

■ Research Article

Evidence-Based Management and Academic Research Relevance

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This study seeks to understand how academic business valuation research influences business practice. It uses knowledge market theory to assess the efficacy of the evidence-based solution to academic research relevance. Fifteen semi-structured interviews were conducted with chartered business valuers in Canada. Interview transcripts were subjected to thematic analysis using QSR's NVivo software (QSR International, Cambridge, USA). The research findings revealed that academic research on business valuation is relevant to business valuation practitioners. The professional nature of the business valuation profession promotes evidence-based management practices and encourages the use of academic literature in managerial decision making. Business valuation academics should not change the manner in which they publish scholarly articles. Instead, a solution to the academic relevance-problem resides in having efficient market intermediaries in the form of knowledge translation mechanisms. Copyright © 2012 John Wiley & Sons, Ltd.

INTRODUCTION

In 1800, Humphrey Davy made a momentous discovery—it was a finding that almost went unnoticed. At the time, it was believed that diseases were caused by harmful gasses. It seemed natural to wonder if gasses cure diseases as well. Dr. Thomas Beddoes established an institute to investigate the therapeutic use of gasses. He hired Davy to help in the investigation and to administer treatments to his patients. After years of research, Davy concluded that gasses had no therapeutic effect, and that the study of gasses as a cure for disease was a scientific dead end. Yet, he made one important observation. During the course of his research, Davy had become a user of nitrous oxide (laughing gas), and he noticed that he felt no pain while under the influence of the gas. In a scientific paper published in *Researches* in 1800, he concluded that “nitrous oxide in its extensive operation appears capable of destroying physical pain, it may probably be used with advantage during surgical operations. . .” (Holmes, 2009). In other words, Davy discovered that gasses could be used as an anesthetic for medical applications.

Although Davy published his finding in a prestigious scientific outlet, his discovery did not influence medical practice for several decades. It was not until 1845 in Boston when an American dentist named Dr. Horace Wells used nitrous oxide as an anesthetic while having some of his teeth extracted at a public exhibition. Within 2 years, gasses were used as an anesthetic in North America and Europe. It took 47 years before humanity was able to benefit from Davy's well-documented discovery. Two generations of patients suffered needlessly through surgery, dental work, amputations, and child birth before the medical community utilized his finding.

The story of Davy and his discovery of anesthetic gasses highlights an important but undervalued aspect of the debate surrounding the relevance and practical impact of academic research. It is not enough to conduct meaningful research and to publish important discoveries if the findings remain unused on a shelf. To be relevant, scientific breakthroughs need to be disseminated to the people who can benefit from them. Knowledge should not only be created but also delivered to those who may apply it. The present study investigates how scientific discoveries can better influence the state of practice by examining the channels through which academic research influences the operations of the business valuation professionals. Specifically,

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it investigates whether the evidence-based nature of the business valuation profession facilitates the dissemination and use of business valuation research.

LITERATURE REVIEW

Defining academic research relevance

The academic research relevance problem can be defined using the knowledge-based view of the firm (Curado and Bontis, 2006). It suggests that businesses exist for two reasons. First, some forms of knowledge are immobile and cannot be directly integrated in the marketplace (Nonaka, 1994). Businesses, however, are able to coordinate and govern knowledge-related activities (Spender, 1994) such as the integration of knowledge possessed by specialists (Grant, 1996; Nahapiet and Ghoshal, 1998). Second, firms apply specialized knowledge to provide goods and services. Managers within a firm identify high-value problems and govern the search for a solution by mobilizing knowledge resources (Nickerson and Zenger, 2004). The integration and application of specialist knowledge is a social process that is achieved through social interactions and is facilitated by social capital (Nahapiet and Ghoshal, 1998; Robert *et al.*, 2008). Knowledge is a social construct (Miranda and Saunders, 2003) and businesses are social institutions in which social networks interpret information and assign meaning to it. Within organizations, knowledge is associated with human agency and collective action. Knowledge is an enacted capability situated in the practices of individuals within an organization. Knowledge is a social accomplishment embedded in organizational practices. Consequently, knowledge and action are intertwined and inseparable (Orlikowski, 2002).

