

Bridging the Gap between Academic Accounting Research and Professional Practice

edited by Elaine Evans, Roger Burritt and James Guthrie



Centre for
Accounting, Governance
and Sustainability



**The Institute of
Chartered Accountants
in Australia**



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and Sustainability**

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Our members work in diverse roles across commerce and industry, academia, government and public practice throughout Australia and in 109 countries around the world.

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The Institute can leverage advantages for its members as a founding member of the Global Accounting Alliance (GAA), an international accounting coalition formed by the world's premier accounting bodies. With a membership of over 800,000, the GAA promotes quality professional services, shares information, and collaborates on international accounting issues.

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Fifty academic members and about 10 professional staff offer administrative and research assistance on research designed to make a difference to teaching and practice.

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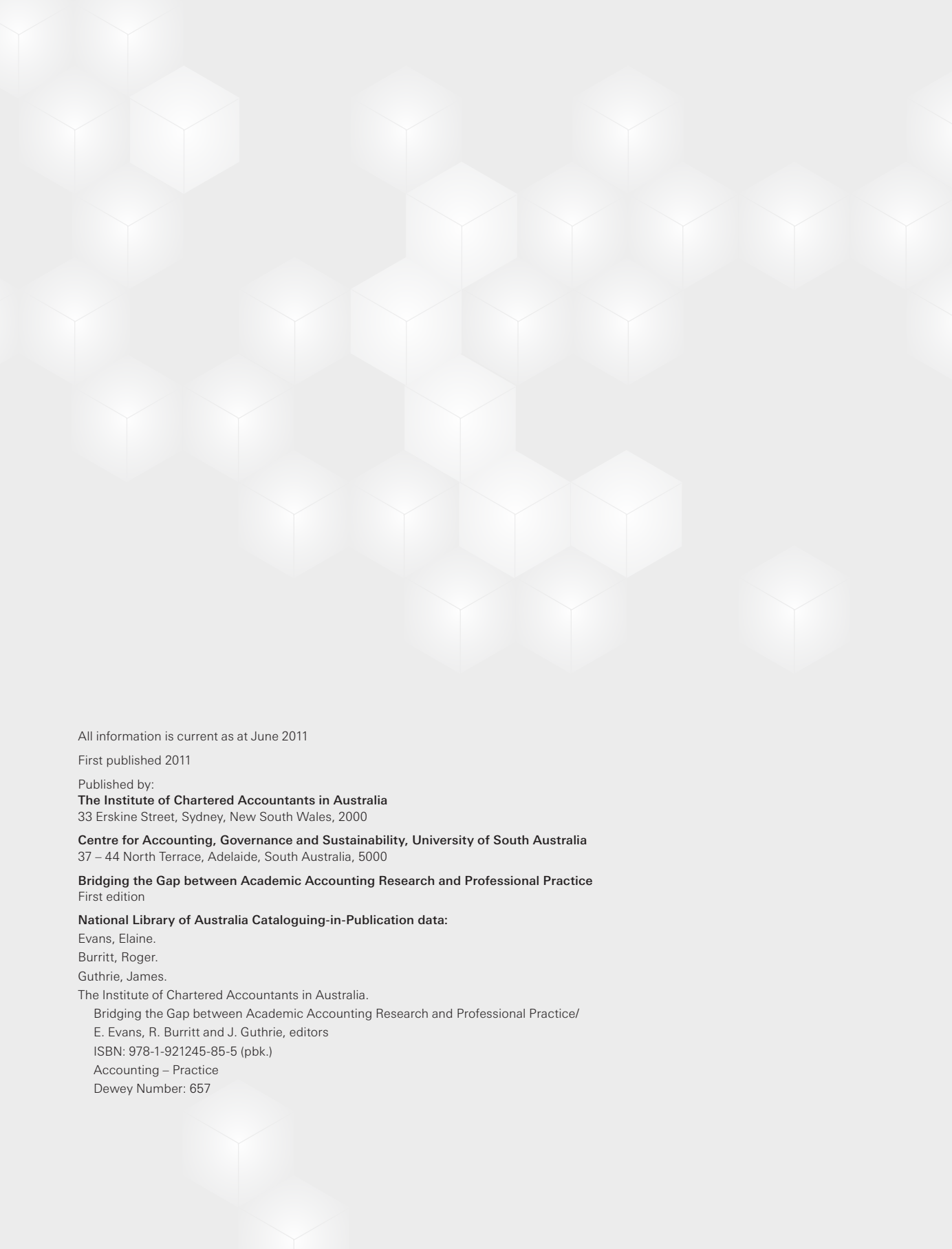


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Preface

The Institute of Chartered Accountants in Australia recognises the importance of tertiary education for building a sustainable long-term accounting profession in Australia. An important part of tertiary education is the ability to produce world-class accounting research that, in part, is relevant to policy making and professional practice. In taking a leadership role on this issue, the Institute has commissioned this publication, produced in collaboration with the Centre for Accounting, Governance and Sustainability in the School of Commerce at the University of South Australia, a recognised world-class academic research centre.

I welcome this new publication, which is the second thought leadership book based on our collaborative arrangement. The forum on 'The Relationship between Academic Accounting Research and Professional Practice' was held in Adelaide in February this year when leading Australian and overseas academics, practitioners, public policy representatives and Institute members gathered and openly debated the need for relevance and the importance of an understanding of the impact of academic accounting research.

Contemporary knowledge about the relationship is revealed in the current book, which comprises 18 authors drawing deeply into the many complex issues linking accounting research and the accounting profession. The Institute recognises the important role of accounting research and the potential costs to the accounting profession and the wider community if academic accounting research loses its relevance or does not have a demonstrated impact on public policy or practice. The current book will contribute to an on-going dialogue between academics, practitioners and public policy makers concerning the key challenges facing accounting academic research in 2011 and into the future.

I am pleased to note the progress the Institute is making towards our strategic objective of investing in accounting research measures, which includes support for academics in terms of research funding, participation in wider community debates and representation at the highest levels in government. Our investment in aligning our organisation, in part, to the needs of accounting academics and transforming our links with the academic community is an important platform for continued dialogue and debate.

I commend the academic and practitioner contributors to this book, for their detailed discussion on various aspects of accounting research relevant to the profession, and wish the various stakeholders success in their continued debates on this important issue.

A handwritten signature in black ink, reading "Graham Meyer". The signature is fluid and cursive, with a long horizontal stroke at the end.

Graham Meyer

Chief Executive Officer

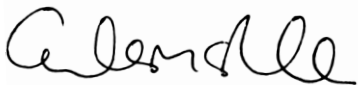
The Institute of Chartered Accountants in Australia

Preface

As Deputy Vice Chancellor: Research and Innovation at the University of South Australia it gives me real pleasure to provide a preface to this important text. There is no doubt that delivery of world-class research in key disciplines is at the heart of every university's mission but there is also no doubt that it is research which informs, and is informed by, professional practice that will deliver innovation of value to major professions such as accounting. It is therefore critically important to provide opportunities for high-level engagement between academic and professional practitioners to discuss the evidence base, which supports a strong research agenda of direct relevance to the challenges of professional practice. So, a forum which sets out to target and bridge the gap between academic accounting research and professional practice is the ideal platform to support practice that will enable Australia to have a strong, sustainable base for accounting that is ready for the long haul and positioned to address the sustainability, environmental and social issues of our time. Any intelligent bystander reflecting on the role of failures in regulatory and corporate governance practices in the genesis of the global financial crisis would welcome a forum where senior academic and accounting professionals seek to combine and leverage their insight, knowledge and experience to improve organisational practice and financial reporting.

An impressive feature of the leadership forum on which this book is based was that the right people were in the room; this has ensured that the voices of the most senior and innovative leaders in the field are represented in this volume of proceedings. Some of the fierce debate around the identification and source of the major gaps in the relationship between accounting research and professional practice has translated from the presentations into the accompanying text and importantly the recommendations of what actions might be required to bridge those gaps are also highlighted.

I am delighted that the Research Centre for Accounting, Governance and Sustainability at the University of South Australia has partnered with the Institute of Chartered Accountants in Australia to support this key forum and the proceedings arising from it – an effective collaboration is one that is most likely to lead to productive and valuable outcomes. I do hope that in a relatively short time it will have become clear that this volume captures a landmark event, one which has acted in different ways to catalyse changes in practice and outcomes which have been recognised as being of real value across the Australian accounting community.



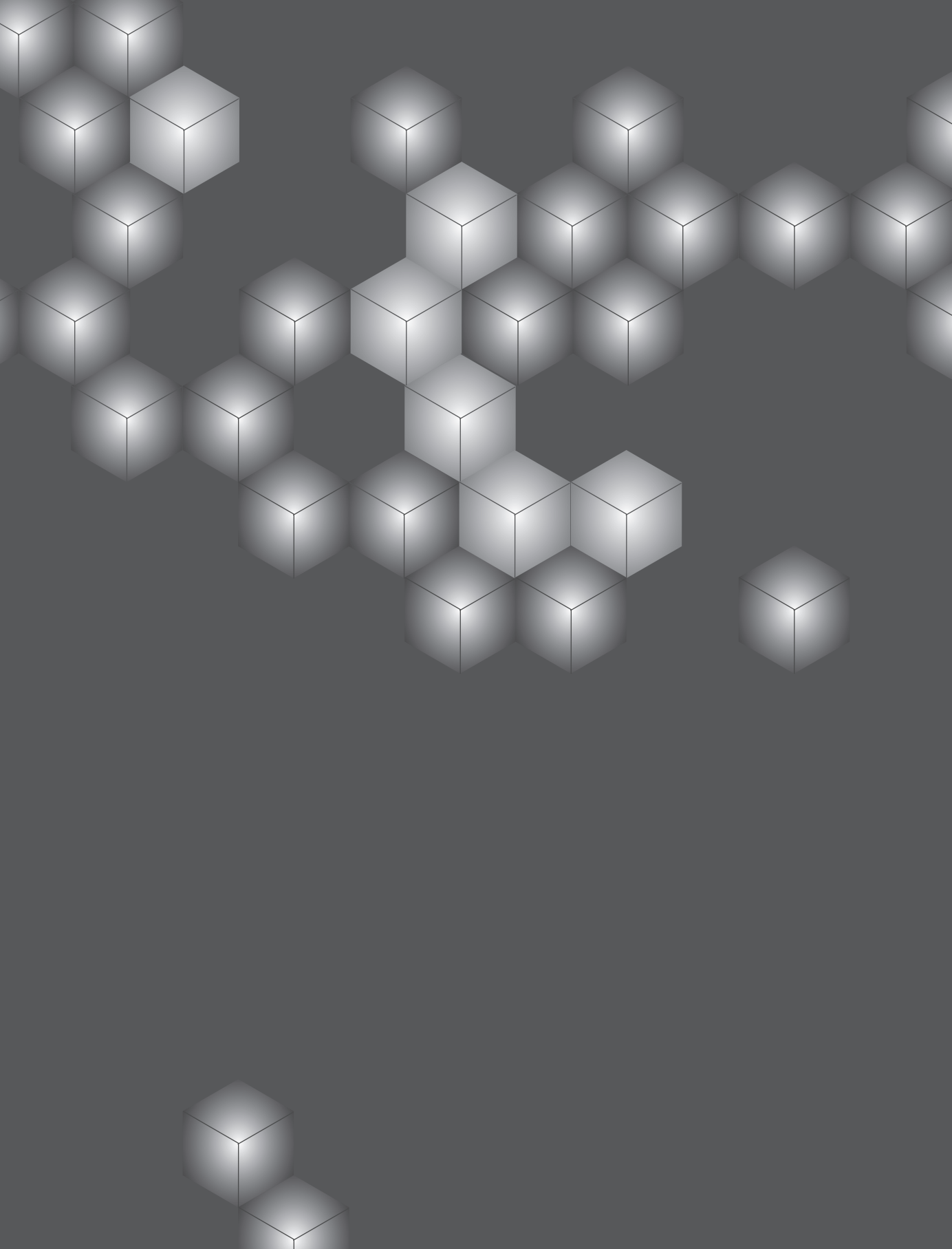
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Chapter 1

The Relationship between Academic Accounting Research and Professional Practice

James Guthrie, Roger Burritt and Elaine Evans

Accounting research is often conceived as applied research in that the focus of study is made up of technologies and technical practices used by accounting practitioners in social and organisational settings. This stands in marked contrast to the physical sciences where the focus of study is mainly physical matter. At the international level, research is generally a requirement for accounting academic career progression, and an important contributor to the development of knowledge and scholarship (Wright and Chalmers, 2010).

The impact of research in some disciplines is easy for the lay person to comprehend, such as in medicine, where advances in medical procedures and development of new drugs result in benefits to society. For accounting, this impact is not so easy to discern (Tilt, 2010). For instance, in the field of accounting there have been claims that research has become too far removed from the interests of the profession and practitioners. Researchers in turn point to the shortcomings of current professional practices. Indeed, some in the accounting research community go so far as to consider that many practical issues of concern to professional accountants do not warrant the attention of researchers (Singleton-Green, 2010).

The main purpose of this book is to report on a Forum that investigated contemporary challenges in the relationship between academic accounting research and professional practice in Australia. In particular, the various contributions discuss the interface between the academy and the profession in determining future directions. Its objective is to provide a foundation for open discussions on possible strategies, issues and changing skill sets for accounting graduates, accounting academics and higher education providers, by identifying major challenges and strategies for addressing them.

Each chapter presents a wide variety of challenges and solutions, including those faced by accounting researchers, policy makers and practitioners. It is difficult to distill only a few challenges, but the following few are highlighted:

- The accounting profession is made up of three parts – research, policy and practice – therefore within the broad profession of accounting there needs to be more communication and coordination between practitioners, policy makers and academic researchers
- Professional associations have an important role to play in transmitting academic research findings to practitioners
- The different time horizons of academic researchers and practitioners are a major contributor to the gap between research and practice
- Academic research papers are difficult to read and understand

- More direct contact between academics and practitioners would improve the quality of academic research
- Academic research is typically orientated towards other academics, rather than practitioners
- Academics have limited incentives to undertake research that is focused on practice
- Joint seminars between academics and practitioners are likely to enhance the relevance of academic research to practitioners
- More education in undergraduate university programs about the value of academic research is likely to enhance the relevance of academic research to practitioners.

The following is a brief introduction to each of the further 10 chapters in this book.

Richard Laughlin's chapter questions the relationship not as a 'gap' that needs to be 'bridged', but rather in a more open ended way considering whether accounting research, policy and practice are 'worlds together or worlds apart' and what the answer to this question implies for the elements that constitute the profession. In conclusion, he indicates that not bringing these worlds together runs the risk of losing the societally-sanctioned status of being seen as a profession with all the associated privileges and respect. His chapter makes clear that it is accounting research, policy and practice that constitute the accounting profession. Put simply and directly, all three elements need to work together and, through discourse, agree and accept, at an institutional level, the respective roles, responsibilities and interrelationships (with the other elements), if the profession is to continue to survive and prosper and offer the services it should in societies throughout the world.

