specialist is hired by and works with management to prepare fair value measurements, indicate your agreement with the following statements.*

<sup>c</sup> The *p*-value represents the level of significance of the difference of the overall mean from the scale midpoint.

\* Difference between Big4 and Non-Big4 significant at the .10 level.

\*\* Difference between Big4 and Non-Big4 significant at the .05 level.

## Specialist Factors

- *Control of Valuation Methodology [preparation].* When preparing FVMs for management, specialists decide whether to develop a new model or enhance an existing model, and have a strong preference for the efficiencies associated with the latter. Specialists also apply “homegrown tools, proprietary tools, that we’ve used and that we’ve developed over the years” (P8 – Partner – Big4 US). In addition, specialists commonly use data suppliers such as *Bloomberg, Capital IQ, Markit, and IHS* (the latter two have recently merged).
- *Resistance to Standardisation of Valuation Approaches.* Specialists express modest support for recent initiatives by professional organisations and regulators to create certifications and professional practice frameworks. While these initiatives intend to improve the quality of specialists’ work, specialists believe that these efforts could dilute the need for specialists’ professional judgment, which they see as critical for valuing FIs.

*There are different groups in the valuation profession that are working on standardizing some of the best practices but there are still differences. Some people prefer some methods versus others [but what matters] in the end, is the experience and knowledge of the person doing the valuation.*

P16 – Managing Director – Non-Big4 Accounting Firm – US

- *Independent Recalculation vs. Reperformance [evaluation].* In specialists’ evaluation role, an important decision is whether to develop an independent estimate or to re-perform management’s process. Market data availability, specialists’ expertise, and availability of management’s model are key drivers of the decision about the approach that will be used. Notwithstanding, specialists indicate a preference for developing independent estimates. The availability of management’s model is particularly relevant in determining the approach for financial service clients because their in-house specialists often use proprietary models.

### **Resources and expertise influence approach**

*The two [approaches] differ in terms of time and budget, and sophistication. Clearly if you do it independently, it takes much more skills and budget than if you just ask some questions [after] reading a report. [The] reality is there is a difference between good and not so good companies, which affects our ability to replicate independently.*

P16 – Managing Director – Non-Big4 Accounting Firm – US

### **Uncertainty influences approach**

*[When] we have a wide range of potential inputs that could be appropriate depending on the particular strength of any instrument it becomes more challenging, and, in those cases, we might gravitate away from trying to provide [independent] estimates and instead evaluate the client’s process for producing fair estimates of value.*

P8 – Partner – Big4 – US

### **Lack of access influences approach**

*The client... they’ll say “Well, we got it from the bank.” We’ll say we need to speak to them. (Most) banks are reticent, [they will not] tell you how they [modelled] their price.*

P11 – Audit Senior Manager - Big4 – INTL

## Environmental and Professional Inter-relationship Factors

- *Increased Regulatory Scrutiny.* Across valuation roles, surveyed specialists suggest that accounting regulatory oversight has a significant effect on their work (Table 4 Panels A and B). The specialists' perceptions about the impact of regulators do not vary significantly when specialists prepare versus evaluate the reasonableness of FVMs, however, seasoned specialists are more sensitive to increased regulatory scrutiny (not tabulated).
- *Market vs. Fair Value Perception Difference.* During Phase 2, the most prevalent inter-group conflict factor identified by specialists was a difference in perceptions over the meaning of "fair value." Specialists referred to this as the *market versus fair value perception difference*. Specialists argue that fair value for financial statement purposes is an "artificial" concept that is unrelated to the actual market value of the asset – which is what specialists would prefer to provide.<sup>9</sup>

*It [fair value] is more related to a math exercise in a repeatable framework that allows for efficient verification by a regulator."*

P21 – Senior Manager – Non-Big4 Accounting Firm – US

### ***Differences from management's perspective***

*I just had a client [that] was like, "we have a bunch of rounds of angel financing so I know what my share price is." Basically, telling me, "I'm a private company. I don't need you to come up with the equity value because all this angel funding [indicates] what we're worth."...The discussion I had was, look, fair value is not equivalent to investor value. Fair value is not equivalent to fair market value. It is one of those things we do under ASC 820;<sup>10</sup> it is a recipe prescribed by FASB... Valuation for fair value is not set up to determine what something is really worth...Those codes have been set up to standardise a process [so] that an inspector can go through their check list, repeat the steps and get to the same number. [Emphasis added].*

P17 – Senior Manager – Non-Big4 Accounting Firm – US

### ***Differences from auditors' perspectives***

*When [the accounting standards] switched over to fair value accounting, we spent a lot of time discussing the meaning of "market versus fair value."*

[Emphasis added]. P19 – Partner – Big4 – INTL

- *Valuation Range vs. Point Estimate.* Specialists overwhelmingly prefer to think of valuation as a range and are frustrated that they are asked to prepare a point estimate. This sentiment is particularly true when specialists evaluate FVMs for auditors.