Because knowledge in organizations is intimately linked with action, it follows that academic knowledge is useful to practitioners only if it creates capabilities and guides action. Therefore, business research can be deemed to be relevant to practice if it influences decisions or guides actions of industry professionals or organizations.

Modes of knowledge

The view that knowledge is a social construct has a parallel in a modern thought on science. Several researchers have argued that a new mode of knowledge production, mode 2 knowledge production, has evolved (Gibbons *et al.*, 1994). It has five key characteristics: (i) it is created in the context in which it will be applied; (ii) it is trans-disciplinary in the sense that a variety of theoretical perspectives and methodologies are used to solve specified problems; (iii) it is produced by a broader community that includes new knowledge

organizations, such as think tanks, consultants and activist groups; (iv) it is a reflexive dialogical process that involves the subject of study in the investigation; and (v) it is created in the context of novel forms of quality control that reflects accountability to a greater diversity of stakeholders (Nowotny *et al.*, 2003). The knowledge created by this form of production is not solely objective knowledge. Instead, it is socially distributed knowledge that may be applied within a specific context and that has practical value.

Paths of relevance

There are two paths through which practitioners can be influenced by academic research: direct knowledge transfer and indirect knowledge transfer. Direct knowledge transfer occurs when industry professionals read peer-reviewed journal articles or attend academic conferences. Indirect knowledge transfer takes place when academic research is translated through intermediaries into a form that is more readily interpreted and applied by industry professionals. Indirect knowledge transfer happens when practitioners attend workshops, classes or training in which academic material has been utilized, or when consultants or think tanks make use of academic research and apply it in the services that they deliver to their customers. Indirect knowledge transfer occurs when practitioners learn about academic research in any way except directly reading peer-reviewed publications or attending academic events.

The accusation that business research is irrelevant to the needs of business professionals is predicated on the assumption that research is relevant only when direct knowledge transfer occurs (Bennis and O'Toole, 2005). Research is deemed to be relevant if practitioners access academic research directly. However, there is evidence to suggest that this mechanistic assumption is inappropriate (Booker *et al.*, 2008; Serenko *et al.*, 2011). Furthermore, academic research can be delivered to practitioners through indirect knowledge transfer (Serenko *et al.*, 2012). This study seeks to understand how academic research becomes relevant to practice by investigating routes of indirect knowledge transfer.

Knowledge markets and the relevance issue

The knowledge market model may provide a useful lens for studying the distribution of academic discoveries. It is based on the assumption that when there are providers and consumers of knowledge, a market must exist (Davenport and Prusak, 1998). Knowledge market theory views knowledge management as a market coordination mechanism (Fang and Su, 2008). Knowledge utilization is optimized by maximizing the efficiency of knowledge markets (Bontis, 2001).

To be efficient, markets must perform three functions: (i) to match buyers and sellers; (ii) to facilitate transactions; and (iii) to provide a legal and regulatory institutional infrastructure to facilitate and regulate transactions (Bakos, 1998). When these functions are performed well, markets balance supply with demand; when they are performed poorly, markets fail. Examples of market failures include externalities, public goods, merit and demerit goods, and non-competitive markets. When people state that a market has failed, they make a normative judgment that an intervention is required to correct the situation (Dahlman, 1979).

Knowledge markets perform the same functions as regular markets. Knowledge markets facilitate the promotion, distribution, communication and acquisition of knowledge (Davenport and Prusak, 1998). In efficient knowledge markets, the demand for knowledge should trigger people to specialize in the area where expertise is needed (Brett and Bontis, 2004). It should inspire them to dedicate time and effort to solve important, urgent problems. The knowledge market perspective can be applied to markets inside organizations (internal knowledge markets) or markets between organizations (external knowledge markets).

Knowledge markets are subject to market failures (Matson *et al.*, 2003). These include ineffective codification mechanisms, poor incentives to codify/share knowledge, limited external knowledge sources, unproductive delivery systems, lack of awareness of the existence of knowledge, insufficient number of brokers/intermediaries, and unprotected intellectual property. The accusation of academic irrelevance can be interpreted as a failure of knowledge markets. There are business researchers who work to inform business practice, and there are practitioners who are expected to benefit from business research. When practitioners are unable to benefit from business research then the situation can be described as a market failure. Stated differently, when business research does not influence decisions or guide actions then the academic knowledge market can be considered to be in a state of failure.