Göran Roos and Stephen Pike in their chapter, 'The Relationship between University Research and Firm Innovation' discuss the definitional issues concerning research and innovation and the importance of innovation to economic value creation. They find that the interaction between universities and firms is less effective and efficient than is commonly assumed, especially by policy makers, and they identify areas of concern and suggestions for improving the situation.

In her chapter, Margaret McKerchar considers the connection between tax research and practice and observes that the connection between the two worlds does exist and is quite robust. However, whether the connection could be strengthened and thereby made more effective, and the strategies by which this might be achieved, were both questioned. She concludes with a discussion of a number of the strategies to make a tighter connection between the two worlds. These include funding, which is likely to remain an issue for research, as is balancing competing demands in the university environment. While professional bodies, government and statutory bodies can be valuable sources of research funds and support, they can also provide access to otherwise unattainable data, and/or to subjects for fieldwork studies and the like. Again, these are important reasons why tax research should be connected to practice, assuming that the researcher is not compromised in doing so.

Keryn Chalmers and Sue Wright in their wide-ranging chapter highlight that the bridge between accounting education and practice is one by which the work of academics and of practitioners both effectively impact upon each other. However, they argue that the bridge between accounting research and practice is less well-constructed and less effective than it could be. It is often asserted that accounting research lacks practical relevance, thereby losing potential impact from the academic to

the practitioner community. Their chapter presents a summary of the dialogue on the 'research gap', particularly as it relates to accounting. It discusses the identity and extent of the gap, and the roles of the accounting academy, practitioners and professional organisations, firstly in bridging this gap, to the extent that it exists, and secondly in signposting those bridges to all interested parties. In particular, it identifies the role that an academic association can play (e.g., AFAANZ). The underlying proposition is that building and strengthening the bridge is value enhancing for all stakeholders.

In their chapter 'Engaging with and Extending Organisational Practices: The Potential of Management Accounting', Suresh Cuganesan and Len Gainsford outline an actual working relationship they have shared that crosses the research and practice divide. They reflect on a particular project that links academia and practice and this is discussed in terms of how it exemplifies a way forward for management accounting research such that it can make a contribution to organisational performance through better planning and control practices. In summary, they argue for reinforced commitment to evolutions in management accounting research that lead to better planning and control systems – practices that ultimately translate into better organisational performance.

In a joint academic and policy maker chapter on 'Audit Research and Practice: A Dialogue on Relevance', two academics, Philomena Leung and Barry Cooper, join forces with Lee White, from the Institute of Chartered Accountants in Australia (the Institute), to discuss audit research. They conclude that to address this issue, there is a need to re-examine the role of academics in research, and to align the value of academic research with matters such as academic career choices, professional development and education systems. In Australia, professional and academic leadership are necessary to make this happen.

They conclude that for the profession, the challenge lies with development and engagement in thought leadership. Also post-implementation reviews of auditing standards, for example, are very important. Policy does not stand alone; it must be continuously revised and the role of research is crucial to enable feedback and engagement. For these authors, when thinking about research a good starting point is to consider how are we going to sense the impact of the research? Engagement between the profession and the academic community, dissemination of research findings and ultimately participation in policy debates, are all part of the development.

Tyrone Carlin, in his chapter, reflects on the contemporary Australian accounting research context and, in particular, on arguments about research funding and the value of some modern financial accounting scholarship. He states that there can be no doubt that much of the potential for valuable knowledge production within the accounting academy goes untapped by reason of the diversion of funding flows. However, other factors are also likely at play. These include the nature of modern scholarship and research in accounting, the parties who undertake and publish that work and the parties who consume it. The chapter briefly examines several of these factors, explores their key implications and suggests a range of possible remedial courses of action necessary to the creation of a healthier environment for quality scholarship and research in the domain of accounting.

He concludes that the endemic lack of engagement between accounting scholars and the practice element of the profession serves as a substantial barrier to the leveraging of these comparative advantages. This drives substantial opportunity losses for scholars, practitioners and consumers

of accounting product alike. Strategies to improve engagement, enhance access and leverage these comparative advantages are potentially far more potent drivers of improvement in the quality, relevance, timeliness and impact of accounting research than further investment in the development of incremental methodological sophistication. The opportunity to change direction and consequently influence practice much more deeply is real. But embracing that opportunity will require leadership and that leadership may involve a potentially confronting need to recant a series of tightly cherished values and assumptions, established over a period of decades.

Kevin Stevenson, an Australian standard setter, explores a number of important topics from a policy maker's perspective. He makes the observation that there seems to be renewed interest in financial reporting research on mainstream topics. Currently there are a growing number of topics in journals that are of interest to policy makers, as well as presentations at conferences such as the annual AFAANZ conference. This is encouraging. But does academic research play a major part in policy making? He answers this with a firm 'no'. It is his belief that if the academy is to be truly liberated to conduct research in a manner that is well regarded and resourced, it must have user support. That support should be seen as more important than institutionalised incentives for certain types of research and publication. Potential users of research need to understand the benefits that are possible from engaging in research. This means that there is a responsibility on both sides to educate and communicate. For policy makers and practitioners, their key requirement is that research topics are relevant.

Roger Burritt and Joanne Tingey-Holyoak, in their chapter, 'Sustainability Accounting Research and Professional Practice: Mind the Gap' argue that striving towards the goal of sustainability implies that transdisciplinary work is essential as all resources need to be directed to this end. Accounting is a key discipline because it provides the language of business, and business activity has considerable environmental, social and economic impact. For the past two decades, accountants in academia have been vociferous in their calls for accountants in practice to use their professional strengths to consider the impacts of business on the environment, and the environment on business. However, accountants in practice have been slow to engage with the sustainability issues forced upon them by the environmental crisis. This chapter explores the gap between sustainability accounting research and practice by examining their relationship, investigating who can change the current relationship, what changes are feasible in the near and medium terms, and how these changes can best be introduced. The chapter concludes that if the profession is to retain its future relevance by deciding to engage with sustainability, then increased collaboration between academic accounting and professional practice will be the only way for evolution of the relationship between sustainability accounting research and practice. The public and clients of professional firms expect no less.

Geraldine Magarey from the Institute argues in her chapter 'Sustainability Research and Practice: Bridging the Gap' that accountants are not taking up the sustainability challenge and ensuring sustainability is at the heart of their organisations' strategies. She identifies two barriers to ensuring that sustainability is on the agenda in organisations: getting the terminology right in order to get practitioners to engage in sustainability and failing to demonstrate the business case.

Research detachment

In recent times a number of commentators have indicated that accounting research has become insufficiently innovative and increasingly detached from practice and society (e.g., Hopwood, 2007; 2008; 2009; Baldvinsdottir et al., 2010). Associated with such concerns has been a flurry of recent special journal issues, editors' forums and papers on the apparent research/practice gap in accounting. Some commentators argue that the ultimate purpose of accounting research should be to improve accounting practice, rather than simply to describe or understand or critique it. Hence a gap appears to have emerged between the concerns of policy makers, practitioners and academics as to the need to identify the impact of accounting research and to establish links between research output, practice and social impact.

Parker and Guthrie (2010) reflected on the business school in the age of globalisation. Recent developments in Australia would indicate their analysis was correct (Cappelletto, 2010). For instance, in 2010 many universities have over-enrolled students, some by as much as 20%, and of course the area for over-enrollment is the business school (AFR, 2010). Accounting schools are seen as 'cash cows' for the rest of university activities (AFR, 2011). This over-enrolment has led to staff shortages, large classes, very high student/staff ratios and issues associated with poor teaching quality (Parker, 2010; Ryan, 2010). Another important feature of these conditions is the impact on accounting academics' ability to undertake accounting research (Evans et al., 2010). In the international arena several commentators have indicated that business and accounting research have become inefficient, pedestrian and increasingly detached from practice (Moehrle et al., 2009; AACSB, 2008). For example, in the United States, the American Accounting Association (AAA) research impact task force reported that research did have an influence on practice. However, they concluded that academia is recognised more for its role as a provider of education and less recognised for professional or practice impacts (Moehrle et al., 2009).

The Association to Advance Collegiate Schools of Business (AACSB) (2008) task force on research stated that scholarly inquiry is an essential process that places business schools in a unique and important position at the intersection of management theory, education and practice. It differentiates institutions of higher education from providers of training and from other organisations providing management education while relying on scholarship generated by others for its educational content. It also made several strong recommendations around the issue of the lack of impact of scholarship on the intended audiences. A recent article in the *Financial Times* in the United Kingdom (UK) (Schiller, 2011, p. 13) reports that the AACSB is developing measures of academic impact on business in areas such as executive education and the work of research centres.

In the UK and Australia there is considerable focus on the issue of impact of publications and research. This is seen in the *Australian Accounting Review* (2010) special forum analysing how research assessment exercises like the Excellence for Research in Australia (ERA) (Taylor, 2009) and the Research Assessment Exercise (RAE) in the UK (Broadbent, 2010; Otley, 2010) affect academics, journals and universities (Northcott and Linacre, 2010). In 2010, the new UK coalition government was still pondering how to take forward the previous government's plans to award funding to higher education by assessing the overall quality of research, with around 20% of the amount accounted for by the 'impact' of research undertaken by an institution. Schiller (2011, p. 13) reports that in May this year

the UK universities minister criticised business schools 'for focusing on peer-reviewed research at the expense of applied studies'.

Academia versus professional practice

Historically, there have been a number of publications suggesting a divide between the academic community and the professional community (Bricker and Previts, 1990; Singleton-Green, 2010). Early on the divide was about how to educate accountants and the case for the introduction of accounting degrees (Evans, 2010). This was mainly centered on the concept that accounting was about accounting principles or a broader education than just technical training (Bricker and Previts, 1990). As business schools grew in such countries as the UK and Australia in the 1950s, accounting degrees became popular and a broader education began to be offered. From this time a further change could be observed in the establishment of an academia with its requirements adopted from the social science model (e.g., PhD qualifications, a record of publications, concentration on employment of acceptable methodologies and theory as a foundation for research work). These requirements were different from those valued by the practising accountant, who maintained an emphasis on professional qualifications and technical skills.

Tilt (2010) captures the 'schism' between the interests of academics and the interests of practitioners in the following comments:

- Academics are considered elitists as they speak with their own jargon; they use complex mathematical formula; they shut out potential practitioner readers by doing this; the aim of the game is to publish at all costs, not to disseminate knowledge or improve practice (Baxter, 1988)
- Practitioners are seen as not being interested in any challenge or debate or threat to the status quo; they are reluctant to disclose their data, so they want us to help them but they won't let us into their firms (Bricker and Previts, 1990)
- Practitioners often regard jargon as pretentious whereas academics suggest that when you have new ideas, new terminology appears; mathematical formulae are really useful because they are a form of shorthand and help clarity of thought (Baxter, 1988; Bricker and Previts, 1990; Leisenring and Johnson, 1994).

Any discussion about the impact of research on professional practice must include education in the equation. A research/practice/teaching triangle has induced a range of research around these connections. The focus of such studies has been largely internal, namely on whether research impacts practice through accounting education, on courses and through students who become graduates and professional practitioners. Hancock et al. (2010) consider the changing skills required by accounting graduates to be able to account for the future. Whatever is possible in terms of the direct impact accounting research has on practice, the profession and society is clearly a contested ideal (e.g., see Hopwood, 2007; Scapens, 2008; Williams, 2009; Baxter, 1988; Moehrle et al., 2009; and Singleton-Green, 2010).

So, has anything changed in narrowing the gap between academia and practice? After more than 50 years of producing university accounting graduates, we are still being told that universities produce narrowly educated and focused graduates who can produce bank reconciliations, but cannot think critically.

Signs of change

Arguably there are signs that times are changing. At the international level there are sporadic signs of improving interactions between accounting practitioners, higher education providers and academics. This is witnessed by the inclusion of academic work in professional publications; research funding provided by the accounting profession; and the commissioning and publishing of research on contemporary issues facing accounting academics by the practitioners (e.g., Unerman and O'Dwyer, 2010). For instance, the professional bodies have funded academic research in areas such as accounting for the environment, water accounting, emissions trading scheme, intellectual capital, public private partnerships, and carbon credits and assurance. Academics and practitioners are working together to create new academic discourses and practice in these emerging accountings (e.g., Unerman et al., 2008; English et al., 2010).

The researcher role

In summary, the role of the accounting academic remains as one of critiquing, challenging, and engaging in debate. This role is as important as producing practically useful research. As Evans (2010) argues, what counts as knowledge will remain as contested and needs to be debated and negotiated between the profession, policy makers, practitioners and accounting academics, while preserving the researcher's role and right of independence and critical thought. This is occasionally evident, for example, through collaboration between professional accounting bodies and academics to produce sponsored research, sponsored specialised conferences and public policy contributions.

There is, in some quarters, an emerging recognition that collaboration between academic research and practice is an important, but not sole determinant for research. As argued above, a crucial key role of academics remains: namely to critique, debate and challenge the status quo. This is an essential path to improving the lot of stakeholders, be they investors, minority groups, employees, communities, accounting practitioners, government policy or societal conditions.

We still contend that accounting research needs to be socially, politically and institutionally contextualised, theoretically informed, embracing of interdisciplinarity, and representative of long-term thinking. Without a persistent focus on social, political and organisational settings, academic accounting research will become lost in a myopic obsession with accounting technologies and practices so that the potentially wider societal contribution will fail to emerge.

The practitioner role

The role of the practitioner is to seek out academic research results that add value to the businesses of clients or to the practice itself and its business performance, or to the enhanced credibility and longevity of the profession of which the practitioner is a part. Practitioners can provide the demand for, and encourage relevancy in, academic research outputs.

In addition, the interface between practitioner and academic is moderated through the practitioner's need for high quality student graduates. The students leave university with competencies, skills and worldliness and move into the practising part of the profession equipped to conduct daily operations

for financial gain, yet able to think creatively about the future of the profession and to value the services offered by accountants to society.

The provision of resources, monetary and in kind, provides a third avenue of discourse between practitioners and academics, in which practice-based theoretical developments are studied and a pragmatism that is not always evident in academic research output can be encouraged.

Making visible the publisher's role

Another moderator, the publisher of academic articles, is complicit in the pursuit of high quality rankings so prized by academics and despised by practice for its lack of relevance. Publishers are the 'elephant in the room'. Some are insightful and engaged in the debates about the practitioner – academic researcher interface. For instance, the Emerald publication *Strategic Direction* provides a management information resource for strategic thinkers. An Emerald team scans through 400 management journals in the world and distils topical management issues and implications for senior managers out of the research. Perhaps practitioners and the profession could encourage publishers to expand this function to establish, through 'practitionerisation' of academic work, the credibility and ranking of all academic accounting research output as a way to improve impact? A top-level journal could rapidly become a lowly ranked journal, if impact on policy or practice was incorporated in the submission requirements of publishers.

Not all published output can be expected to be directly relevant to practitioner or policy needs but this does not stop a ranking process based on impact to parallel the academic ranking process to help bring the worlds together. Such a process could increase the transparency of contributions by academia. Recent examples where academic research has provided a valuable contribution to the profession include:

- In the sustainability and carbon areas by demonstrating how practitioners can add value to businesses and for their clients as part of transdisciplinary teams trying to address these critical issues, rather than as stand-alone experts concerned only for the financial
- Through the development of carbon accounting and reporting techniques in spite of politicisation of issues affecting the vast majority of Australians through carbon taxes and emissions trading schemes
- Through the development of water accounting in the face of poorly constructed and inequitable water allocation schemes, etc.