*I've had recent run-ins where I'm a third-party valuation specialist and [Big4 X] is the auditor where they want my number to land right on top of theirs. The auditor [wants it] to be precise within the dollar on these really esoteric Level 3s... I never heard of such a thing. It's a reasonableness test, not a, 'I-get-to-the-same-number test.'*

P17 – Senior Manager – Non-Big4 Accounting Firm – US

<sup>9</sup> Note that both the FASB and IASB define fair value "on the basis of an 'exit price' notion and uses a 'fair value hierarchy,' which results in a *market-based* – rather than *entity-specific* – measurement of an asset or liability (ASC 820 (formerly SFAS 157 (FASB, 2006); IAS 39 (IASB, 2003). Specialists, auditors, and management differentially interpret what FVMs represent.

<sup>10</sup> The equivalent standard in the U.K. is IFRS 13.

- *Inconsistent Firm Guidance on Valuation Approach.* Survey results suggest there are differences in the specialist's access to decision aids and support tools to guide their approach to valuation tasks (Table 4 Panels A and B). Specialists in Big4 firms more strongly agree that their firms provide adequate guidelines and decision aids for preparing FVMs, which suggests Big4 firms could have greater resources to devote to the standardisation and production of FVMs.

***Phase 2 Summary:***

Specialists' responses reveal the factors affecting the scoping, methodology and valuation approach that are associated with management, auditors, other specialists, and professional interrelationships include: budget and fee pressure, auditor and management competence and industry expertise, market data availability and auditor involvement in both specialists' preparation and evaluation roles. The interviews reveal that specialists have a general preference for developing independent measures versus re-performing management's process, and professional differences in specialists' versus auditors' and managers' perceptions about what fair value represents. Several specialists have negative perceptions of the push by the profession for increased credentialing such as the AICPA's CVFI credentialing and process standardisation efforts because they believe that knowledge and experience are more critical to high quality FVMs.

***Phase 3: Fair Value Measurement Preparation and Relationship Management***

Phase 3 consists of the steps in completing the FVM service and managing relationships with the clients and the other professionals who play a role in the reported FVMs that are presented in the audited financial statements.

**TABLE 5: Top 10 Most Influential Factors Affecting the Production of Fair Value Measurements**

Most influential when preparing and evaluating FV estimates <sup>a</sup>	Cumulative Frequency of Factor	Preparing	Assessing	Difference Chi-Square <sup>c</sup> Value	p-Value
Market data	42	22	20	0.14	0.70
Methodology	27	8	19	5.72	<b>0.02</b>
Management forecasts	23	17	6	6.45	<b>0.01</b>
Economy / Industry conditions	19	9	10	0.06	0.80
Model Parameter Assumptions	17	4	13	5.52	<b>0.02</b>
Past performance of the Security	15	7	8	0.07	0.78
Preparer competence	12	1	11	9.22	<b>&lt; 0.01</b>
Materiality to the Financial Statements	11	1	10	8.08	<b>&lt; 0.01</b>
Security characteristics	8	5	3	0.50	0.46
Information quality and supportability	7	2	5	1.36	0.24

**TABLE 6: Top 10 Factors Most Considered when Providing Details to Management vs. Auditors**

Factors Most Considered <sup>b</sup>	Frequency	Management Factors	Auditor Factors	Difference Chi-Square <sup>c</sup> Value	p-Value
Judgment support for valuation decision	22	13	9	0.88	0.34
Management / Auditor understanding	17	8	9	0.06	0.79
Documentation / evidence requirements	14	3	11	5.15	<b>0.02</b>
Complexity of instrument	12	2	10	5.90	<b>0.02</b>
Materiality to the Financial Statements	12	3	9	3.32	<b>0.07</b>
Management / Auditor Competence	11	5	6	0.09	0.75
Valuation purpose	9	5	4	0.12	0.73
Description - Not live model	8	1	7	4.81	<b>0.03</b>
Relevance to the instrument	7	3	4	0.15	0.70
Transparency of decision elements	5	2	3	0.20	0.65
Standards and legal compliance	4	3	1	1.03	0.31

<sup>a</sup> Participants listed the top 3 factors they most considered when deciding to release details of their valuation model to management and auditors.

<sup>b</sup> Participants listed the top 3 factors that most influenced their valuation judgment.