Evidence-based management and academic research relevance

Traditionally, the problem of academic research relevance has been viewed from the researcher's perspective. Most of the proposed solutions have been directed toward the researcher: researchers have to change the criteria by which they assess research for publication; academic administrators need to adjust the tenure and reward structure to include practitioner-oriented journals (Beyer, 1997; Pearson *et al.*, 2005); researchers need to disseminate their work more widely (Kelemen and Bansal, 2002); researchers need to change the way they teach (Bailey and Ford, 1996); researchers need to

collaborate with practitioners (Andriessen, 2004; Ferguson, 2005; Anandarajan and Lippert, 2006); researchers need to use scientific methods that are both rigorous and relevant (Serenko and Turel, 2010); and researchers need to involve practitioners in the study design and paper publication processes (Cohen, 2007).

Evidence-based management (EBM) frames the relevance problem from the other side of the academic divide (Rynes *et al.*, 2007). EBM asserts that organizational practices should be based on scientific evidence (Pfeffer and Sutton, 2006; Rousseau, 2006). If managers are not using research then the problem is with management education (Walshe and Rundall, 2001). Because management is not a profession, managers feel no obligation to be familiar with an established body of scientific knowledge (Cascio, 2007). The EBM perspective on the academic research relevance issue asserts that business research would be more relevant if managers were trained in the use of scientific evidence and if they had a reason to use it.

Chartered business valuers

Canadian Chartered Business Valuers (CBVs) are a good example of a business profession. CBVs are professionals who are members of the Canadian Institute of Chartered Business Valuers (CICBV). They are experts at quantifying the worth of a business, part of a business, the securities of a business, or the tangible or intangible assets of a business. CBVs are well educated with wide-ranging backgrounds including commerce, accounting, law and economics, as well as those holding accounting and financial designations. Unlike general business managers, CBVs are required to use the established body of knowledge in their area of expertise. To become a CBV, candidates must have a university degree or a professional financial designation, complete eight special courses, accumulate 1500 hours of business experience, and pass an entrance exam. In order to retain the CBV designation, valuation professionals must follow the CICBV's code of ethics and undergo 20 hours of professional development each year.

The nature of CBVs' work provides an incentive to make use of the latest scholarly work in their field. The role of CBVs is to increase the objectivity (and to reduce the subjectivity) of business valuations. To accomplish their tasks, CBVs have to keep up-to-date with the body of knowledge in their field. The latest discoveries first appear in the form of scholarly publications, for example, refereed journals, conference proceedings and academic books, which should be of primary importance to CBV professionals.

STUDY OBJECTIVE

This study seeks to understand how academic knowledge reaches industry professionals and influences

business practice. For this, business valuation research is used as a lens of analysis. The key objective is to understand the role that the indirect knowledge transfer approach plays in influencing practice by identifying the channels through which academic knowledge reaches CBVs. Also, this investigation seeks to evaluate the efficacy of the EBM solution to the academic divide, and whether the evidence-based nature of the business valuation profession promotes academic knowledge use. It aims to evaluate the utility of the knowledge market perspective in examining the academic research relevance problem.

METHODOLOGY

Fifteen semi-structured interviews with CBV practitioners in Canada were conducted over a seven-month period from November 2009 to May 2010. Three interviews were conducted face-to-face and 12 over the telephone. The first interviewees were identified by querying the "Find a CBV" feature of the CICBV's website (www.cicbv.ca). Snowball sampling was used to identify the remaining interviewees. The previous interviewees were asked to name CBV professionals who would be willing to participate in this study. The interviewees were located in the provinces of Ontario, British Columbia and Alberta. Each interview lasted approximately 1 hour.

The interview questions were developed to gauge the interviewees' views of the channels of the distribution of knowledge about advances in their field. The questions were designed to determine the extent to which each distribution channel was used, and the degree to which the channel was viewed as useful and credible. The interviewees were asked about academic sources, practitioner sources, books, conferences, word-of-mouth communications, and others. The questions were also designed to encourage the respondents to share their views on the role of their professional association in influencing the direction of academic research in their field and in communicating research findings to them.