Conclusion

Strategies capitalising on the current drive towards symbiosis between academic research, policy making and practice require support from the profession and an improvement in rewards for students who perform at higher levels in their undergraduate and honours degrees. Those undertaking research degrees should be better rewarded and academic achievement by students should be recognised by partners in firms. It is essential for academics to assess the full range of skills desired from graduate students by practitioners; in doing so academics can adopt a pragmatic approach to their research. This would include academics drawing normative conclusions for practitioners about the matters academics

are investigating and using modern communications media to ensure that important research is disseminated for practitioners. Finally, it is important that the incentives for academics and publishers to engage with practitioners are strengthened (e.g., to develop mechanisms for assessing impact on the profession).

The Forum conducted by the Centre for Accounting, Governance and Sustainability (CAGS) and the Institute in February 2011 and the related publications contained in this thought leadership publication trigger the start of the call for action by firms, professional bodies, publishers, academics, universities, governments, non-government organisations and all stakeholders with an interest in maintaining a vibrant and informed accounting profession. For educators of members of the profession and those who influence them from the public and private sectors, in universities, schools and professional bodies, and in transdisciplinary areas upon which accounting impinges (such as engineering, law and management), a new era is emerging where the profession of accounting needs to stimulate the education of future and present accountants with 'the education they deserve' (Diamond, 2005, p. 361). The deserved education is one not marked solely by abstract reasoning, beloved by some accounting academics. It is not one scarred with overemphasis on narrow operational applications, the delight of instrumental practitioners. It is one which will help accounting and business professionals meet their own business challenges through strategies developed to integrate thought and progress within the broad profession, encompassing practitioners, policy makers and academics. Such education will be for the benefit of practitioners, graduate students entering practice through critical and constructive foundations for their education, academics, and by preserving the legitimacy of accountancy as a profession in the eyes of society.

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Chapter 2

Accounting Research, Policy and Practice: Worlds Together or Worlds Apart?

Richard Laughlin

For many years there has been a concern that accounting research is separate from, and largely irrelevant to, practice. Baxter (1988, p. 1) summarises this concern well when he says 'I fear that a great gap separates much research from practice'. This concern about a 'gap' has echoes in much of the recent literature on this important topic (see, for example, Tilt, 2010; Parker et al., 2011; Tucker, 2011), even though this literature has recognised that there is not a simple solution to such a complex problem. This chapter identifies the issue as not so much a 'gap' that needs to be 'bridged' but rather asks in a more open ended way whether accounting research, practice and policy are 'worlds together' or 'worlds apart'. It also examines what the answer to this question implies for each of these elements that constitute the accounting profession.

The emphasis on 'policy' and 'profession' is important and needs clarification before proceeding. While the title of the Centre for Accounting, Governance and Sustainability (CAGS)/Institute of Chartered Accountants in Australia (the Institute) Forum continues to address the concern about the linkages between accounting research and practice, the introduction of policy in this chapter indicates that policy is an important intervening element between research and practice. Accounting practice might be separate from accounting research, yet it is not allowed to be so free floating from the policy and regulatory processes that guide financial reporting practices and internal governance arrangements. Together, accounting research, policy and practice will, in this chapter, be collectively referred to as 'the profession'. It is usual to assign the descriptor of 'profession' to only accounting 'practice', yet this convention is deliberately rejected in this chapter. In accepting this descriptor there is a tendency to belittle the research and policy elements, which are deemed to only be in existence to further practice *as defined by practice*. Thus, according to this way of thinking, any 'gap' can only be filled by research and policy being more relevant to practice. The question to be investigated therefore is whether the profession, in the wider sense, that is, in the context of the three distinct elements, is a world containing elements that work together or a world containing elements that work independently and, therefore, apart.

Before proceeding it is important to note the underlying values and assumptions of the author. My overarching view is that the three elements of accounting – research, policy and practice – do need to work together, but this does not mean that they need to 'dilute' their respective contributions or be driven by only one of the elements, such as practice. I write as an academic accounting researcher and not as a policy maker or practitioner and as someone who has spent a lifetime trying to encourage the three elements of the profession to work together. Also, the research approach that I have used throughout my career, both working on my own and with others, is one that formally recognises that understanding, primarily accounting policy and practice, is not the end of the work of the academic

researcher. What is done with this understanding, in terms of change and development in policy and practice, is equally important. This approach also requires that such developments are led primarily by policy makers and practitioners but are enabled by academic researchers through discursive engagement (Laughlin, 1987; 1995; 2004; Broadbent and Laughlin, 1997; Power and Laughlin, 1996).

Where we are and some downsides

A contemporary analysis of the profession suggests that the elements of research, policy and practice, instead of working together to contribute to the development of the profession in the wider sense, are more like separate elements pursuing their own agendas and concerns.

At policy level there are some indications that policy does engage, in a regulatory capacity, with practice, yet it is not without tension and disagreement. Societies across the world require that there are institutional bodies that should regulate the practice of accounting. Yet the nature of these regulatory bodies is diverse. They include the self-regulation of accounting by accountants, regulation by law and also by national governments. Accounting is often seen as coming out of law and there is a continuing tension as to who should be the dominant party in the regulation of practice (Napier and Noke, 1991). The current equilibrium state is that law regulates the 'form' of accounting reports whereas the 'independent' accounting regulators and standard setters regulate the 'substance' of these reports (Freedman and Power, 1991; Macdonald, 1991). Then there are the state authorities (such as governments) who have been known to override both law and independent accounting regulators in the regulation of accounting reports where, in their judgement, the latter are not doing what is required in the 'public interest' (Broadbent and Laughlin, 2005). However, in the main, governments only occasionally usurp the accounting regulatory process and law rarely goes beyond being concerned with regulating the form of accounting reports; most regulation of practice comes through independent accounting regulatory bodies.

Moreover, international, rather than domestic, accounting regulations, in the main, regulate accounting practice. The International Accounting Standards Board (IASB), which issues International Financial Reporting Standards (IFRS), is predominant, certainly with regard to the regulation of reporting practices for private sector organisations that trade their stocks and shares in markets around the world. However, the IASB's influence is not limited to private sector organisations that trade their stocks and shares on markets around the world. The development of their somewhat less onerous IFRS for small and medium-sized enterprises will expand their influence considerably and, in some countries, take over the accounting regulation for all private sector organisations and even some public sector organisations and lead, in some cases, to the demise of national, domestic standard setting. This internationalisation of private sector financial reporting regulation is also apparent in the public sector in the work of the International Public Sector Accounting Standards Board (IPSASB) and the various International Public Sector Accounting Standards (IPSAS) they issue. While IPSAS do not have anything like the power to regulate domestic public sector accounting practice that the IFRS do, they are not without their increasing influence across a range of nation states (e.g., Switzerland, Brazil) and their public sector organisations.

Accounting practice is meant to follow the regulatory requirements of whichever body is deemed to be the legitimate and appropriate regulatory authority. In this sense practice and policy work together but this does not mean that practice willingly accepts what the regulators require. In the main, practice would prefer less, not more, regulation. Indeed, there is a tendency towards being minimally compliant and even deliberately non-compliant in relation to regulatory requirements. In fact, organisations often seek the assistance of accounting firms to find loopholes that can be exploited to avoid compliance. This has led to several high profile financial scandals. The case of Enron and that of the accounting firm Arthur Andersen are probably the scandals with the highest profile but there are many other examples. The point to stress is that, since policy is supposed to be directing practice, this is not a welcome relationship, certainly where practitioners are concerned. Nor does it indicate a 'world together', that is, mutual acknowledgement, trust and respect for the roles of each party.

Practice, therefore, cannot ignore policy makers and their regulations without possible unpleasant repercussions, but policy makers and practice can and often do ignore accounting research. Policy makers have a tendency to look to their own resources and thinking in the name of research to guide the policy process. Typical have been the extensive attempts over many decades to develop a conceptual framework for financial reporting. These attempts have consistently ground to a halt and resulted in a dead end. However, there is now renewed energy within both the IASB and the IPSASB to attempt to develop not one but two conceptual frameworks (IASB, 2010; IPSASB, 2010). Only time will tell whether these renewed attempts succeed relative to the failures of the past. What is clear is that the contents of these proposed conceptual frameworks, like the previous versions, are developed with only limited reference to academic research that has addressed similar concerns. While some of the academic literature will be apparent in several of the ideas, the point remains that the first port of call for policy makers to design a conceptual framework is not accounting research but their own thinking. As a result it is left to academic researchers to try to access and influence the conceptual framework proposals once they are published or in the discussion stage (Laughlin, 2008), rather than looking to accounting researchers in the first place to design an agreed conceptual framework. If accounting research and policy worked together, such an academically agreed framework, after suitable consultation, would then be passed on by accounting researchers to policy makers to operationalise the framework into detailed regulations. As it is, policy makers both design (or attempt to design) the conceptual framework, allowing academics, like everyone else, to make comments at the discussion stage, as well as specify the detailed regulations over practice coming from such a framework.

Practice, on the other hand, can, and invariably does, disregard accounting research on the grounds that it is perceived, often rightly, that the latter is working on a completely different agenda to the former. It is only when accounting research develops ideas that are directly related to the specific and immediate problems of practice that accounting research becomes relevant.

The lack of a direct role for accounting research and researchers in the nature and design of a conceptual framework for financial reporting is a good illustration of the problems that arise when there is no institutional clarity on the roles of the different elements in the work of the profession. As a result there is considerable debate as to whether accounting researchers should engage with policy and practice and, if they do believe this is important, how successful they will be. It is left to *individuals*

(or *small* groups) to decide whether this is a strategy that should be pursued. Such individual and small group strategies are time consuming and difficult and the success rate is dependent on many factors, not least the persuasive power of the individual researcher(s). It is for this reason that researchers who do want to engage in policy and practice have to not only do the research and discover something of value but also sell their ideas to policy makers or practitioners who are not required to listen and who can find many reasons not to do so.

In summary to this section, the three elements of accounting – research, policy and practice – are largely working as worlds apart, and this has considerable downsides. Policy and practice are closer but are tense worlds together even though, or maybe because, society requires that regulation of practice is necessary. But owing to the lack of respect for the role of policy makers, practice often tries to ‘capture’ (Mitnick, 1980) the regulatory process to work in its interest and/or tries to find ways to comply minimally, or risks non-compliance. This, in turn, makes policy makers more defensive and more swayed by opinion rather than being driven by some agreed (by the research and practice elements) professional role for the policy making process. While policy and practice are required to work together at some level, no such requirement applies regarding the use of accounting research by policy makers and practitioners. As a result, many accounting researchers often do not bother to even try to engage, and instead spend their entire career just talking to other accounting researchers about their work through conferences and journals. Those who do venture forth and attempt to engage with either policy or practice or both, have to work as individuals (or small groups) to try to influence these different spheres. Success rates with regard to these endeavours are variable, no matter how relevant the idea or concept. We are, therefore, a profession where the elements that constitute the profession, by and large, are working as worlds apart from each other. We now turn to a consideration of where we should be and the constraints that are in place that might prevent this alternative being realised.

Where we should be and some possible constraints on achieving this ideal

Where we should be is not where we are. Accounting research, policy and practice, as elements making up the accounting profession, need to work together in a way that furthers the profession as a whole. Not to do so runs the risk of not fulfilling societal expectations for the profession, leading to all manner of problems for its long-term survival.

While it is always difficult to talk of ‘society’ having expectations, no such problems apply in the case of parliaments and governments who are custodians of these expectations. Governments exist to ‘steer’ all professions, not just the accounting profession, to fulfil their societal role (Broadbent et al., 1991). If they do not work in the ‘public interest’, they suffer repercussions in terms of a reduction in the societally-sanctioned independence that has been given to them (Broadbent and Laughlin, 2005).

From a societal viewpoint, accounting is deemed to be a profession in the same way as the more ancient disciplines of say, law and medicine are, and is granted the freedoms and responsibilities that come with being seen as such (Abbott, 1988). This is despite some less favourable views about accounting – such as that proposed by Gambling (1977; 1978) who equates accounting with ‘witchcraft’ – which cannot command such a high societal status! As a profession, accounting has considerable power in its practices to commodify actions and activities that can even undermine other professions,

including medicine, as Broadbent et al. (1997) ably demonstrate. It also has the skill, like any profession, to make itself vulnerable to government intervention; most recently, for instance, owing to its significant role in the financial crises of the last few years (Samuel et al., 2009).

It can be argued that the profession can, and should, learn important lessons from medicine, one of the oldest and most established professions, to improve its role in society. One key lesson is the clarity given to the role, responsibility and interrelationship between the research, policy and practice elements that constitute the medical profession. It would be unheard of in medicine for practitioners to practice on patients with cures that had not been thoroughly researched, developed and operationalised by policy makers. Equally policy makers would not develop their own policies without due respect for research into evidence-based cures undertaken by academic research. Put simply the medical profession as a whole works together with due respect for the contribution of the different elements (research, policy and practice) in a common objective to save lives.

Accounting does not have the same life and death outcomes as a concern, although judging by the catastrophes and personal hardships that have come with the global financial crisis, and to the extent that accounting has responsibilities for this, the two professions are not too far away from being comparable. Yet detailed comparability and mirroring is not the issue. For instance, accounting would not want to advocate that there is only one way to look at a subject or try to replicate the use of only one 'scientific' approach to the issue. Yet the respect and recognition afforded to the role of each of the three elements and the way they interrelate in the medical profession is a model that should be replicated in the accounting profession.

Lack of space precludes a full explication of what this would look like and, in fact, much work is still needed to get to anything like a workable model. It will certainly not replicate the *detail* of what happens in the medical profession. There needs to be detailed discussion, leading to an acceptance by accounting researchers, policy makers and practitioners to work under whatever is agreed. The end product would be an institutional agreement about the role, responsibility and extremes of responsibility, and interrelationship between each of the three elements that make up the profession.

The only real and fundamental constraint on allowing the necessary discourse to occur is a lack of will on the part of accounting researchers, policy makers and practitioners to come together to make it work. The CAGS/the Institute Forum and this book are an illustration of this engagement yet it remains only a start. There needs to be more extensive institutional support and encouragement for the debate to continue between all parties until something meaningful, practical and long-lasting about roles, responsibilities and interrelationships is forthcoming and agreed by all.

To get to the starting point of this process involves overcoming some quite significant constraints on the views of some, but fortunately not all, accounting researchers, policy makers and practitioners. The following discussion explores the nature of these significant constraints.

Currently there are two major constraints on academic researchers that could prevent them seeking a closer engagement with policy makers and practitioners. First, there could be a genuinely held belief that this is 'not their job' which is often dressed up as a fear that the quality of their research will be undermined. This stance is a surprisingly common ground for those who adopt a form of 'quasi-

scientific' positivism and for those who take the opposite research approach based on an ethnographic, more anthropological, approach to understanding (Laughlin, 1995; 2004). The positivists are of the view that their task is to build objective general theories, rather like the theory of gravity, and that any policy implications coming from these 'truths' is a separate value-driven exercise to be conducted separately by policy makers and practitioners. To engage with the latter is seen as running the risk of compromising the 'truth' of any study.