<sup>c</sup> Chi-Square statistics compare the frequency of the considered factor when deciding to provide model details to management versus auditors as a proportion of the total number of participants surveyed across the categories Accounting Firms (Big4 and Non-Big4; total of 62). Participants provided open-ended responses, which were coded into categories by one researcher and a graduate assistant.

## Management Factors

- *Lack of Understanding of Instrument Complexity.* Specialists indicate that they encounter both managers and auditors who do not fully understand the complexity of the FIs. They have particular concern about managers who want to rely solely on the issuer's or fiduciary agent's statements for the FV estimate. Specialists believe that managers with this type of knowledge gap pose a problem because they are ill-positioned to take full ownership of the valuation measurement process, and thus, run the risk of not complying with the requirements of the financial reporting standards.

*There are clients that are less inclined to [seek] a third party firm....primarily because they get valuation statements from their bank. They incorrectly think [those statements are] a reasonable estimate of what the fair value should be.*  
P12 – Audit Senior Manager – Big4 – INTL

- *Lack of Understanding of Model Inputs.* Management's lack of understanding can inhibit their ability to provide appropriate information to specialists. Specialists suggest that the issuing financial institutions are contributorily negligent for selling FIs to clients who lack the capacity to fully appreciate underlying risk and the impact on their financial statements.

### ***Lack of understanding of model inputs***

*Part of the challenge is getting [management] to understand how the assumptions integrate into the methodology and the model... [but] once they start to understand there tends to be less of a disagreement [with the calculation].*

P19 – Partner – Big4 – INTL

### ***Lack of understanding of FIs***

*We had a client [who]...entered into an extremely complicated hedging instrument..., and the markets weren't going in the way they were expecting. [He] couldn't understand why all of a sudden [there was] this massive liability on his books.*

P6 – Manager – Non-Big4 Accounting Firm – INTL

- *Competence to Construct Financial Forecasts.* Surveys reveal that when specialists prepare FVMs, management's financial forecasts—a critical input to the FVM—are almost three times as influential as when specialists evaluate FVMs for auditors (Table 5). Relatedly, specialists also place greater emphasis on the competence of management's specialist when they assess versus prepare FVMs. Taken together, these results suggest that the competence of management and their specialist to develop key inputs to the FVM, including financial forecasts, influence specialists' valuation decisions.
- *Industry Expertise and Competence.* Several specialists indicate there is an information imbalance when they prepare or evaluate FVMs for financial service industry companies. These companies often have significantly more resources and greater access to detailed trading information than the specialists do. The access to detailed trading information can be particularly relevant in identifying comparable securities as Level 2 and Level 3 (ASC 820 Hierarchy) inputs.

*I think that there's a very significant data mismatch between what accounting firm [specialists] have versus what their big-client [counterparts] have. If you're sitting on the trading desk, you have access [to significant trading data]. The amount of information that I had as a trader, versus how we have to kind of scrape together information [in my current] practice, it's night and day. If we don't have a particular bond or loan that [negatively affects our ability to generate] pricing [and] enough comps....to come up with prices.*

P8 – Partner – Big4 – US

### Auditor Factors

- *Lack of Engagement and Sufficient Communication.* Specialists express frustration when they encounter auditors who are not active participants in the valuation process. They view such auditors as no different from the managers who try to “hand-off” responsibility for the FVM and the FVM process. The level of expertise varies by the type of clients the auditors have.

*To the extent where the fair value instruments are a small part of engagement, ... in that case, you may see less [auditor] understanding or less involvement... With funds and financial services, the auditor [will] be more versed. ...There's also a range in practice in terms of the audit partner or manager taking ownership for this valuation. [Some] send it to the specialist and say, “are you okay or not?” There's others that say, “Okay, here it is. We're going to do this together.”*

P1 – Managing Director – Non-Big4 Accounting Firm – US

Specialists have a favorable impression of auditors' supervisory ability. Surveyed specialists in the evaluator role agree that auditors adequately supervise their work (Table 4 Panel A). However, similar to scope supervision findings, specialists from Big4 firms have a significantly more positive assessment of auditors' valuation supervision than specialists employed in non-Big4 firms have. These perceived differences suggest there could be accounting firm-specific characteristics that foster collaboration between auditors and specialists within the firm.

### Specialist Factors

- *Quality Variance of Management's Specialists.* Because the software, information platforms, data and other necessary tools to calculate FVMs are costly, specialists question whether small and “solo-operators” can provide high quality FVMs. Specialists report that a key factor in evaluating FVMs for auditors is the competence and skill of management's specialist. Participants' share candid concerns such as the following:

*We have a list of firms that we've distributed to our audit teams and we've told them that if your client ever asks about these firms, you tell them they are not competent. If they do use these firms then our review is going to be more expensive.*

P14 – Director – Non-Big4 Accounting Firm – US

- *Subjectivity and Judgment Differences.* Judgement drives the production of FVMs. Specialists observe that two competent professionals could arrive at an estimate that falls outside an acceptable range, and that their approaches could differ. Because of this subjectivity, having these judgments second-guessed by either auditors, management, or other specialists can be a source of frustration and contention among the professionals involved in the FVM process.