The interviews were recorded, transcribed into QSR's NVivo and coded. The interpretive paradigm was used. A draft a-priori list of codes was developed based on the previous projects of the research team (Booker *et al.*, 2008; Serenko *et al.*, 2011). As the coding process progressed, new codes were developed, and the previous interviews were re-coded using the codes that emerged during the coding of the later interviews. While coding the interviews, the coders kept the goal of assessing the relevance of business valuation research among CBV professionals in mind. The researchers coded the interviews in an effort to understand the mechanisms by which academic discoveries get disseminated. All coders had sufficient expertise in knowledge management, EBM, academic research relevance, and qualitative research methods.

FINDINGS

A framework summarizing the key research findings emerged (Figure 1). This framework consists of five elements and six paths of influence. The five elements summarized in this model are practitioners, researchers, the practitioner knowledge market, the academic knowledge market, and knowledge translation mechanisms. *Practitioners* are the business valuation professionals. *Researchers* are trained scientists who systematically observe phenomena of interest and test hypotheses related to those phenomena. They disseminate their findings for the research community through academic publications, which mostly appear in the form of peer-reviewed journal articles, conference papers, books and book chapters. *Translation mechanisms* are channels through which research findings are repackaged for practitioners (i.e., indirect knowledge transfer). Translation mechanisms tend to be one-way communication channels; information flows from the research community to practitioners through intermediaries. The translation process involves aggregating research findings, summarizing research programs, contextualizing the academic material and expressing it in simple language. The key points of findings or research programs are identified, interpreted and highlighted for practitioners. Practitioners access both the academic and practitioner knowledge markets.

Academics

There are several well recognized and respected business valuation academics, such as Shannon Pratt, Aswath Damodaran, Laurence Booth and Ian Campbell, whose names were mentioned by most of the participants.

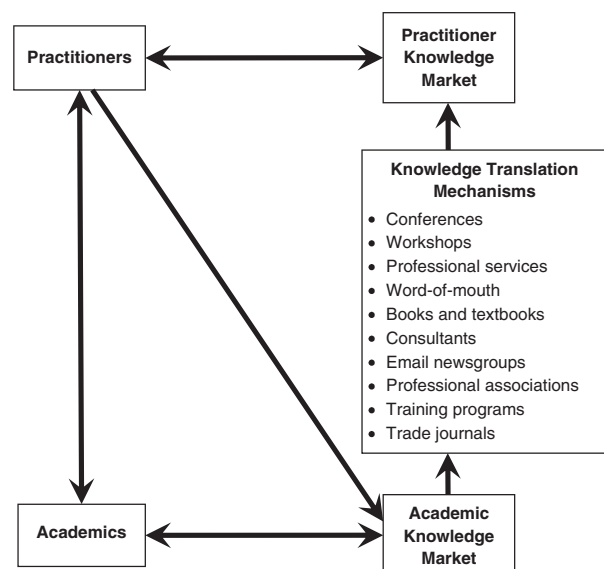


Figure 1 Knowledge markets

"One of the people that the valuation profession as a whole respects is Shannon Pratt. ... He is a PhD. His books are up there."

"His name is Asworth Damodaran, his work is amazing."

Some of the CBVs mentioned that the academic names that they recognize are academics who have written textbooks or provided professional services. They were not sure whether these individuals would be considered academics or practitioners because they focus not only on scholarly research but also on business practice. Some of the most recognizable names seem to be engaged in Mode 2 knowledge production (Gibbons *et al.*, 1994).

"Now whether you would consider him [Shannon Pratt] to be an academic now is unlikely. He could probably be called a practitioner."

Practitioners

In the context of this study, practitioners are CBVs who are engaged in the professional practice of valuing businesses. In an ideal world, they are the ones whose work practices ought to be changed or improved by academic research. CBVs need an assortment of knowledge for their work. Some of the knowledge they need, academics cannot provide. For example, CBVs need to have knowledge about the industry that the business they are valuing is in. They want to know about factors that impact the industry, its history, future projections, current economic conditions, and anticipated technological changes.

Chartered business valuers are aware that when they work on a file, they may have to defend their valuation in court. Consequently, they need impartial *authoritative sources* that can inform and support their decisions. CBVs use academic research to confirm their decisions, to apply the appropriate theory, and to justify their valuation methodology. Academics provide critical insight into the fundamental financial principles that CBVs use in their work. For example, business scholars report on equity risk premiums, the capital asset pricing model, and marketability discounts. By using these credible academic findings, CBVs can make better decisions, protect themselves against future legal actions and reduce subjectivity in their work.