Those who adopt a more anthropological, ethnographic research approach to any empirical study reject engagement with policy and practice due to the dangers of going 'native' and becoming an actor rather than a researcher who looks, sees and records, but leaves the empirical site untouched and undisturbed. These are genuinely held beliefs, driven by the research approach adopted, and would need a gestalt shift in thinking before engagement with policy and practice, in the way envisaged under a worlds together scenario, is seen as something that would be welcomed.

The second constraint on academic researchers to prevent further engagement with policy and practice is related to an understanding of what constitutes scholarship which, sadly, and increasingly, is (spuriously) defined by what particular 'high ranked' journals define as 'good' research. This is a serious and worrying concern across the developed world. Currently, Australia is the worst exemplar of this. In 2010 the Australian Research Council's Excellence for Research in Australia (ERA) framework published a comprehensive journal ranking listing for all journal outlets across all subject areas. This exercise is being repeated for a new ranking list to be published in 2012 and there are plans for it to be repeated in future years. The worrying aspect with regard to these journal rankings is that few highly ranked journals are particularly interested in a research article that values the policy and practice implications of the study and the researchers' struggles or otherwise with this engagement. Rather, these rankings, certainly in the accounting area, have a tendency to value research that appears in journals that are published in North America and that adopt a more quasi-scientific understanding of research, and downgrade journals that deliberately set out to encourage publication of research that engages with policy and practice. There are fortunately some notable exceptions to this dominant trend¹ but the trend is real and apparent certainly in the accounting area. Willmott (2011) examines wider business areas and summarises well these dangers in his analysis of journal rankings with a particular emphasis on the UK's Association of Business School's journal listings:

A monoculture is fostered in which a preoccupation with shoehorning research into a form prized by elite, US-oriented journals overrides a concern to maintain and enrich the diversity of topics, the range of methods and the plurality of perspectives engaged in business and management research. Use of a particular journal list, such as the one prepared by the Association of Business Schools (ABS), can come to dominate the scholarly terrain of a particular discipline with consequences that can be damaging to funding as well as to research culture. (Willmott, 2011, Abstract)

1. *Accounting, Auditing and Accountability Journal* and *Accounting, Organizations and Society*, which are more tolerant of engagement with policy and practice, were awarded A* (the highest ranking) in the 2010 ERA exercise, with a limited number of others that have a similar ethos an A. However, the remaining 7 A* rankings in accounting follow the dominant quasi-scientific North American trend. This is in marked contrast with journals such as *Public Money and Management (PMM)*, which publishes research integrating theory and practice and has done so for over 30 years with considerable success. However, *PMM* is ranked a B journal in the 2010 ERA.

The dangers of these rankings, therefore, are great to both new and more established accounting researchers. Departments value high rankings and if, as is particularly the case in Australia, high rankings mean publishing in high ranking ERA-defined journals and if, as seems to be the case, these journals do not value research that involves policy and practice engagement as important, then this engagement will not occur².

Policy makers may be constrained in pursuing increased engagement with accounting research and accounting researchers due to a basic lack of belief that the latter has anything of value to contribute to the policy process. This could be the inevitable outcome of accounting researchers undertaking research that is geared to get into the 'top' journals as described above. This in turn could lead to, at best, an indifference to this form of accounting research by policy makers or a less tolerant view and serious scepticism as to the ability of accounting researchers to provide insights that are of relevance to the policy process. Either way the lack of perceived (and actual) relevance of vast swathes of accounting research leads policy makers to, in the main, ignore this work and build their own theoretical underpinnings, as with the conceptual framework projects. It is encouraging to note some significant exceptions to this overall trend by some individuals or small groups of accounting researchers, such as those in the CAGS at the University of South Australia. However this remains an isolated exemplar rather than the norm.

Practitioners, on the other hand, may be constrained in seeking to engage further with both policy makers and accounting researchers for rather different reasons. For some practitioners, the idea of opening up a dialogue with policy makers, which could lead to greater levels of importance for the latter in their regulatory work over practice, is equivalent to 'turkeys voting for Christmas'. A particular extreme version of this involves those practitioners who, with support from certain forms of economic theory (Veljanovski, 2010), believe that the market is all that is required to regulate practice and that the current regulating activities by accounting policy makers distort these efficient market processes. To these market proponents, therefore, current levels of engagement with policy and policy makers are already too high, so any proposal to increase these levels results in complete intolerance.

On the other hand, many practitioners see accounting research as a pointless exercise unless the research is deemed to be 'relevant'. But 'relevance' in this context is defined and controlled by practitioners themselves. This, in effect, means that researchers need to become the equivalent of consultants if practitioners are to engage with them. However, to many practitioners, the first port of call for this service is not academic accounting researchers but rather professional accounting firms who are well equipped with the consultants practitioners deem are needed. This is reinforced by a well-established view that academic accounting researchers are removed from the real world and thus do not have anything of value to bring to practitioners. Unfortunately, there is more than a grain of truth in this view. Either way, there is not much to motivate practitioners to seek increased levels of engagement with accounting research.

2. Australia, with its heavy reliance on journal rankings to judge quality, is worrying in this regard. In the UK, however, journal rankings in accounting and business have always been seen as problematic, despite claims to the contrary by the Association of Business Schools, and the next Research Excellence Framework due in 2013 is increasingly concerned with 'impact' to judge quality that goes beyond academic impact to policy and practice implications. However, the detail of this has yet to be fully worked out and the dangers of retaining more familiar ways to assess quality is always a tempting option.

These constraints need to be overcome if there is going to be an open dialogue between accounting researchers, policy makers and practitioners to find a way in which they can work together rather than apart.

Some concluding thoughts

The conclusion from the above analysis is not very encouraging in relation to whether accounting research, policy and practice are worlds that work together or are in fact worlds apart. Sadly, the reality appears to be closer to the latter than the former. This is both where we are and where we may continue to be unless the constraints highlighted in the previous section are removed. Also, there needs to be a will by accounting researchers, accounting policy makers and accounting practitioners to come together in a discourse to discover how they may work more closely together in a similar way that the medical profession has successfully managed to do.

If we don't bring these worlds together we run the risk of losing the societally-sanctioned status of being seen as a profession with all the privileges and respect this brings. As this chapter has made clear it is accounting research, policy and practice which constitutes the accounting profession. Put simply and directly all three elements need to work together and, through discourse, agree, and accept, at an institutional level, their respective roles, responsibilities and interrelationships, if the profession, as a profession, is to continue to survive and prosper and offer the services it should in societies throughout the world.

'Doing what you can' is a pragmatic way forward, certainly for an individual or small group. However, the long-term solution has to be at the institutional level to ensure that accounting research, policy and practice do indeed work together, with each element knowing what it contributes to the development of the profession as a whole. With this institutional solution in place, those who have 'done what they can' would no longer be 'swimming against the tide', but would be in a new position to guide the way forward for those who have lagged behind and wanted to keep the worlds of accounting research, policy and practice apart.

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Chapter 3

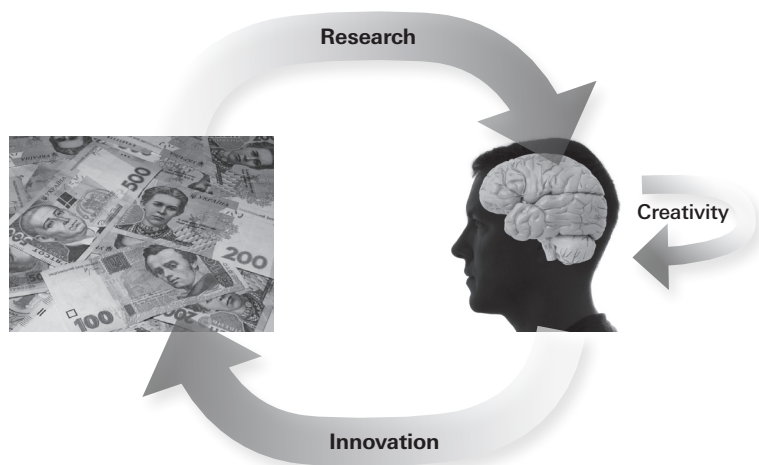
The Relationship between University Research and Firm Innovation

Göran Roos and Stephen Pike

Innovation involves the successful value creating exploitation of new knowledge³. Innovation should not be equated to invention; an invention may not necessarily lead to innovation. This distinction is made by Freeman (1982, p. 7), when he noted that: 'an invention is an idea, a sketch or model for a new or improved device, product, process or system' whereas 'an *innovation* in the economic sense is accomplished only with the first *commercial* transaction involving the new product, process, system or device...'. Innovation can be given different meanings in different contexts. In the context of this chapter, innovation refers to anything that improves the economic performance of a firm.

At this point it is worth making a distinction between innovation and research, a distinction too frequently overlooked (Roos, 2007). This is illustrated in Figure 1. Research is the transformation of money into knowledge new to the offering, the company, the industry and the world. Innovation, on the other hand, is the transformation of knowledge into money by the adaptation or adoption, by the organisation, of anything new that is being transformed or incorporated into products, services, processes, systems, structures, brands, IP, etc., that is, anything that the customer and/or consumer is willing to pay for or that reduces the cost of serving the customer/consumer.

Figure 1: Distinction between innovation and research

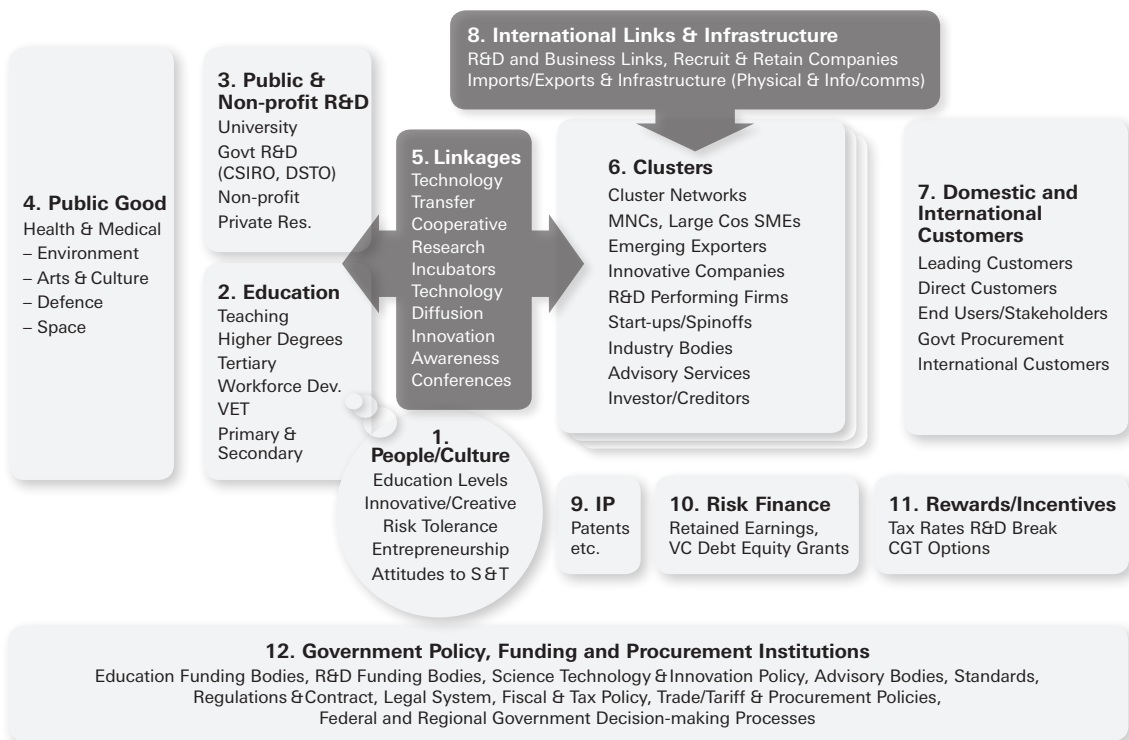


3. Knowledge here refers to any domain (scientific, social science, etc.) and any type (learnt through analytical techniques, learnt through doing, using or interacting, learnt through the application of creativity).

The OECD has estimated that innovation is the key driver for economic growth in developed countries, with at least 50% of growth directly attributable to it. Furthermore, growth in the world economy is increasingly dominated by knowledge-intensive goods and services. A key element of competitiveness in the knowledge-based economy is 'interconnectedness' or linkages. Fostering an infrastructure of linkages (networks) among firms, universities and governments, provides competitive advantage through faster learning, faster information diffusion and faster knowledge deployment. Modern technologies and the associated enabled ways of working, like open innovation, have only increased the reach and speed of these systems.

These linkages tend to be called 'innovation systems'. An innovation system can be broadly defined as all economic, political and other social institutions affecting learning, searching, and exploring activities (i.e., a region's universities and research bodies, financial system, its monetary policies, and internal organisation of private firms). A principal system of innovation is outlined in Figure 2 (after Roos et al., 2005; Boldt-Christmas et al., 2006).

Figure 2: A principal innovation system



Innovation systems can be analysed at different levels: micro, meso and macro. At the **micro level** the focus is on the internal capabilities of the firm and on the links connecting one or a few firms. Their knowledge relationships with other firms and with non-market institutions in the innovation system are examined with a view to identifying unsatisfactory links in the value chain. Such analysis is most relevant to the firms being analysed and is usually carried out by consulting firms. It can enrich policy makers' understanding of innovation when adequately related to broader issues.

At the **meso level** the focus is on knowledge links among interacting firms with common characteristics, using three main clustering approaches: sectoral, spatial and functional. A *sectoral (or industrial) cluster* includes suppliers, research and training institutes, markets, transportation, and specialised government agencies, finance or insurance, that are organised around a common knowledge base. Analysis of *regional clusters* emphasises local factors behind highly competitive geographic agglomerations of knowledge-intensive activities. *Functional cluster analysis* uses statistical techniques to identify groups of firms that share certain characteristics (e.g., a common innovation style or specific type of external linkages) and include the industrial ecology lens where the shared characteristics are the interconnected material flows (one firm's waste is another firm's raw material).

At the **macro level** the focus is on the use of two approaches: macro-clustering and functional analysis of knowledge flows. *Macro-clustering* sees the economy as a network of interlinked sectoral clusters. *Functional analysis* sees the economy as networks of institutions and maps knowledge interactions among and between them. This involves the measurement of five types of knowledge flows:

1. Interactions among enterprises
2. Interactions among enterprises, universities and public research institutes, including joint research, co-patenting, co-publications and more informal linkages
3. Other innovation supporting institutional interactions, such as innovation funding, technical training, research and engineering facilities, market services, etc.
4. Technology diffusion, including industry adoption rates for new technologies and diffusion through machinery and equipment
5. Personnel mobility, focusing on the movement of key personnel within and between the public and private sectors.