***Judgment differences with other specialists***

*Looking at work that we've done for financial reporting valuations, we may get disagreements in the way that we build up subjective assumptions like volatility, how do we pick it up, did we look at it at a certain frequency? If we used proxies, how did we come up with a proxy, what proxies did we use? We may disagree on methodology...Different specialists may have different opinions as to how much do you go to get to the right answer.*

P17 – Senior Manager – Non-Big4 Accounting Firm – US

***Judgment differences with clients***

*We've had a cross currency swap denominated in currencies that are not that liquid, like Brazilian real, or Mexican pesos. We often find clients choose a [classification] level which is easier for them to choose, so for example if it's, "It could be Level 2, or it could be Level 3", we tend to find clients err on the side Level 2, and we tend to push for, "Should this be a Level 3?" We don't often see it the other way round.*

P11 – Audit Senior Manager – Big4 – INTL

- *Specialist and Auditor Skill Integration.* Specialists believe that experience preparing and evaluating FVMs enhance their technical skills and valuation competence. Similarly, they note that a greater appreciation for auditing, such as through experience as an auditor, improves the level of support they can provide to audit teams. To facilitate such knowledge acquisition and cross-functional team collaboration, some accounting firms have a group of hybrid specialists who are charged with serving as liaisons between auditors and the more mathematically-focused specialists (who they often refer to as 'quants'). The following quotes illustrate other approaches to foster inter-group collaboration that accounting firms use and their rationale for doing so:

*We found it was easier to teach the accountants more about valuation, than it was to teach valuation specialists about accounting and auditing. All our specialists now are audit trained. I think that does help in helping them to understand what audit teams need. We're still trying to work on it the other way round, so the audit teams fully understand what they need as valuation and financial instruments specialists.*

P12 – Audit Senior Manager – Big4 – INTL

*Our program helps because we've effectively mandated our financial instrument specialists that assist the audit teams to have a [liaison] review their deliverables, to effectively bridge the gap between that quant valuing the swap and the third-year auditor responsible for [preparing] a workpaper. That made a big difference.*

P9 – Senior Manager – Big4 – US

## Environment and Professional Relationship Factors

- *Professional Relationships.* Specialists consistently express a desire to be seen and respected as technical experts by their clients. Specialists also consider that facilitating knowledge sharing between specialists and auditors is an important part of their responsibility. As the following comments indicate, specialists often feel more connected and an integral part of the audit team when their expertise is acknowledged.

*I've always thought it is a responsibility of specialists to help in upskilling auditors. Ultimately, I take the view that, even though you're a specialist, and audit teams might think they've outsourced to you, you are delivering an audit [to your client] as a firm.*

P12 – Audit Senior Manager – Big4 – INTL

*Sometimes in our firm [in particular], audit teams don't understand that specialists are also auditors. So clearly when we outsource the tax specialist, I say outsource, but let's [say] we involve, because that's more appropriate. ... It's awful to think that the standard on an audit [without specialists] would be very different to [one with specialists], and it's disappointing that as a firm [our] standards are not the same. It is extremely frustrating.*

P11 – Audit Senior Manager - Big4 – INTL

Specialists also indicate that they prefer to communicate directly with the audit clients and other specialists when evaluating FVMs for the audit teams because the auditors lack the expertise to contribute to the discussion. One specialist articulated:

*So, when we are having these conversations, it's quant to quant and the audit team is just sitting around as a mediator.*

P3 – Managing Director – Big4 – US

- *Factors that Influence Valuation Judgments.* Survey results show the factors that most influence specialists' valuation judgments when preparing or evaluating FVMs for financial instruments include: publicly available information related to the security, the valuation methodology used to determine the measurement, and management's financial forecasts (see Table 5). While publicly-available information, the valuation methodology employed, model assumptions, materiality, and preparer competence are indicated as important to specialists in their roles as preparer and evaluator of FVMs, there are key differences. For example, in the preparation of FVMs, the methodology employed to estimate the valuation is more important when evaluating the reasonableness of FVMs than when developing the FVM. Further, the assumptions used as model parameters are not as important when developing the measurement as when evaluating the FVM. Not surprisingly, the materiality of the FVM to the financial statements and the competence of the specialist involved in preparing the FVM play a significant role in how specialists derive fair value when they evaluate FVMs for the audit team but not when they prepare FVMs for management.