"... we can demonstrate to the judge that we have considered various sources."

"I mean it's not always in court [that] we have to defend it but if it's not in court it's to a client, to regulator or to a taxing authority."

There are two ways by which CBVs typically encounter academic material. First, they have journals and e-mail delivered to them from a variety of sources including academic ones. When new material arrives, CBVs do not read it in depth. Instead they *skim* through the arrived material and pay attention to the topics that are presented. This way, they remain aware of current popular topics of interest and resources they have on hand. Second, CBVs *search* for material on topics that are specific to the file they are working on. This is the most common situation in which CBVs use academic material. They do not use academic material for their own edification. They use it when they have a need to learn about a specific issue. That need is usually associated with the needs of their client at the time. Self-education is not their primary goal, it is a by-product.

"I've never sort of sat down, gone through a whole bunch of journals and said, 'this is useful.' Usually, I'm looking for a topic."

"When I'm looking for research, I have a specific topic, and I'll go on the Internet and I'll look for that particular topic."

It is interesting to note that many of the CBVs report that they use academic material in their daily work. They do not use it as a matter of routine. They use it only when they have a need.

Academic knowledge market

Academic knowledge markets are external entities through which business research is distributed for consumption by other academics. Academic knowledge markets are also the mechanism through which direct knowledge transfer occurs between academics and practitioners. When practitioners read research reports written by academics, they are making direct use of academic output. Traditionally, academic knowledge markets were considered the mechanism by which academic work is believed to be delivered to practitioners.

When academic research is described as irrelevant to business practice, the presumption is that the direct knowledge transfer does not occur between academics and practitioners in the academic knowledge market. Previous research has described some of the elements that discourage practitioners from using academic research (Booker *et al.*, 2008). On the one hand, CBVs attempt to access the academic knowledge market directly; frequently, they succeed. On the other hand, there are obstacles preventing them from fully harvesting the academic knowledge market's potential, which can be interpreted as knowledge market failures.

One of the key barriers is access to academic materials. The practitioner's access to materials varies

considerably from practice to practice. Large consulting firms enjoy extensive libraries, access to dedicated proprietary information and academic sources. For small firms or individuals, access to academic materials is limited to the CICBV publications.

"We don't have access to it, that's number one, okay. We don't have any way to get into those journals."

"We are limited in our ability to access academic research papers."

The practitioner's lack of access to academic materials relates to the ineffective knowledge delivery system resulting in the knowledge market failure (Matson *et al.*, 2003). The academic knowledge market cannot be effective at distributing knowledge directly to practitioners if practitioners do not have direct access to what they need.

Another significant market failure stems from the way the academic knowledge is packaged. The comments made by this study's respondents mostly mirror conclusions made in past studies. Research papers written by business researchers include complicated statistics and mathematics, contain technical jargon (Ankers and Brennan, 2002; Kelemen and Bansal, 2002; Cohen, 2007), describe unnecessary (from CBVs perspective) detail, and are written at a high level of abstraction (Worren *et al.*, 2002; Pearson *et al.*, 2005). Academics create theoretical rather than practical knowledge (Bolton and Stolcis, 2003). Practitioners require tacit procedural knowledge, or knowledge-in-practice, yet academics provide explicit propositional knowledge (Breu and Peppard, 2003). In essence, academics and practitioners do not share a common context with which to represent knowledge (Jennex, 2008).

"I think what that the information gets lost in communication. I've gone to conferences where I've been very interested in the topic but then when I went to hear the individual speaker, I didn't know what they were saying to me."

"Some of the things that are put out by the academics you'd need a Ph.D. in mathematics to even begin to comprehend what they are doing."

"...when they're communicating, they're talking in betas and you can't follow them. It's too technical."

"...as a practitioner, we don't need to intimately understand every sampling and every detail of the study."

For academics to meet the needs of practitioners, they have to understand the nature of business valuation work, which is a highly specialized field. It takes a long time to become proficient at it. When CBVs were asked if they believed that academics were knowledgeable about business valuation, some

of them suggested that it depends on the research report or the author of the report. Overall, they stated that many researchers do not have the practical experience to understand this domain. As such, the supply and demand sides of the knowledge market were sometimes misaligned.