Characteristics of economically successful innovation systems can include a range of elements, including those relating to education, such as above average rate of investment in education, research and innovation and a public and high class university system.

The university research system

Universities are the primary source of highly educated people and a major source of new ideas. Globally, new policies are sought to strengthen the role of universities as core agents of local, regional and national economic development.

As a consequence of this role for universities they are under increasing pressure to create more effective technology transfer mechanisms. The economic significance of the linear technology transfer model, starting from discoveries made in a university and proceeding to disclosure, patenting, licensing of the technology and perhaps to start-up or early stage technology-based enterprises founded by the inventors themselves, is usually exaggerated in the policy sphere (Ministry of Education (MoE) et al., 2009). New business formation stemming from university research is only a small fraction of all new businesses (Lester, 2007). Even in its limited role, technology transfer is an important contribution by the university to economic development. The possibilities are not limited to patenting and licensing the discoveries made in university laboratories. A systemic perspective of innovation policy also acknowledges the role of universities in attracting new knowledge and resources from outside, adapting knowledge to local conditions, integrating previously separate areas of technological activity in the region and, unlocking and redirecting knowledge that is already present but is not being put to productive use. University – industry collaboration is a vitally important route for technology transfer. It should also be noted that most of these university contributions presuppose the presence of industry or other interested and capable⁴ organisations. Also in many cases, the indirect support provided by universities for innovation processes is likely to be more important than their direct contributions to problem solving in industry. Indirect support refers to education, training programs, awareness raising conferences and other forms of activity that may shape and direct innovation processes but do not aim to influence them directly.

Why do universities execute research? Table 1 outlines the nine main objectives for universities to undertake research. The university research system is deeply intertwined within the innovation system. Universities are key players in the innovation system but alone cannot ensure successful innovation. As Betts et al. (2004, p. 35) observe 'Even in the best of all worlds... a "have-not" region could invest in universities... only to find that local high tech growth remains dismally low'. Figure 3 outlines the university research system (after Langford, 2002).

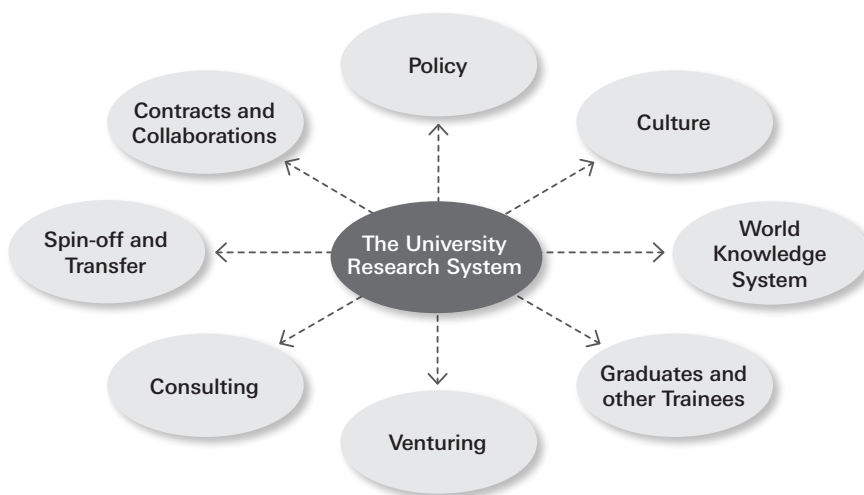
4. 'Capable' here refers to the ability to absorb and deploy the knowledge. This is also valid for public policy organisations (O'Connor et al., 2007).

Table 1: Failure risks in university research

Reason for universities to involve themselves in executing research	Reason for lack of innovation in the university research system and/or the regional innovation system (Gupta et al., 2001; Betts et al., 2004; Anderberg and Roos, 2005)
<p>1. Developing knowledge relevant to the strategic objectives of the research body (university, institute, etc.)</p>	<p>The university may fail in providing this knowledge and hence lose its way.</p>
<p>2. Maintaining research competence</p>	<p>The university may fail in this leading to the quality of the output being degraded and hence the causality implied in the deployment of the outcomes may not be realised for the deployer.</p> <p>The university may apply methodologies that have low relevance for economic value creation on the firm level.</p> <p>The university may not have methodological competence relevant to firm-level research problems.</p>
<p>3. Maintaining subject matter competence</p>	<p>The university may fail in this and hence provide out of date or erroneous input to firms leading to innovation failure in the firm.</p> <p>The university's subject matter competence may be misaligned with the firms seeking input from the university and hence making the university irrelevant from the firm's perspective.</p>
<p>4. Pushing the boundaries of knowledge through curiosity-driven research</p>	<p>The university may fail in this, which negatively impacts the reputation and research standing of the university and hence its long-term viability.</p> <p>Universities can function as the knowledge creation anchor for a region but the university is not sufficient in and of itself to drive the creation of a knowledge intensive industry cluster.</p>
<p>5. To ensure participation in the global knowledge system (requires the ability to operate as both a source of knowledge and a sink for knowledge)</p>	<p>The university may fail in this and hence not be allowed to participate in certain key networks and as a consequence not be able to maintain its subject matter competence.</p> <p>The university may not be able to use the networks it participates in to generate useful input for the firm's innovation process.</p>
<p>6. To execute contract research in return for funding</p>	<p>The university may fail in this due to:</p> <ul style="list-style-type: none"> • Not allocating key staff to the project • Not understanding the context of the firm and hence providing a solution that is unimplementable • Not being able to execute the project on the boundary conditions of the firm • Not being able to put together an interdisciplinary or transdisciplinary research project team to ensure relevance and implementability of the outcome.

Reason for universities to involve themselves in executing research	Reason for lack of innovation in the university research system and/or the regional innovation system (Gupta et al., 2001; Betts et al., 2004; Anderberg and Roos, 2005)
<p>7. To provide relevant knowledge input into education</p>	<p>The university may fail in this due to:</p> <ul style="list-style-type: none"> • Not having relevant knowledge to provide • Not updating course material with relevant knowledge frequently enough • Not having sufficiently high academic staff/student ratios to enable effective learning • Focusing on education as a business for making money at the expense of providing high-quality graduates that are industry ready. <p>A university could produce outstanding graduates, only to see them leave for more thriving areas.</p>
<p>8. To train researchers</p>	<p>The university may fail in this due to insufficient focus on methodology or insufficient supply of industry-relevant research problems to provide relevant training for assisting industry with innovation.</p>
<p>9. To form the basis for economic activities (i.e. spin-offs and start-ups)</p>	<p>The university may fail in this due to focusing on start-up by academic staff rather than start-ups by students.</p> <p>There are other vital pieces that need to be connected such as smart sources of financing that understand the needs of emerging high-tech firms, managerial talent savvy in these industries, as well as the scientists and engineers who innovate in these firms.</p> <p>Technology commercialisation is very different than knowledge creation; a region needs both to thrive.</p>

Figure 3: A university research system



One of the key conclusions of Betts et al. (2004, p. 35) is 'To be blunt, if anything, there is a tendency in the literature to perhaps overplay the role of universities and underplay the role of the private sector in generating innovative technology clusters'.

Universities can contribute to business innovation through increasing the stock of knowledge and ensuring supply of skilled graduates and researchers. They can create new methodologies, develop networks and stimulate social interaction, enhance problem-solving capacity and create new firms (Martin and Tang, 2007). This overlaps with Ritsilä et al. (2008) who state that when assessing the extent of universities' socioeconomic engagement, five different dimensions ought to be taken into consideration. These emanate from the strategic choices made by the universities themselves and include:

1. Science-based innovation activities, especially technology transfer
2. Engagement in the labour market (i.e. lifelong learning in working life)
3. Engagement in socioecological development for sustainability
4. Engagement in the regional development
5. Engagement in wider societal debate.

If this is the case then a key focus for universities must be to reduce any perceived barriers to firms working with them. This makes the observable increasing barriers to cooperation worrying. This general trend is exemplified in the UK, where there are some indications that collaboration between business and the public research base is declining. Bruneel et al. (2009) found a much greater proportion of responders to a 2008 survey identified barriers to collaboration compared with 2004, particularly in terms of the long-term orientation of university research, unrealistic expectations of Technology Transfer Offices, difficulty in finding the appropriate partner, university researchers seeking immediate dissemination, and concerns over intellectual property rights (all rose by over 50%). Similarly, there was a marked decrease in the proportion of organisations using university outputs in over 40% of their innovation projects, especially in the use of problem solving (both at early stages and close to market), consultancy and advice, and real-time feedback throughout innovation projects. It is worth noting that all the respondents to the survey (646 organisations) had actively collaborated with higher education institutions, so this apparent increase in perception of barriers is concerning.

Also, Kenney and Patton (2009) drew attention to the fact that university technology licensing (transfer) offices may pursue their own interests (revenue generation) to the detriment of the university's overall interest, and end up restricting the disclosure of inventions rather than disseminating information. These offices may be badly managed and resourced or simply incompetent. The authors conclude that these offices may turn out to be an ineffective and counterproductive solution for the intermediation between the inventors and those who will eventually utilise the inventions. This finding is supported by Mowery and Sampat (2004) whose findings, based on evidence from the US, indicate that for most universities that have established an Intellectual Property Rights (IPR) system, this move has resulted in a pure financial loss.

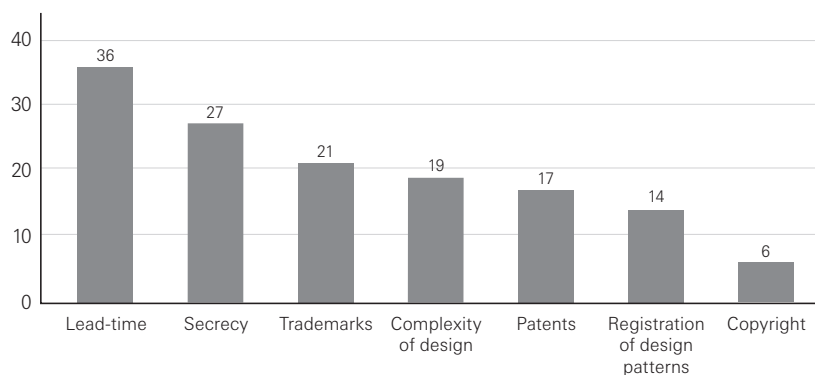
However, Valentin and Jensen (2007) found that the convention of allocating IPR to the industrial partner in return for funding and publication rights to the academic partner offers more effective contracting for this type of research than other approaches and this seems to indicate that changes in contractual mechanisms in collaborative research can be counterproductive to the original purpose of the change. It is also clear that uncertainties and delays caused by negotiations about ownership rights hamper university–industry collaboration and the utilisation of the inventive potential of university scientists.

Codified information that is patented and traded in markets (or not patented and hence provided gratis), is only one among several types of economically relevant information (albeit an important one). In fact, there is now a large body of research showing that firms generally do not regard patenting as the most important way to protect their knowledge (Foray, 2004; Granstrand, 2004) as seen in Figure 4. A more detailed discussion of internal asset management inside R&D organisations can be found in Pike et al. (2005).

D’Este and Patel (2005) highlighted that the quality of university research does not affect the intensity of industrial interaction, while Perkmann et al. (2009) looked at how the research standing of universities informs academic researchers’ engagement with industry via collaborative research, contract research and consulting. They claimed that the establishment of university–industry relationships is informed by three factors: faculty perceived complementarity with academic research; faculty efforts to attract industrial funding for research; and industry preference to work with highly skilled and reputable faculty. Using data from UK universities they found that in technology-oriented disciplines, faculty quality is positively related to industry involvement. In basic scientific disciplines a threshold effect in terms of faculty quality is positively related to industry involvement, except in the case of the very best researchers. In the social sciences, there is a mostly negative relationship between faculty quality and particularly the more applied forms of industry involvement.

Effective public support for industry–science interactions needs a long-term approach as it attempts to change structural features of innovation systems and traditional attitudes and behaviour of actors (MoE et al., 2009).

Figure 4: How firms appropriate innovation benefits



Is investment in university research a good investment?

In considering the merits of investing in university research, it is useful to start by understanding the contribution of universities (and other higher education institutions) to R&D in different countries from a quantitative point of view by using data from the OECD (2008b; see also de Campos, 2008). There have been numerous attempts to measure the economic impact of publicly funded research and development, all of which show a positive contribution to economic growth. The studies cited in OTA (1986) and Griliches (1995) spanning over 30 years of work find a rate of return to public R&D of between 20% and 50%. R&D investment, as a whole, and higher education R&D investment, in particular, is positively associated with innovation and economic growth in peripheral regions of the EU, although the strength of this association varies with the socio-economic characteristics of each region (Bilbao-Osorio and Rodriguez-Pose, 2004).

In his first study, Mansfield (1991) concluded that approximately 10% of innovations could not have happened, at least not without a significant delay, without the support of academic research. He estimated the rate of return from academic research to be 28%. In a follow-up study, Mansfield (1998) found that academic research was increasingly important for industrial innovation. A growing proportion of innovations depended on the results of basic research, while the timeframe between basic research and innovation was decreasing. Beise and Stahl (1999) later confirmed Mansfield's results for a much larger sample of firms in Germany.

Tijssen (2002) produced evidence that 20% of private sector innovations are based to some extent on public sector research, while in the biomedical industry, Toole (1999) has shown that a 1% increase in the stock of public basic research ultimately leads to a 2.0% – 2.4% increase in the number of commercially available new compounds. A good example of a valuation of university activities from the viewpoint of their stakeholders can be found in Garnett et al. (2008), building on some of the principles outlined in Burgman and Roos (2004).

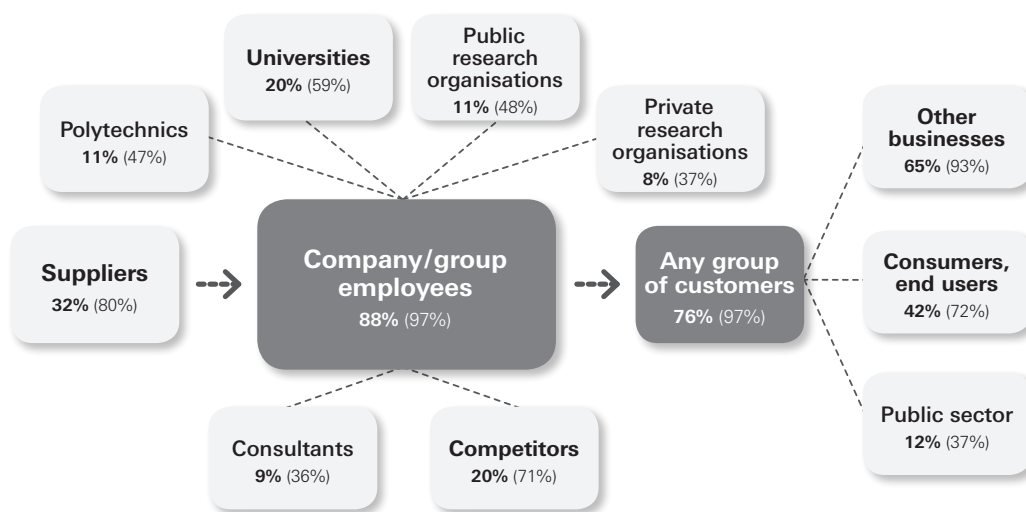
The firm perspective

The technological development of firms is influenced by various sources of know-how including R&D, industry contacts, learning, ICT and publications. R&D is a major source for technological progress in a modern economy. A principal justification for government support of R&D activities rests upon the positive spillovers that are the positive externalities from R&D (Revesz and Boldeman, 2006). Research spillovers are the means by which new knowledge developed by one firm becomes potentially available to others and the absorptive capacity of the receiving firms will determine the extent to which the knowledge is incorporated. In order for this to happen the firm must first become aware of the existence of the new knowledge, then attempt to evaluate it, which will generate learning in the firm. The importance of accumulated knowledge and expertise is an important factor determining whether firms are likely to adopt new knowledge or to act as sources of innovation (Gurisatti et al., 1997). As firms adopt the new knowledge the available knowledge base for firms that have not yet adopted the new knowledge grows and hence speeds up the adoption process throughout the landscape of firms until the only firms left are those that either wilfully resist the adoption or those that do not have, and cannot build, the absorptive capacity (see, for example, Gupta et al., 2002; Pike and Roos, 2002;

Marr et al., 2003; Roos et al., 2005; Roos, 2005). Universities are, of course, one key source of new knowledge and from this we see that not only do they have to provide new knowledge, they have to actively communicate it to firms, as well as assisting the firms to build absorptive capacity and to deploy the received knowledge effectively (Yasuhiko and Roos, 2008).