- *Regulatory Oversight—Documentation and Quality.* Except for agreeing that documentation requirements increased particularly due to audit regulatory inspections, specialists express mixed views on the impact of regulatory oversight on their work. Many suggest that focus on documentation did not improve valuation quality. Specialists convey that the collective focus on documentation threatens valuation quality because it leads specialists to consider *what would be defensible* should the regulator select the engagement that they worked on for review. For engagements with relatively higher risk of selection for inspection by regulators, some specialists believe this higher likelihood of scrutiny drives specialists' behavior. However, a minority of specialists express that regulatory review provides an overall improvement in valuation work and serve to further emphasise management's ultimate responsibility over FVMs.

**Reduced quality**

*I think [regulators prompt] quite evasive [behaviors]. A lot of people are not on the front-end thinking about doing the right work, rather they are focusing on documenting that we did some audit work.*

P12 – Audit Senior Manager – Big4 – INTL

**Improvement related to inspection risk**

*[Due to regulatory scrutiny] I don't think that an audit partner would go rogue on a valuation issue for a public client. For a private client, I'm sure they feel that because they don't have that scrutiny, that they're going to try to do it themselves.*

P17 – Senior Manager – Non-Big4 Accounting Firm – US

**Justifying judgment**

*[Having to justify my judgment] that's the fundamental change over the past few years, and it is, in many respects, influencing the actual valuation. Because my ultimate work product is a number, I also know that number has to have a justification behind it, and evidence for that justification. And the evidence is not always going to be entirely straightforward. You've got to calculate a value, but that value also needs to be auditable, and that influences pricing.... [by pricing] I mean the ultimate value.*

*We have regulators, and those regulators know what audit processes are, and they know what GAAP says, [but] they don't appreciate that not all financial instruments are as transparent as GAAP would say they are. What I mean ... is we can have something that's Level 3, and we'll have people asking for auditable ticking and tying evidence for the inputs. By definition Level 3 inputs are unobservable, but then you're asking me to provide something for you to observe!*

P15 – Managing Director – Big4 – US

**Management ownership**

*I think that the Financial Crisis [and regulatory oversight] now pushes management to be fully responsible for everything they've bought and put on financial statements and [discourages them from] relying on third parties to do that.*

P7 – Partner – Non-Big4 Accounting Firm – US

- *Regulatory Oversight – PCAOB/IFIAR Inspectors’ Knowledge.* Some specialists express concern that inspectors were not as knowledgeable, or do not ask deep and probing questions, about the FVMs they evaluated for audit teams. A minority of specialists believe inspectors are reasonably qualified, while others take a more cynical view suggesting that the inspectors’ job is to “find something” and that the highly subjective nature of valuation would always lead to deficiencies/findings. Importantly, there are no differences across firm size regarding balanced perspectives about inspector competence.

***Competent inspectors***

*I would say that, generally speaking, the interactions that I have had have been with their specialist teams that get it. I think the questions they ask have generally been reasonable, and if there’s some issue that they’re focusing on it’s probably because at some point during our internal preparation process we maybe didn’t document something as clearly as we could have. On net, I think my experience has been positive.*

P8 – Partner – Big4 – US

***Inspections not challenging***

*I spent hours prepping [for a meeting with inspectors]. I was very nervous, and then I went in there and they asked me two questions, which I thought were ridiculous and very obvious questions, and that was it. It wasn’t even on anything complex.*

P14 – Director – Non-Big4 Accounting Firm – US

*I’ve had direct interaction with the PCAOB and I have questioned their qualifications.*

P8 – Partner – Big4 – US

***Cynical view of the inspections process***

*[Any] valuation you give me, I can always find a lot of things wrong. [With inspections] you get the sense like, are people just justifying their hours and their jobs? [A finding] doesn’t mean the specialist was incompetent, just [the inspectors] justifying their jobs.*

P13 – Director – Non-Big4 Accounting Firm – US

***Phase 3 Summary:***

Specialists indicate that they often encounter both management and auditors who do not understand the complexity of the financial instruments they hold or must evaluate, respectively. Key aspects of the valuation process present challenges, which are exacerbated by management demonstrating a lack of ownership of the valuation process. Although specialists express concern about the quality of some third-party specialists who prepare FVMs for management, they also note that even the most competent specialists can disagree due to the highly subjective nature inherent in the production of FVMs. These competence concerns notwithstanding, specialists perceive auditors and management operating in the financial service industry as highly competent, which facilitates a more effective valuation process.