"...they don't have the practical experience..."

"...if you're just talking about little Ph.D. groups in universities, I do sometimes question whether they have enough real world experience."

"They haven't got a clue about the practice of business valuation."

Most respondents were not completely satisfied with academic business valuation research. Their complaints often related to the amount of research being undertaken. The number of scholars working in this field is relatively small, and most are located in the USA. There is a need for more research in Canada.

"I'm moderately dissatisfied because of the difficulty in understanding and the difficulty in finding relevance to a practical situation."

"Am I satisfied? No."

Although the interviewees felt that scholarly articles are not well suited to their needs in the form they are published, they did not express a desire for academics to change what they do. In fact, they unanimously recognized that peer-reviewed publications are presented the way that they are in order to advance science. Giving the irreconcilable differences between the academic and practitioner knowledge markets, there should be a mechanism to transform the scholarly knowledge and move it from the academic to the practitioner market.

"My advice to you guys would be, you do your research the way you typically do your research and you have that paper available. And then from that, do your different articles and the different venues that ha[ve] a softer touch to it with reference to the technical journal so that people can get interested and understand it. And if they want to know more, they can go to the source."

Practitioner knowledge market

Many CBV practitioners are engaged in knowledge creation and distribution. Their efforts emulate academic knowledge dissemination processes. CBVs write articles on topics within their area of expertise; they publish their work for their peers in trade journals; the trade journals subject their work to peer review before it is published; and they cite relevant academic and non-academic sources. Some examples of these outlets are the magazines associated with the

Canadian Institute of Chartered Accountants (*CA Magazine*) and with the Canadian Institute of Chartered Business Valuators (*Business Valuation Digest*). The main attributes of these publications are that they are written by business valuation professionals for business valuation professionals in a tone and style that are appropriate for this audience.

“People will start thinking about issues and then the more senior practitioners in the field will start thinking about them, and they will write what is the equivalent of an academic paper with a lot of research in it, but they’re not from academia.”

“So whether it’s Richard Wise, for instance, lots of articles – Howard Johnson, lots of articles. So we kind of bypass academia. Does that mean that there’s no relevance for it?”

“I find articles from a practitioner much easier to read.”

Knowledge translation mechanisms

The term knowledge translation has not been consistently articulated nor authoritatively defined (Estabrooks *et al.*, 2006). In this study, knowledge translation is referred to as the process through which scientific evidence comes to change the work practices of practitioners. As noted earlier, scientific papers are written to the standards required by the scientific process. The result is that academic papers are not directly suitable for the needs of busy practitioners. For scientific evidence to be directly suitable for practitioners, it has to be communicated and contextualized differently. Knowledge translation mechanisms are the means by which scientific evidence is made more readily usable for practitioners.

Viewed from the knowledge market perspective, knowledge translation mechanisms perform a role similar to the wholesale function in mundane markets. Wholesalers facilitate buying and selling by buying in bulk, repackaging goods, distributing goods to markets, and managing information. Wholesale markets reduce transaction costs and enable economies of scale to be achieved. Knowledge translation mechanisms perform a similar role by summarizing accumulated scientific evidence, and converting it from abstract theoretical notions or decontextualized facts to context-based information expressed in the language of the end user.

Recall that the overall goal of this study was to determine how scientific evidence comes to influence professional practice in the business valuation field. In the paragraphs that follow, the mechanisms through which academic material gets communicated to CBVs and converted into a format that is usable to them are explored.

The most commonly reported translation mechanism utilized by the CBVs was *conferences*. On average, CBVs attend one conference per year. When asked how they stay up-to-date, most mentioned the CICBV conference first. The CICBV also hosts *workshops* throughout the year that some interviewees attend on an ad hoc basis.

“For me personally, it would probably be more of the conferences. So, I would become aware of new knowledge through a conference ... as opposed to reviewing the academic research.”

“That’s what I sometimes get out of conferences. Sometimes there’s an academic, whether it’s Shannon Pratt or whether it’s Damodaran who will speak and will try to translate what the latest studies mean to us as, as practitioners.”

Professional services are another important source of academic knowledge. Professional services compile useful information about academic discoveries, legal rules and practitioner publications, and offer access for a fee.