So how important are universities to firms? The answer is outlined in Figure 5, which identifies sources of knowledge in innovation activities (Kotiranta et al., 2009).

Figure 5: Sources of knowledge in innovation activities for firms



The percentages refer to the share of firms considering the information source important (the number in parentheses is the corresponding percentage). While Figure 5, based on the results of a study by Kotiranta et al. (2009) shows universities contributing 20%, a Eurostat Community Innovation Survey found that the percentage of firms quoting universities and other higher education institutions as important sources of innovation varied between 2% in France and 5% in Finland (Eurostat’s Community Innovation Survey – IV). The same survey reported that the share of innovative firms cooperating with universities and other higher education institutions varied from 9% in Germany to 33% in Finland. These numbers seem to indicate that the quantity of interaction far exceeds the quality of the outcome of the interaction from the firms’ point of view. Simplistically one could say that half of those that consider universities an important source of innovation enter into cooperation with universities, and that around one fifth of those that enter into cooperation with universities succeed in generating an important innovation.

From an innovation perspective, firms execute two types of innovation activities. First they use technology-based, design-based and efficiency improving innovations to increase the value created, and second they use business model innovations and effectiveness improving innovations to maximise the share of this value that they can appropriate for themselves (Fernström et al., 2004; Roos et al., 2006; Roos, forthcoming). All too frequently do firms focus on parts of the first group of activities and all too rarely on the second and hence they end up losing their share of the profit pool to firms with a better focused portfolio of innovation activities. A good example is the meteoric rise in terms of profit pool share of Apple (the operator of a superior business model combined with superior design) compared to Nokia (the producer of a superior product, in engineering terms).

Through inaction universities frequently contribute to this one-sided view of innovation in the firm. As an example, the linkages between young scientific researchers and their equivalent business school colleagues through their interaction in university-based entrepreneurship programs is one significant characteristic of the best enterprise training in both the US and the UK (OECD, 2008a; Roberts and Eesley, 2009).

In conditions of high uncertainty and complexity, pursuing qualified interactions with universities can, in theory (and sometimes also in practice), be advantageous for firms (Rossi, 2010) because it provides access to wide, international networks of scientists with heterogeneous competences providing opportunities for establishing relationships with high potential to generate innovations (Lane and Maxfield, 1997; Antonelli, 2006), especially as industrial production has a growing scientific and technological content (Geuna, 1999; Mokyr, 1990). It also provides the possibility of hedging against uncertainty through the opportunity to monitor numerous innovation processes at the same time and keep up to date with scientific developments (Meyer-Kramer and Schmoch, 1998). Universities may access new knowledge in the form of infrastructures (laboratories, databases) and secondments of researchers and scientists to academic institutions thereby enhancing learning and research opportunities (Freitas et al., 2010). Thus, university–industry interaction as a means of access to and development of knowledge has to be continuous (Meyer-Krahmer and Schmoch, 1998; Cohen et al., 2002).

There have been many attempts made around the world to enhance the knowledge diffusion between universities and firms (Block, 2008; Geuna and Muscio, 2009). A common principle in these attempts is that the university must take an active part in the governance of the knowledge transfer. This means that knowledge transfer is becoming institutionalised and seen as a key role conferred on the university rather than on individual university researchers. Freitas et al. (2010) point out that this qualitative change in the nature of the relationships between industry and academia has been accompanied by the emergence of visible new organisational forms, such as university–industry liaison offices, technology licensing offices, technology transfer offices, industry–university research centres, research joint ventures, university spin-offs and technology consultancies (Peters et al., 1990; Cohen et al., 2002; Rothaermel and Thursby, 2005; Link et al., 2007). It has also entailed the development of a new set of ‘rules of engagement’ to coordinate the interactions between university researchers and company employees.

At present, no good internationally comparable data exist on university R&D contracting, licensing and spin-offs. It is only recently that a number of surveys have been conducted across countries to assess universities' performance on various industry – science links, but these surveys are for the moment still with limited participants and therefore cannot be considered as representative across countries (MoE et al., 2009).

Figure 6: Share of co-produced articles with industry vs. impact of articles per capita

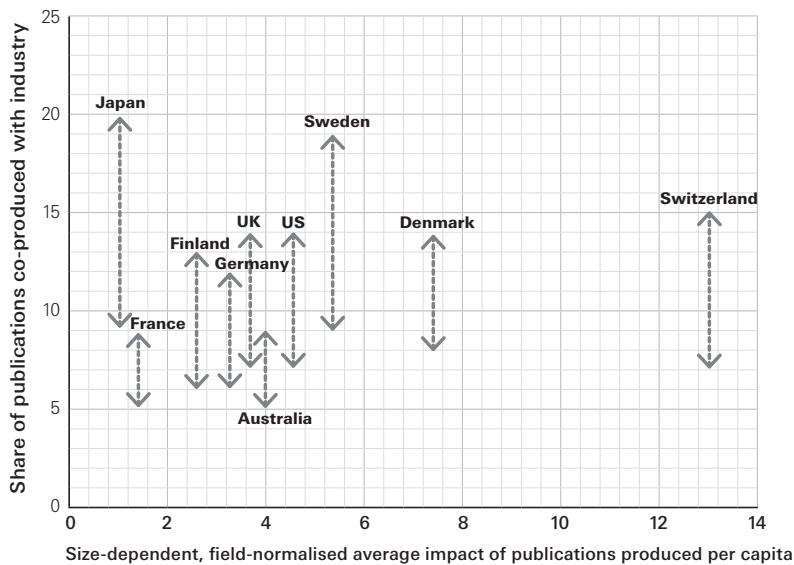
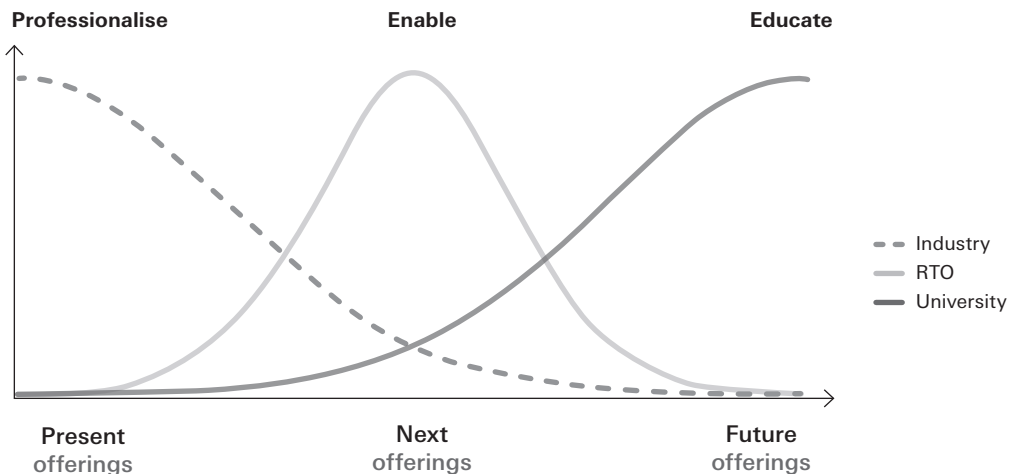


Figure 6 indicates that there is a national difference in the type of research that is done jointly between universities and industry from very high impact in Switzerland to rather low impact in Japan. This is an indication of at least three things:

1. The industry structure (Switzerland is high on pharmaceutical co-publications with high impact since the industry tends to lead the universities in research results)
2. The quality of universities
3. The tradition of industry – university research interaction (being low in e.g., France and Australia and high in Japan and Sweden).

Studies show that basic research has a productivity premium when compared to applied research and development, only for firms belonging to high-tech industries (Czarnitzki and Thorwarth, 2010). This can be explained by looking at the world from the point of view of a SME. In Figure 7 the x-axis illustrates three time perspectives: Present Offerings, Next Generation Offerings and As Yet Undefined Future Offerings. The y-axis illustrates the relative effort discharged by the stakeholder in terms of money, time, etc. There are three stakeholders illustrated in Figure 7: the firm, a typical basic research focused university and a typical research and technology organisation (Roos, 2008):

Figure 7: The world from the point of view of a SME



As can be seen from Figure 7 the overlap between the efforts of universities and firms is very small. This can also be understood when the typical problem groups in each time horizon are articulated. In the present offerings time horizon the typical problem is one which can be solved by deploying already existing knowledge. The fact that the firm has this problem means that it, de facto, is not a professional firm. It also means that the solutions to the problem are well distributed in the market place and as a consequence of that, numerous actors will be willing and able to solve this problem in exchange for something else, normally money. This is not a space where research-based universities and firms have a large overlap.

In the next offering time horizon the problem is not primarily linked to the offering itself but rather to the technology related to how the offering is to be produced. This means that the firm is looking to enable the production of something it knows. This 'production' knowledge does not exist in the market place today but bringing this knowledge forth will require both in-depth insight into what is known from a research point of view as well as insight into the practical realities of the firm and the ability to synthesise the two into a solution to the problem. This unique requirement makes it very difficult for both universities (lacking insight into the firm's reality) and firms (lacking insight into the research result space) to offer this solution. This is the optimal focus area of research and technology organisations. The importance of research and technology organisations in this space can be seen from the Danish Innovation System where the majority of innovation vouchers issued to SMEs for solving technical problems were applied towards solving problems in this space and being cashed in by GTS (the Danish Research and Technology Organisation system).

In the future offerings time horizon the typical problem is one where the firm does not know what will be possible in the future and hence the problem is one of awareness. Here it is enough for the firm to broaden its knowledge of what might be possible within some time horizon into the future. This is the space where universities can provide support to firms. If we look at the relative distribution of effort from the firm's point of view it can explain why universities are viewed as important for innovation by less than 5% of firms in general and as an important source of information by 59% of firms.

Conclusions and insights

Universities are primarily focused on research whereas firms are primarily focused on innovation. This fundamental difference is the foundation for many issues relating to the effective (or not) interaction between universities and industry and hence for the relationship between university research and firm innovation. One of the key underpinnings of successful regional industrial economic value creation is a well-functioning innovation system of which universities are an integral part. However, the system contains many more necessary actors, that are both well integrated and strongly interactive. Key characteristics of well-functioning innovation systems are, among other things, above average rate of investment in education, research and innovation and a public and high-class university system with strong emphasis on engineering and sciences. The system must also encourage intensive networking and cooperation between companies and public sector organisations and to facilitate world leading applied research through research and technology organisations. Finally, high business (80%) and government (20%) expenditure on R&D as well as strong linkages between science and industry are critical.

The university-related part of the innovation system is one of the key providers of new knowledge. In spite of this, the role of the universities in the generation of direct firm level innovation is commonly overestimated. Only 20% of firms consider universities a very important source of information whilst 39% consider them important. The share of innovative firms cooperating with universities and other higher education institutions varies from 9% to 33%. Between 2% and 5% of firms consider universities an important source of innovation. This means that one could simplistically say that half of those that consider universities an important source of innovation enter into cooperation with universities and that around one fifth of those that enter into cooperation with universities succeed in generating an important innovation. This is not an impressive outcome. In spite of this the return of public R&D executed at universities is found to be between 20% and 50%. This should then be compared to the, admittedly much smaller, component of the innovation system that also provides input to firm innovation (the research and technology organisations), where the publicly funded research shows a return that is a factor of 10 higher. This seems to primarily be due to the fact that traditional university R&D benefits mainly accrue to high technology firms whereas the benefits from the research executed by research and technology organisations accrue to a much wider range of firms. In addition most SMEs find it very difficult to interact with universities compared with research and technology organisations.

The interaction problems of universities with industry are also increased by the attitudes of academics to working with industry, which is found to be limited by the extent to which the work is felt to be complementary to the research interest of the individual faculty and frequently driven by the desire for research funding from industry rather than by the desire for a good outcome for industry. This can result in situations where collective structures, like temporary joint industry university research consortia (e.g., the Australian Cooperative Research Centres or the Finnish Strategic Centres for Science, Technology and Innovation), in worst case scenarios, can be used as a way for academic researchers to take industry hostage in order to secure long-term research funding for their own academic activities.

It is also important to keep in mind that universities contribute to business innovation in many ways: generating an increase in the stock of useful knowledge, ensuring supply of skilled graduates and researchers, creating new scientific instrumentation and developing new methodologies, development of networks and stimulation of social interaction, enhancement of problem-solving capacity, and the creation of new firms. In order to facilitate their contribution to firm innovation, universities must continuously strive to reduce the barriers to interaction from the firm's point of view. Unfortunately evidence seems to point to the opposite trend with many barriers having increased by 50% over a four-year period resulting in a reduction of the proportion of firms that use universities in their research projects by 40%.

The desired development directions for universities are not facilitated by the rising interest in the universities' economic development role that has been fuelled by atypical cases, where the university contribution has been easily identified. It is also interesting to note that for most universities the establishment of IPR regimes and commercialisation organisations have resulted in a pure financial loss. This is even more interesting against growing evidence that shows that firms generally do not regard patenting as the most important way to protect their knowledge.

From the firm perspective it is clear that there are many dimensions to innovation, such as technology-based, design-based, business model-based, efficiency-driving and effectiveness-driven innovations. On the firm level these are usually executed in an integrated way. This is creating real problems for universities given their structure and focus and, as a consequence, universities tend to be limited to contributing to one dimension at a time of the many dimensions in the complex innovation approach of firms. Also the primary beneficiaries of traditional university research in the firm space are high-tech firms and since these are normally a minority of all firms the impact of basic university research tends to be limited to the firms with either absorptive capacity, that is, high-tech firms, or firms with the financial resources to organise for absorption, that is, the larger firms. That means that in an SME economy, the university impact on firm innovation tends to be marginal.