Regarding increased regulation, specialists agree that one benefit to regulatory oversight is that it serves to put further pressure on management to take ownership of both the FVM and the process employed to derive its value. Specialists also agree that there is an excessive emphasis on documentation, which can improve the establishment of an audit trail, but creates an inefficient and less effective valuation process. Specialists, however, recognise the need for FVMs they prepare to be verifiable. They understand that this is an important facet of the service they provide to auditors and financial statement users, and that this is an area of opportunity. For this reason, accounting firms value specialists who have accounting and/or auditing experience because this experience enhances the valuation practice and overall client relationships. To enhance audit quality, several accounting firms have invested in either rotational programs or hybrid organisations focused on serving as intermediaries between auditors and specialists. These programs appear to improve the communication and coordination challenges that can occur in the cross-functional team collaboration between auditors and specialists when preparing and evaluating FVMs. With regulatory focus on controls and documentation, specialists argue that the focus both when they prepare and evaluate the reasonableness of FVMs is on an estimate that can withstand regulatory scrutiny rather than one that is decision-useful for users.

#### ***Phase 4: Negotiations and Reporting the Final Fair Value Measurement***

In the final phase, specialists document their work and produce a final report. During this phase, specialists collaborate with auditors, management, and other specialists to conclude on the final FVM that will be used for reporting purposes. Where there are valuation differences, specialists play a key role in investigating and resolving these differences.

#### **Management Factors**

- *Detail in Report to Management.* Specialists typically provide management a written report. The report is often more detailed than reports provided to auditors for two reasons. First, the detail helps management document the process the specialist used to derive the FVM. Second, the report serves as an audit trail when auditors assess the reasonableness of the reported value. One specialist emphasised the difference as follows:

*The report for preparation services is more descriptive because the goal is that another valuation person reading that memo would get a good gist of what was done, what assumptions were used, and to a certain degree, to be able to reproduce it themselves.*

P19 – Partner – Big4 – INTL

- *Reporting Process to Management.* Specialists also indicate that they write the formal report to management in “draft form” to facilitate client review and to elicit input from the client’s external auditor prior to finalising the report. This approach permits specialists to address differences in opinion about the final FVM that arise between or among the specialist, management, management’s external auditor, and or the external auditor’s specialist.

*For financial statement reports, we do a draft report; send it to the client and the client sends it to their auditors.*

P6 – Manager – Non-Big4 Accounting Firm – INTL

## Auditor Factors

- *Audit Adjustments.* Specialists push back against client pressure to change their FVM but complain that their auditors are not always supportive and tend to side with management rather than with their own internal specialists. Many specialists complain that while they defer to the audit team's judgment, they are frustrated that auditors often act more like their client's advocate.

*The audit team is very sensitive to the auditor-client relationship. They don't like to get into a situation where we're telling them that the client has to have their specialist redo [the estimate]. If you're jeopardizing [the auditor-client] relationship, it doesn't matter how much [the client is] paying [in audit fees] because the relationship is always going to be important to the audit team involved. [Emphasis Added].*

P3 – Managing Director – Big4 – US

*I will say the propensity of the auditors here to defend the clients, [it's] almost as if they're on that side of the table, when I'm raising a valuation matter. That is where it's frustrating. I don't think it's so much a competence, as more of a business risk... I think the alignment [with the client exists] because auditing is so commoditised and there's [competition] out there just waiting like, "How satisfied are you with your service?" "We were late filing... You guys are fired... You guys are hired."*

P17 – Senior Manager – Non-Big4 Accounting Firm – US

- *Memo Provided to Auditors.* The primary deliverable to auditors is a memo. The following reflects specialists' sentiments:

*The memo describes the models used, and the tools, as well as the sources of information. It lists all the inputs, as well as the valuation outcomes. If there are differences [for independent measurements], it will document the investigation processes taken place and the judgments that have been made. It will also have a series of recommendations and findings for the audit team.*

P11 – Audit Senior Manager – Big4 – INTL

## Specialist Factors

- *Model Disclosure to Management and Auditors.* In both their preparation and evaluation roles, specialists state that they withhold live models from their clients for multiple reasons. These reasons, by service role, include the following:

### **Preparation**

*No, we would never provide the actual model because it's the proprietary model.*

P17 – Manager – Non-Big4 Accounting Firm – US

*[Clients] ask sometimes but we don't, because then we can't take ownership, right?*

P20 – Partner – Big4 – US

### **Evaluation**

*We've taken an approach where we will never ever share our models with [auditors], because what we found in the past, is they will, in the next year... just use our model themselves, with no idea of how to actually apply it correctly.*

P6 – Manager – Non-Big4 Accounting Firm – INTL

These perceptions from the interview participants are consistent with the survey responses. Occasionally, however, specialists provide model details to auditors more often than to management (see Table 6). Table 6 also presents the survey results on the Top 10 factors that influence the amount of detail that specialists communicate to auditors and management. Significant differences in the details disclosed to auditors versus management exist for four factors: complexity of the FI, documentation/evidence requirements for financial reporting purposes, FI materiality to the financial statements, and provision of a static (not live) description of the model.