“... there are websites out there, ... and what you do is you become a member, and you get to search their databases. And in those databases, they’ve got articles by practitioners or academic papers or even court cases in some.”

“Well, less often journal articles themselves. Usually we access them through a publication of some sort. For instance, we subscribe to the Canadian Valuation Service.”

The role that person-to-person communication or *word-of-mouth* plays in knowledge dissemination depends on the preferences of the practitioner, the nature of practice and the type of conveyed knowledge. In business valuation practices that have more than one CBV, word-of-mouth plays a larger role. Each CBV has his or her own practice within the firm, but they draw upon one another’s wisdom. Many of them call on their fellow CBVs for their insight or perspective. The word-of-mouth channel is the translation channel that most strongly exemplifies the socially constructed nature of knowledge in practice.

“I think it [word-of-mouth] plays a fairly significant role. If you were to ask most practitioners I think they’d say the discussion with other practitioners is pretty important.”

“[Word-of-mouth] ... I think, there’s a fairly high level of that. If ever I run into an issue then I call on a colleague. I do that on a fairly regular basis.”

E-mail-based newsgroups are another popular mechanism for transmitting knowledge. The newsgroups are popular because they are easy to access and present timely material. CBVs do not have to expend

effort to look for the material. It simply arrives in their inbox; they can peruse it when it is convenient and select topics of interest. Many of messages provide summaries of scholarly articles with links to the source material.

"I subscribe to a number of email news postings which sometimes have links to the journal articles. That's really where I access them."

"I get those monthly emails. They have executive summaries of articles and if there is something that peaks my interest then that would be a way to read that."

A surprising discovery was that *webinars* have become a popular avenue for professional development. Webinars allow practitioners to access relevant information without having to travel. They are popular because they are accessible and useful.

"There are certainly a lot of webinars available. . ."

"I think those webinars are more accessible."

The use of *books* and *textbooks* varies considerably among professionals. CBVs most frequently use textbooks when writing a report. Textbooks are favored because they are viewed as authoritative. Later in their careers, CBVs use textbooks as a means of refreshing their memory on selected topics.

"If I reference a textbook, a judge will challenge it less because it is accepted as a general valuation practice methodology."

The larger firms report that they supplement the CICBV conferences with *internal training* programs that they develop in-house. The in-house training programs are more practical and applied than the conferences provided by the CICBV. The CICBV has much more academic material.

"...we at times have internal training. We had two days of business valuation training in the summer."

When asked who should translate academic material, most of the CBVs gave a variety of responses. The majority suggested that practitioners are better able to perform the translation role.

"...probably, the practitioners because they are the people who are . . . really living in the same world so that would be my preference. . ."

"...I suspect practitioners better know how it's to be applied."

Professional associations also play an important role in academic knowledge transfer. The CICBV has a mandate to advance the profession of business valuation. To achieve this goal, it attempts to deliver business valuation knowledge to its members through a variety of channels. Also, it tries to advance knowledge by identifying relevant research

topics and by sponsoring research in the areas suggested by its members.

"There is a committee that deals with academics and tries to bring forward topics that are of interest to the practitioners that the academics could possibly study."

"These are topics of relevance as of October 2009 that the Canadian Institute has found appropriate for research. It'll give you what it is that we, in the business valuations community, feel are important topics."

Many of the initiatives taken by the CICBV to advance their profession resemble knowledge coordination mechanisms. In essence, the CICBV tries to advance the profession by creating effective knowledge markets and by making those knowledge markets accessible to its members.

Interestingly, CICBV's efforts also strongly resemble a broader view of EBM articulated by Rousseau (2007), who named this approach evidence-based management collaboration (EBMC). Under EBMC, researchers, educators and practitioners work cooperatively to systematically review bodies of research to facilitate knowledge translation and knowledge transfer. Rousseau's vision was to energize practice, make research more influential and make instruction more effective by creating better linkages among the three. The CICBV's effort seems to be inspired by a similar vision.

Unfortunately, some of the CBVs that participated in this study were not aware that this work was being done for them.

"Up until today nobody has ever asked me. I could only say that it's not being done."

"It's unfortunate that we don't get committees together and sort of issue the topics or areas where we as Canadians are concerned. A lot of the times, we just turn to journals and information that's been done in the States."