In such an SME economy the importance of research and technology organisations tends to increase since they can live up to the requirement of having both insight into the firm's reality and insight into the research result space, which makes it very difficult for both traditional research-focused universities and firms to offer these solutions to the enabling problem in firms.

From research it is known that there are some practices that facilitate a high level of university – industry interaction:

- Industrial partners demand competence at universities both in short-term and long-term-oriented basic research leading to a requirement for research excellence
- Universities need to have a balanced financing portfolio for their research activities, universities that are successfully engaged in industry interactions do not solely rely on contract research with industry but rather a mix of basic financing by the government for long-term-oriented, strategic research complemented by industry financing in the course of contract research and collaborative R&D projects, and a competition-based public financing, including funds for joint research with others
- Universities and industry need to strive for a mix of interaction mechanisms to broaden their contacts and improve networking, including personnel mobility in the short- and long-term between industry and universities
- Universities need to be useful to industry and this needs to reflect also in researcher evaluation providing both individual and organisational incentives
- Universities need to simplify the contractual issues surrounding IP in the industrial relationship
- The university research strategy needs to take input from its industrial stakeholders in order to increase the relevance to industry.

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Chapter 4

Connecting Tax Research and Practice: The Past, Present and Future

Margaret McKerchar

This chapter considers the connection between tax research and practice principally from the perspective of the author, who has had a long career in tax academia as a teacher and researcher, and who has strong ties to the accounting profession. In writing the chapter the views of Yasser El-Ansary, Tax Counsel for the Institute of Chartered Accountants in Australia (the Institute), were sought to bring a tax practice perspective to the discussion. From the outset there was agreement that the connection between tax research and practice does exist and is quite robust. However, the question is whether the connection could be strengthened and thereby be made more effective, and what strategies could be employed to achieve this outcome.

The discipline of tax

Tax has always been an important element of Australian society (McKerchar & Coleman, 2010). As Smith (2004, p. 7) points out, Australia's beginnings in 1788 as a British convict settlement may never have occurred if not for the revolt by the North American colonies against the then British policy of taxing American tea. Similarly, the Eureka Stockade in 1854 was a revolt against a mining tax that provoked riots, rebellion and the loss of over 30 lives. Even in more contemporary times, the level of public interest in tax matters remains strong, as evidenced in the lead up to the introduction of the Goods and Services Tax (GST) in 2000 and in the ill-fated proposed resource super profits tax on the mining sector in 2010.

This level of interest in taxation may be, as was observed by Mr Justice Jackson in *Dobson v Commissioner* 320 US 489 (1943, p. 494), that '...no other branch of the law touches human activity at so many points as does tax law'. This is evident in Australia where we increasingly see the tax system used to support many societal objectives including increased support for families and for victims of natural disasters, and to encourage people to be financially self-reliant in retirement. Indeed, the famous words of Oliver Wendell Holmes, former Justice of the United States Supreme Court in 1904, '...taxes are what we pay for a civilized society...', capture the relevance of taxation to who we are, or aspire to be, as an Australian society.

Laws impose taxes, and the interpretation of taxation (or revenue) laws could traditionally (and perhaps reasonably) be expected to be the domain of lawyers, not accountants. However, prior to, and in the early years following the Second World War, taxation in Australia received little attention from lawyers, either in respect of research or practice. There are two likely explanations for this situation. First, before the Second World War there had been a greater reliance on indirect taxes, with the need to fund the war effort being the trigger for the introduction of a far-reaching federal income tax. Second, prior to

the appointment of Sir Garfield Barwick as Chief Justice of the High Court of Australia in 1964, there had been a long period of relative stability in how the judiciary applied and read the law, typically favouring substance over form and generally ensuring that fairness prevailed (Krever, 1987). What followed was a shift by the judiciary to a doctrine of strict literalism when interpreting the law. At the same time as this shift was evident, Australian taxpayers were experiencing increasing marginal tax rates, inflation and bracket creep that characterised the 1960s – 1980s (Collins, 1984). An outcome was the proliferation of schemes to avoid and/or evade taxes. At the time these were largely regarded as legal, rather than accounting, problems (Groenewegen, 1984); hence lawyers became more interested in taxation after the 1960s.

At the time Pedrick (1957) observed that there was not one full-time law teacher engaged in teaching tax in Australia. Today there are many full-time tax teachers at universities across Australia, though they are not always lawyers, and they do not always belong to law faculties. Those based in Australia and New Zealand (numbering approximately 100) have been meeting since 1989 at the annual conference of the Australasian Tax Teachers Association (ATTA) to share their research and promote tax teaching. While tax is undoubtedly their main focus, ATTA members come from varied disciplinary backgrounds including law, accounting, economics, psychology, science, politics and the social sciences. These backgrounds bring different perspectives to the nature of tax research, be they doctrinal, theoretical, conceptual or empirical. To some extent they also bring different expectations about quality and rigour; and provide opportunities for innovation, cross-fertilisation and fresh thinking. Currently tax researchers have to be able to listen to the 'language' of others, to be more open-minded to their contributions and to consider how they can inform their own understanding. It is argued that the often intra-, inter- and multi-disciplinary nature of tax research is a strength of the discipline and not inappropriate given that tax itself is a dynamic, complex and multi-dimensional phenomenon.

This then leads to the central issue of the chapter, that is, the extent to which tax research and practice are connected. The most effective way to address this question is by way of illustration. The examples of research presented herein are drawn mainly from academic colleagues at the Australian School of Taxation and Business Law (Atax) at the University of New South Wales (UNSW), which is itself an illustration of the effectiveness of adopting a multi-disciplinary approach to tax teaching and research. First established in 1990 and the largest tax faculty in Australia, Atax has 15 full-time tax academics who are mainly lawyers and accountants, but who also include economists and some who have also studied in other disciplines including politics and science. Those engaged in the practice of taxation are not limited to lawyers and accountants, but include tax administrators, the judiciary, company directors and other employees, bookkeepers and taxpayers. Further, other parties also have a vested interest in the practice of tax including policy makers, legislative drafters, statutory bodies and many relevant professional and industry bodies. However, for the purposes of this chapter the meaning of 'practice' is generally limited to accountants, but readers will no doubt see that the comments made can, and generally do, have wider application.

The contribution of prior research

There is no doubt that the prior research of former tax academics has been instrumental in shaping the tax landscape we know today, and it would be impossible to adequately acknowledge them all here or the many significant contributions that they have made. Instead, just a few prominent tax academics (from the disciplines of law, economics and accounting, respectively), including the late Professor Ross Parsons (The University of Sydney), the late Professor Cedric Sandford (University of Bath), and Dr Ian Wallschutzky (formerly of the University of Newcastle, Australia), are highlighted.

Professor Ross Parsons (1921 – 1999), a lawyer by training, is recognised as the first Australian academic to elevate tax as a discipline worthy of full-time study and research. Professor Parsons held a Chair in the Law School of the University of Sydney between 1961 and 1986, and was renowned for testing the resilience of statutory concepts. His major work, *Income Taxation in Australia: Principles of Income Deductibility and Tax Accounting*, a 1000-page treatise published by the Law Book Company in 1985, has underpinned much of the learning on income tax in Australia and still continues to be quoted by members of the judiciary. Professor Parsons was also a member of the Asprey Committee, which undertook a comprehensive review of Australia's tax system in the 1970s. This Committee played a part in shaping Australia's tax policy and practice in the ensuing decades, including introducing a tax on capital gains, a tax on fringe benefits, and a tax on goods and services (University of Sydney, 2011). Professor Parsons' contribution to the tax discipline both as a teacher and researcher has had a significant impact on practice.

Another internationally renowned tax academic was the late Professor Cedric Sandford, a leading public finance economist from the University of Bath in the United Kingdom. During his career Professor Sandford authored over 30 books and well over 100 papers in leading journals. He made many valuable contributions that influenced tax policy and tax administration around the globe. Perhaps his most enduring legacy is that he is regarded as the father of the study of compliance costs, which some consider a discipline in its own right (Evans et al., 2001). His scholarly approach to the measurement of compliance costs was instrumental in inspiring the work of many others, including the Australian studies by Pope et al. (1990; 1991; 1993; 1994) and Evans et al. (1996; 1997). In particular, the study conducted by Evans et al. (1997), a team of researchers from Atax and commissioned by the Australian Taxation Office (ATO), is still the most comprehensive of its kind ever conducted anywhere in the world. It found that tax compliance costs in Australia were both large and regressive, and was the empirical basis for subsequent efforts to reduce taxation compliance costs in Australia. More recently the Board of Taxation (a policy group which advises the Federal Treasurer) commissioned qualitative research to gain a better understanding of the drivers of small business compliance costs (see, McKerchar et al., 2009). The findings of the many research studies into compliance costs have influenced tax policy and underpinned aspirations by successive governments at both state and federal levels in Australia, to reduce red tape and to simplify tax systems. It is argued that the flow-on benefits of tax compliance costs research to those in practice is readily apparent.

Dr Ian Wallschutzky was a former Head of the Department of Accounting at the University of Newcastle in the 1980s and again in 1992 – 1996. He completed his doctorate at the University of Bath under the supervision of Professor Sandford. Dr Wallschutzky's doctoral research (see, Wallschutzky, 1985)

on taxpayer compliance behaviour using survey data was pioneering in Australia and influential not only on the tax administration and its approach to enforcement, but also on the next generation of tax compliance researchers.

Subsequently the ATO established the Centre for Tax System Integrity (CTSI) at The Australian National University between 1999 and 2005 under the leadership of psychologists Professors John and Valerie Braithwaite. The ATO's Compliance Model (first adopted in 1998) draws on the Braithwaites' research and sets out the risk to Australia's revenue and the steps the ATO is taking to address them. One important strategy related to the ATO's risk management approach is the publication annually of a Compliance Program, which details the ATO's enforcement priorities and strategies. This program (first published for the 2004 – 2005 year) is remarkable for its transparency and should be of benefit to those in practice.

The contribution of current research

What is readily apparent from prior tax research is that it can push the boundaries of the discipline and lays a foundation for policy and practice to follow. The significance of current research may not always be evident at the time. For example, the research of Pope et al. (1990; 1991; 1993; 1994) on the measurement of compliance costs provoked considerable criticism from tax administrators, who took exception to the empirical measurement techniques used by the researchers, particularly in respect of the costs of time and opportunity. However, this research placed the issue of tax compliance costs firmly on the agenda and provided a benchmark for many other later studies. Similarly, the research by Warren and McManus (2006) stimulated debate about the technique for measuring the tax gap (i.e., the gap between the tax due in theory based on the existing legislation, and the revenue actually collected). They argued that if it was not universally accepted, then there was merit in undertaking the activity in that the measurement in itself provided a benchmark, which could then be used to gauge the effectiveness of various compliance and enforcement strategies. That is, tax research that stimulates and informs debate does make a positive contribution to the development of the discipline, which in turn has a flow-on effect to those in practice.

There are many other examples of contemporary tax research that have made significant contributions to practice. One leading example is the major work of Deutsch et al. (2005) in identifying the inoperative provisions of the 1936 and 1997 *Income Tax Assessment Acts*. This research was commissioned by the Board of Taxation and directly resulted in the reduction of some 4100 pages (or approximately 30%) of income tax legislation. The social and economic benefit to tax professionals, the tax administration and the broader community in not having to engage with redundant legislation is clear. Another example of 'black-letter law' research having an impact on practice is Cashmere's (2004) research on the interpretation of Australia's general tax avoidance legislation contained in Part IVA of the 1936 *Income Tax Assessment Act*, and was referred to with approval in the full Federal Court decision *Macquarie Finance Ltd v FCT* 61 ATR 1 at 60. Similarly, the extensive technical treatise on capital gains tax (CGT) authored by Cooper and Evans (2009) is another example of 'black-letter law' tax research supporting those in practice.

Another noteworthy example of tax research contributing to practice is the research commissioned in 2006 by the Institute to review the manner in which small business was defined in Commonwealth tax legislation, with the aim of proposing consistent criteria for access to, and application of, the various concessions available to small business. In their report to the Institute, Warren et al. (2006) (a tax economist, a tax lawyer and a tax accountant, respectively) identified steps to reducing the problem of inconsistency and complexity; put forward essential elements for simplified definition of small business; and outlined a proposal which included legislative changes which would include consideration of these elements, as well as possible policy reforms to accompany these changes. This report was subsequently submitted by the Institute to Treasury. Legislative changes, substantially in the terms proposed in the report, were later adopted. Again, the practical application of this research in reducing the complexity of tax legislation and ultimately the costs of compliance for business is obvious.

Similarly, the research of Atax's Professor Chris Evans (2004) on personal income tax reform and the need for comprehensive annual filing of returns in Australia has been highly influential. The initial research was extended with the financial support of CPA Australia in Evans and Drum (2006) and highlighted the scope for pre-populated tax returns, a theme echoed by the Organization for Economic Co-operation and Development (OECD) and more recently in the Henry Review and the 2010 Federal Budget announcements. Other examples of contemporary tax research by Atax academics addressing significant social and economic issues and contributing to tax in practice include the study of the public benefit and tax status of charities established for indigenous Australians (see, Martin, 2010a; 2010b); the study of the fairness and simplicity of family tax payments (see, Hodgson, 2005); and the reform of tax and superannuation (see, Mackenzie, 2005; 2008a; 2008b; 2008c).

In summary, throughout the Australian tax literature there are numerous examples of significant research that have been presented at conferences, published in books, peer-reviewed journals, and professional journals. Also there are many submissions made to governmental enquiries; and research funded or commissioned by various authorities and bodies. It is fair to say that tax research often tends to have more of a policy, rather than technical, focus, and that this may lead to those in practice questioning the benefit of the research to them. Certainly the benefits may be less obvious in the short-term, but it is policy that underlies and shapes many aspects of taxation including the law, practice and administration. Further, there are many examples of poorly conceived policy resulting in complex law and ultimately high compliance costs for taxpayers. It follows that tax research with a policy focus is fundamental to the discipline and to tax practice.

It is also important to recognise that the connection between research and practice does not only function in one direction. Quite often the need for research in tax arises from shortcomings recognised in practice. The connection between the two is strong, with both well able to inform, guide, challenge and provide opportunities for both groups to the fullest of their respective potentials.

The direction of future research

Future research in tax is expected to become increasingly multi-disciplinary (and more inter- and intra-disciplinary) and internationally comparative in nature. As business has become increasingly globalised, so has tax not only in terms of transactions, but also in terms of tax planning, tax consequences and tax administration. Many of the issues relating to taxpayers, tax practitioners and tax administrators in Australia resonate in other jurisdictions and there are lessons to be learnt. Increasingly, researchers are looking to other jurisdictions to identify strategies and findings that may inform their own research. Ideally there need to be more comparative and longitudinal tax studies in the future as these are important to having a more comprehensive and detailed understanding of the impact of tax on the breadth of human activity.