- *Valuation Negotiation.* Specialists report involvement more often in the resolution of difference discussions when serving in the evaluation versus the preparation role. Some specialists believe it is more efficient if the auditor steps back and allows the specialist to communicate directly with the audit client or the client's specialist. Others prefer auditor involvement at all times.

*Yes, definitely [we are involved in the resolution of differences]. Only, I think more so with the audit teams. And then [the next step is] deciding whether this is something that we need to speak directly to the client, which we do a lot more of.*

P18 – Partner – Big4 – INTL

*Some auditors will jump on the call with us, alternatively if we get into really technical details I might ask to contact the [other specialist] directly and work through it. It's really the best use of everyone's time if we don't have people on the phone that are just listening [as we] work through the instruments.*

P2 – Director – Non-Big4 Accounting Firm – US

*It is more important that the audit partner be involved in this situation and get comfort.*

P17 – Senior Manager – Non-Big4 Accounting Firm – US

### **Phase 4 Summary:**

Specialists typically generate more detailed written reports when they prepare versus evaluate FVMs. The increased detail in reports prepared for management facilitates management's ability to carefully document and justify all aspects of the valuation process to auditors, regulators, and other stakeholders (through their financial statement disclosures). While specialists indicate that they share some details about the attributes of their measurement models with auditors more so than with management, in general, they only share flat files<sup>11</sup> due to the proprietary nature of their models, and fears of client misuse. After specialists develop an initial estimate, they are more likely to be involved in resolving differences when serving in the evaluator role than in the preparer role. Participants indicate that in the evaluator role, they resist pressure to adjust their estimates in a way that conforms to the audit client's preference. Nonetheless, the perceived lack of support from auditors, or that the auditors are siding with management can make the role of evaluating management's estimate a more contentious experience.

<sup>11</sup> A flat file is a printout of the output of the specialists' models.

## Recommendations and Policy Implications

Findings from this study offer several implications for regulators and standards-setters. These implications are discussed for each of the four phases of the valuation process.

- **Independent measurement**

As specialists acquire and plan valuation projects in Phase 1, they consider the valuation approach best suited to evaluate the financial instrument. Prior research finds that developing independent estimates mitigates the deleterious effects of the anchoring heuristic and improves judgment performance (McDaniel and Kinney, 1995; Earley Hoffman and Joe, 2008). Results indicate that when performing evaluation services, specialists' choice of whether to adopt an independent measurement approach or a review/reperformance of management's process can be influenced by the availability of model details and other information provided by the audit client and/or the client's specialist. Because prior research (Earley *et al.*, 2008) finds that when management is the first mover in financial reporting, they can have undue influence on the succeeding judgments of other professionals. Findings in this study imply that management could opportunistically push specialists to the valuation approach they prefer by selectively controlling the information they provide. When specialists adopt the valuation approach of re-performing management's process they are more susceptible to the anchoring bias (and therefore undue management influence), and less likely to exhibit sceptical judgment, than when they adopt the independent estimate approach to valuation. Accordingly, standard-setters and regulators should consider the costs and benefits of highlighting independent measurements as a preferred or best practice approach during the evaluation process for FVMs.

- **Early specialist involvement**

This study also finds that specialists feel acute stress as a result of budgetary and deadline pressures when performing FVM valuations. Prior research finds that deadline pressure negatively affects judgment performance (e.g., McDaniel, 1990). Lambert, Jones, Brazel, Showalter (2017), results in lower audit quality and imposes significant constraints on the auditors' ability to evaluate audit evidence, especially for complex valuations. Research also finds that when professionals face deadline pressures they are more likely to acquiesce to client preferences (e.g., Bennet, Hatfield, and Stefaniak, 2015). To reduce the risk of the negative effects of fee and deadline pressures, standard-setters should consider the cost and benefits of implementing requirements for specialist involvement in the early stages of audit planning when complex fair value measurements are a significant account for financial reporting. Standard-setters should also consider the benefits of highlighting the risks and pitfalls that arise from these fee and deadline pressures to auditors in an effort to build awareness and encourage an integrated team approach for remedial actions by the professional community.