IMPLICATIONS

The overall goal of this study was to understand how academic research influences the state of practice. The role of direct and indirect knowledge transfer approaches was investigated by identifying the channels through which academic knowledge reaches CBVs. The knowledge market perspective was advanced as a lens with which to examine the relevance problem. Also, the efficacy of EBM practice solution to the relevance problem was assessed. For this, 15 semi-structured interviews with CBVs were conducted. With the findings, the following implications are offered:

Implication 1: Academic research on business valuation is relevant to business valuation practitioners.

Business valuation professionals are aware of the academic findings and make use of them in their practice. Many professionals are familiar with the major scholars in the field. Despite some difficulty in accessing peer-reviewed articles and comprehending their content, most CBVs benefit from scientific research in their domain. In many cases, the body of knowledge existing in peer-reviewed sources is further translated into more easily interpretable chunks of knowledge.

Implication 2: The evidence-based nature of business valuation work encourages the use of academic literature in managerial decision making.

Business valuation practitioners need credible, valid and authoritative knowledge that can be used to support a valuation and stand up in court. The evidence-based nature of business valuation work gives CBVs an incentive to find and use academic material. Business valuation professionals make use of professional services that distribute academic articles to them. CBVs not only read and make use of findings published in scholarly books and journals but also codify and communicate this knowledge to their colleagues. However, it is the evidence-based nature of their work rather than their professional status that causes CBVs to seek out academic publications. Self-education is not their goal; they access scholarly research only when they need it.

Implication 3: The knowledge market perspective provides a useful approach to the study of academic research relevance topic.

In this study, the theory of knowledge markets was adapted to investigate the existing knowledge distribution channels. The knowledge markets perspective proved to be a valuable diagnostic tool for identifying barriers to academic relevance. In the case of the business valuation profession, barriers include having difficulty accessing academic sources, problems with the way knowledge is packaged (e.g., use of statistics, jargon, level of abstraction, propositional rather than procedural knowledge) and a misalignment between the knowledge that is produced and the knowledge that is needed.

Implication 4: A solution to the academic relevance problem for business valuation research resides in having efficient market intermediaries in the form of knowledge translation mechanisms.

Scholarly knowledge reaches business valuation professionals through direct and indirect knowledge dissemination channels. However, practitioners obtain much of their knowledge by means of the indirect knowledge dissemination method.

Conferences, workshops, webinars, professional services, e-mail based newsgroups, books, and internal training that serve to translate, integrate and communicate research for CBV practitioners are a very efficient indirect knowledge dissemination channel. As such, knowledge translation mechanisms, which repackage academic knowledge for practitioners, play the role of market intermediaries in the business valuation knowledge market.

Implication 5: Business valuation academics should not change the manner in which they publish scholarly articles.

Business valuation professionals suggest that academics should not change the way they publish peer-reviewed papers. They believe that researchers follow a strict scientific format for a reason, and they do not ask academics to change the format or language of their peer-reviewed publications. They understand that the academic knowledge market is designed for scientific purposes—to maintain a high level of quality control through peer review. Instead, they prefer to access scholarly findings through intermediary mechanisms. However, it is interesting to note that the efforts of scholars who are most recognizable to CBVs have many of the attributes of Mode 2 knowledge production.

CONCLUSION

This study advanced knowledge markets theory as a theoretical lens with which to study the issue of academic relevance. This study confirmed that the academic relevance problem could be viewed as a failure of the knowledge markets to coordinate knowledge supply with knowledge demand. In the business valuation field, the relevance problem is partially addressed by market intermediaries who translate and repackage academic discoveries into a form more directly usable by practitioners. Conferences, workshops, word-of-mouth, webinars, professional services, e-mail based newsgroups, and internal training serve a wholesale function to facilitate indirect knowledge transfer.

This study proposed that industry professionals would make use of EBM practices and that academic work would be more relevant as a result. The business valuation profession in Canada was found to be evidence-based. However, this takes place due to the evidence-based nature of their work rather than their professional status. Future research should use knowledge market theory to identify methods of improving the efficiency of academic knowledge markets. Specific attention should be paid to discovering methods for improving the efficiency and effectiveness of market intermediaries. Research should identify market coordination mechanisms and propose methods for improving the coordination of knowledge markets.

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