- **Collaboration and professional scepticism**

The complexity of the valuation process as well as the complexity of the FIs under review play important roles in each of the three processes that comprise Phase 2 of production of FVMs (scoping, determining the valuation approach, and determining the valuation methodology). Findings from the study indicate that specialists exercise a considerable amount of judgment when selecting the scope and valuation approach; however, these judgments can be influenced by budgetary constraints. Also, study findings indicate that, at times, auditors determine scope without consultation and advice from their valuation

specialists. These findings suggest that specialists' ability to apply appropriate professional scepticism in selecting the subjective aspects of fair value measurement for testing and critical review can be impaired. Regulators and standard-setters should consider how to promote professional scepticism and more collaboration between auditors and specialists in the scoping, valuation approach and methodology selection processes of fair value estimation.

- **Management competence**

In Phase 3 of the valuation process, specialists execute their valuation methodology to arrive at either a point estimate for management or an estimation range for the audit team and must manage communication channels and client relationships. To facilitate increased communication and productivity between auditor and specialist teams, some accounting firms are engaging in recruiting and job rotation strategies to cross-train auditors and specialists on important integration points such as obtaining and evaluating model inputs, and evaluating instrument complexity. In addition, among the factors that most influence specialists' valuation judgments such as instrument complexity, and economic and industry-related factors, management's FVM knowledge and competence to prepare the FVM and develop adequate financial forecasts are key components. These findings suggest that these areas pose a potential risk for the FVM evaluation process. While standards indicate that auditors should consider management competence when assessing audit risk, there is a paucity of empirical evidence in the literature to suggest that auditors adequately weight this factor in their risk assessment. Specialists identify the management competence factor as highly important to their judgment. Accordingly, standard-setters should consider emphasising that management competence related to complex estimates and fair value measurements is an important component of risk assessment when evaluating the client's fair values. Encouraging auditors to more carefully consider management's FVM competence can help promote auditors' professional scepticism with regard to the measurement uncertainty inherent in this area of audit work (e.g., Cannon and Bedard, 2016).

In Phase 4 where specialists collaborate with auditors and management to report the final measurement, the subjective aspects and measurement uncertainty associated with FVMs make them susceptible to management bias and at greater risk for material misstatement.

- **Audit Committee and audit guidance**

Findings from this study that specialists believe that both specialists and auditors are at a comparative resource and expertise disadvantage when compared with clients in certain industries is troubling. Further, from the specialists' perspective, the subjective nature of fair value measurement and the highly competitive audit market leads auditors to be more willing to acquiesce to client preferences. This implies that specialists and auditors, when working in those industries, could be less willing, or feel less capable, to challenge FVMs from clients, and generally demonstrate less professional scepticism on such client engagements. Because prior research finds that auditors are more likely to resist management preferences when corporate boards and audit committees are strong, standard-setters should consider highlighting the importance of detailed discussions of FVM during audit committee communications (see Carcello, Hermanson, and Ye, 2011 for a review). Further, recent research (Fuller, Luippold and Joe, 2017) suggests that auditors' decisions to highlight uncertainty and subjectivity around critical accounting estimates influences management's forthcomingness in financial reporting disclosures.

Existing and proposed auditing guidance (e.g., ISA 701) emphasise that auditors should focus on areas with significant amounts of judgment-based decision-making such as FVMs. However, inspection findings by audit regulators such as the PCAOB and the IFIAR in conjunction with the findings in this study suggest the potential for auditor bias and an unintentionally abbreviated valuation process due to auditor and management knowledge deficits and budgetary constraints remain. This suggests auditors may not appropriately consider the judgment complexity and measurement uncertainty involved with FVMs. Taken together, these findings suggest that guidance provided to auditors may require revision such that the valuation-related decision framework articulated for their use is accessible in a form that more closely matches the current challenges inherent in FVMs as well as the challenges highlighted by this study. Further, regulators should consider the costs and benefits of highlighting fair value measurement as an area of estimates that is particularly worthy of attention when auditors opine on critical accounting estimates.

While the mixed-method research approach employed in this study is especially suited to investigate the research questions posed in this study, and provides insights into factors that affect specialists' judgments (Malsch and Salterio, 2015), there are limitations to interpreting these findings. Whereas the field-based methods employed in this study are suitable for exploratory examinations of some of the complexities of human behavior, and provide more in-depth understanding of real-world phenomena, this approach does not provide empirical evidence that can be used to make generalisations about causal factors (Malsch and Salterio, 2015; Power and Gendron, 2015). To this end, this study consistently draws upon prior research to infer and conjecture implications from the survey and interview responses. Future research can empirically examine causal effects. For example, future research can empirically investigate the nature of and the extent to which the management, auditor, specialist, and environmental factors identified in this study affect specialists' judgments as well as corrective mechanisms that can mitigate any deleterious effects observed.

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