Also, there is a need for greater input from different disciplines and opportunities for more collaborative studies to advance tax research in the future. For example, there is still much work to be done on understanding why people pay their taxes willingly. There is increased emphasis evident on ethics, morale and citizenship as important elements in taxpayer compliance decision-making – but these are areas of research that often lay beyond the traditional training of tax academics (i.e., lawyers, accountants and economists) as researchers.

In conclusion, to add substantially to the body of past and current tax research increasingly requires experts from different fields (and different bodies) to collaborate, and to have an open mind as to how diversity can enrich the research. At the same time, there is a need to strive for rigour and relevance in research and continue to meet disciplinary expectations. There is a need also to improve the quality of research training, both for current tax academics and for students. Ideally, more local higher degrees by research students are needed, but this is unlikely in the short-term as academia is the career of choice for few in the tax field. Similarly, there is a need to work with professional bodies and other stakeholders – not simply for funding purposes – but to understand the issues from their perspective so that it can enrich research. As we head to the long-awaited Australian Tax Summit in October 2011, there is a need for informed debate, and tax researchers are well placed to make a positive contribution in this regard.

Funding is likely to remain an issue for research, as is balancing competing demands in the university environment. While professional bodies, government and statutory bodies can be valuable sources of research funds and support, they can also provide access to otherwise unattainable data, and/or to subjects for fieldwork studies and the like. Again, these are important reasons why tax research needs to be connected to practice, assuming that the researcher is not compromised in doing so.

Could the relationship between tax research and practice be stronger? Arguably yes, all relationships need nurturing if they are to continue to thrive. The professional bodies already play an important role in promoting tax research in Australia through grants, conference sponsorship, commissioned research and linkage funding agreements. The bodies and their members have been supportive of research through participation in surveys, focus groups and other data collection means, and in the publication of research findings in professional journals. Going forward, identifying areas of research that are of mutual interest and benefit to researchers and practitioners is critical, as is engaging in continuing dialogue about the priorities, opportunities and future directions of tax research.

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Chapter 5

Bridging Accounting Research and Practice: A Value Adding Endeavour

Keryn Chalmers and Sue Wright

The well-known bridge between accounting research and practice is one by which the work of academics and practitioners both effectively impact the other. However, this bridge is less well constructed and less effective than it could be. As members of a professional discipline, it is important for accounting academics, the practitioner community and professional accounting organisations to reflect on the relevance of the accounting academy's research to practice.

It is often asserted that accounting research lacks practical relevance, thereby losing potential impact from the academic to the practitioner community. Calls to bridge this 'research gap' between academic research and practice and enhance the connectivity between the two have intensified in recent times with professional organisations and accrediting bodies focusing on the relevance, utility and impact of research (AACSB, 2008; ACCA, 2010). This chapter summarises the extant dialogue on the 'research gap' in accounting discussing the identity and extent of the gap. While acknowledging the traits of published accounting research that attract criticism of a 'research gap', it also identifies the accounting academy's research contributions that have informed and influenced practice across a range of accounting sub-disciplines.

The research gap

As depicted in Figure 1, the interrelationships between accounting teaching, research and practice can be represented as a triangle (Foster, 1988) with bi-directional arcs connecting each of the triangle's nodes (Kaplan, 1989). As noted by Kaplan (1989), strengthening the bi-directional arcs connecting research and practice is a value-enhancing proposition. To the extent that either accounting academics or practitioners do not take up potential activities and communications to enhance this link, there is a research gap. That such a gap exists has been the subject of much research (Hopwood, 2007; Inanga and Schneider, 2005; Wyatt, 1989; Tilt, 2010), not only within the accounting discipline. A survey of research utilisation led Beyer and Trice (1982, p. 608) to comment that 'researchers and users belong to two different communities with very different values and ideologies and that these differences impede utilisation'. The research gap is never wider than when practitioners fail to turn to the accounting academy and its research findings for the development of practices, or when the academy fails to turn to practitioners for inspiration in identifying and developing research questions or interpreting results and contemplating their implications.

Figure 1: Six arcs of the research–teaching–practice triangle



There are various reasons espoused for this disconnect, underpinned by a lack of academic and industry research (Bolton and Stolcis, 2003; Fitzgerald, 2010). The motivations driving academic research typically fall between an idealistic desire to extend the knowledge base in a chosen area, and a less idealistic need to publish to maintain one’s research reputation and ranking. When undertaking academic research, it is important to ensure that the research is rigorously and independently conducted, and almost unfettered by concerns about its duration or its commercial appeal. In contrast, research with greater relevance to industry addresses existing problems, and/or is motivated by future improvements to profitability or efficiency. It is time constrained, seeks a competitive advantage, and may be commercially sensitive. Wyatt (1989) also contends that inertia and resistance to change are barriers to the acceptance of research by practitioners. Changing practice requires an investment of time and effort, and acceptance that outcomes may be uncertain. Chambers (2005) attributes the lack of relevance for practice that characterises much accounting academic research to the investigation of positive accounting problems in a simplified setting devoid of real considerations.

Singleton-Green (2010) describes the research gap as a communication gap. For a practitioner, an academic’s research is difficult to draw upon for a number of reasons. First, there is a substantial volume of papers on any single topic, published across an array of journals. Second, the various findings, which are often quantitative and couched in methods and statistical detail unfamiliar to practitioners, can be inconsistent and lack a normative conclusion. For a researcher, the academic reward system does not explicitly encourage strong research-related practitioner communication. The academy’s view of research, linked to academic publications in peer-reviewed academic journals, which are exclusively read and assessed by a small proportion of fellow academics, restricts the ability of practitioners to identify with academic research and the ability of the academy to connect with practitioners⁵.

5. Trends in accounting research suggest that the most highly-rated quality accounting journals are increasingly publishing archival research and the papers have an increased emphasis on finance and economics (Oler et al., 2010).

A perceived or real research gap?

The research gap in accounting may be, to some extent, a perceived gap rather than a real gap. There are many instances of the use of outcomes and outputs from accounting research in practice and public policy. Moehrle et al. (2009) summarise the areas in which accounting research has been successful in influencing practice⁶. Their analysis identifies contributions in the following areas: regulation of financial accounting, financial reporting and capital markets (e.g., financial reporting model); use of financial accounting information (e.g., fundamental analysis, risk assessment and bankruptcy predictions); auditing practice (e.g., audit judgement, audit sampling); tax practice, policy and compliance (e.g., tax interpretations, Scholes-Wolfson framework); management accounting (e.g., activity-based costing, balanced scorecard; performance measurement); and accounting information systems (e.g., design of accounting systems; internet technologies for communicating firm performance).

Why are these academic contributions to practice not widely recognised as evidence of the value of academic accounting research? Is it because (in some cases) the innovations were introduced to practice so long ago that their source has been forgotten? Is it because they are each used in a specialised area of the business world, so that practitioners may only encounter one or two in their field? Or is it because academics fail to teach about the research itself, and only pass on to future practitioners the tools and techniques that research has contributed? This chapter contends that the latter explanation is the most likely, and it behoves academics to include an awareness of the history and outputs of academic accounting research into their lectures and textbooks. Such material could inspire future generations of researchers, and create an appreciation of the benefits and limitations of accounting research, as well as train all accountants in methods of systematic enquiry and discovery.

An alternative viewpoint is that a real research gap in accounting does, and should, exist. Academic research is not necessarily designed to support practice, nor is it only about relating to professional practice. It also has an arm's length role to play in questioning practice. It embraces critiquing, reflecting, debating and challenging the status quo (Parker et al., 2011). As such, it is not clear how practitioners would engage with that research compared to how they would engage with research that develops solutions for them. As noted by Lee (1989, p. 237):

If the world of accounting is viewed as a social system that is open or permeable to its environment, then the loop of education and *practice* and the significant isolation of much of research can be interpreted as attempted systems closures that have the intended effect of systems stabilization and control. *Accounting research* can thus be identified as a potentially destabilizing influence acting against systems equilibrium. There should not be any deliberate attempt to bring *accounting research* into the loop of education and practice. Instead, its potential in the long run may be best achieved by its present separation from them.

6. The genesis of Moehrle et al. (2009) was the commissioning of the American Accounting Association's Research Impact Task Force to study and document the accounting academy's impact on practice.

Bridging the research gap

Accounting research can affect society in numerous ways (Salterio, 2010). First, accounting education is a conduit for disseminating ideas that are infused into practice by graduates. Second, regulators and decision-makers should be informed by research when evaluating decisions. Third, accounting research can affect society through thought leadership. Various stakeholders, including academics, academic institutions, professional and accrediting bodies and practitioners, seek a heightened relevance of accounting research for the benefit of society. Importantly, the responsibility for appreciating and enhancing the relevance of accounting research is one that must be shared by all stakeholders.

The recommendations of the Final Report of the Association to Advance Collegiate Schools of Business (AACSB) International Impact of Research Taskforce (AACSB, 2008) include seven specific initiatives designed to address the research gap. The themes contained within these recommendations are discussed below. The actions and strategies currently occurring are identified, as are the roles that the various stakeholders need to assume to advance the relevance of accounting research. In addition, the strategies and actions pursued by the Accounting and Finance Association of Australia and New Zealand (AFAANZ) in bridging this gap are mentioned.

Creating incentives for greater diversity in institutional missions and faculty intellectual contributions, and demonstrating their impact on targeted audiences (AACSB Recommendations 1 & 2)

One of the criticisms of accounting academic research is that it lacks relevance and usefulness to the practitioner community. Has the accounting academy's definition of research become too rigid as a consequence of its need to achieve academic legitimacy and to compete effectively with other disciplines in academic institutions for resources and academic integrity? Inanga and Schneider (2005) argue that a highly advanced research context has been created, dominated by sophisticated methodology rather than theory. Further, they state that in emulating the hard sciences, accounting's pursuit is academically acceptable, but lacks substance.

Relative to other professional disciplines such as medicine, it is more difficult to demonstrate the impact and benefits of accounting research to end users in the community (Tilt, 2010), given that the imperative for non-lifesaving research is not as intense. In addition, the academic reward system increasingly interprets research in a narrow frame to mean publication in academic journals. Many consider that the focus on articles in peer-reviewed academic journals devalues applied research that would be more likely to contribute to practice. To meet the AACSB initiatives described above, a wider frame of research endeavours resulting in outcomes such as articles in practice-oriented journals, the development of discipline-based practice tools, and published consulting reports should be more overtly recognised and rewarded by academic institutions. If incentive structures move to include a focus on research impact, the recognition of such research outputs will be enhanced. Interestingly, the proposed Research Quality Framework (RQF), the predecessor to Excellence in Research for Australia (ERA), included a requirement to demonstrate research impact. The definition of impact included: (1) engaging with end users to disseminate the outcomes of the research to address issues; (2) adoption of research by end users (e.g., new policies, practices, legislation); and (3) social, economic, environmental

and/or cultural benefits enjoyed by the wider community as a result of the research being adopted. An impact statement for each research group was required. This criterion was removed in the ERA assessment with research primarily assessed on discipline-based scholarship using articles in peer reviewed academic journals. Re-including research impact would widen the definition of research and might encourage academics to engage in research outputs beyond academic publications targeted to peers.

In response to these issues, AFAANZ has encouraged accounting academics to explicitly consider the impact of their research on targeted audiences. As an additional requirement in grant applications for the 2011–2012 AFAANZ Research Funds, researchers must articulate the contribution of their research findings to practice, where practice is broadly defined as 'the real world'. It could be practice in sustainability accounting, management accounting or tax. This is a message that also needs to be communicated to accounting higher degree students. Research students and academics creating knowledge must be cognisant of the potential users and uses of the knowledge they create.

Strengthening the linkage between scholarly inquiry and education in degree and non-degree programs (AACSB Recommendation 3)

Considering the relationship between accounting practice, education and research is paramount when contemplating the advantages of academic and practitioner collaboration (Donovan, 2005). Even to discuss the research practice gap in isolation of education is remiss. There are two aspects to the gap: a research practice gap, and a research education gap.

Wyatt (1989) discusses the research education gap, arguing that education programs' focus on technical accounting issues at the expense of developing a foundation to reason, identify and analyse issues and resolve conflicts, limits the impact of research on practice. This is an early diagnosis of a problem in the United States that is also found in Australia. As mentioned above, accounting academics have limited the inclusion of academic research and its findings in their curricula, to the obvious detriment of bridge-building between practice and the academy. Has the gap been widened by the current state of accounting education in Australia? Confronted with external pressures arising from a global and competitive market, has the emphasis switched from accounting education to accounting training, thereby limiting graduates' exposure to research? How can our students, the future practitioners, appreciate and understand research if their education is devoid of research engagement? Academics must be encouraged to engage in research-led teaching. This is broadly defined as an approach to teaching and learning that integrates student-centred pedagogies, discipline-based research and research practice (Schapper and Mayson, 2007; Mayson and Schapper, 2007). Managing the research education gap will assist in bridging the research practice gap. Further, professional bodies and accrediting bodies must recognise the value of a rounded accounting education encompassing technical skills, research understanding and scholarly inquiry.

Goldberg (1987) records the history of AFAANZ from 1949 through to 1987, identifying it as an organisation that was founded by and for accounting academics with an interest in teaching and research into teaching. AFAANZ was previously known as AAANZ (Accounting Association of Australia and New Zealand), which is the successor, in time, in name and in functions, of the Australasian

Association of University Teachers of Accounting (AAUTA), which in turn was the successor to the Australasian Association of University Teachers of Accounting (also AAUTA). AFAANZ members' support of the research education link is evident in the strong membership of its Special Interest Group in Accounting Education. Its history and continued involvement in the research–teaching link demonstrates the significance of research-led teaching as a means to distinguish a university education from purely technical or vocational training, and as central to value-enhancing academic work (Jenkins and Zetter, 2003; Neumann, 1994; Mayson and Schapper, 2007).

Developing an awards program to recognise and publicise high-impact research (AACSB Recommendation 4)

The need for communication was previously discussed. For the accounting academic's research to be utilised, it is first necessary to ensure that the research findings are diffused throughout the practitioner community. Publicly recognising outstanding contributions of accounting academics to practice is an important and effective way of communicating the value of research.

AFAANZ presents awards to senior academics who provide outstanding contributions to practice, teaching, and research. Conveyed in appropriately non-technical language, these awards could be given greater publicity, both among practitioners as well as the general public. Another suggestion under current consideration is for AFAANZ, through one of its journals such as *Accounting and Finance*, to follow the lead of the *Journal of Marketing Research*, by creating an award for the article that demonstrates the greatest potential to contribute significantly to the practice of accounting research.

Developing mechanisms to strengthen interaction between academics and practitioners in the production of knowledge (AACSB Recommendation 5)

Martin (2010) identifies and evaluates five strategies for achieving more engaged and engaging research scholarship. The strategies include involving practitioners as: (1) data sources; (2) recipients; (3) endorsers; (4) commissioners; and (5) co-researchers. The involvement by practitioners in these various strategies ranges from low to high, respectively.

In accounting, the academy does interact with the profession. Examples include teaching-related activities, such as professional programs and textbook programs; standards-related activities such as positions on regulatory bodies, submissions to enquiries, and advocacy in the media; and practice-related activities such roles with professional associations, secondments and sabbatical employment. The academy does co-produce research with practitioners, as evidenced by instances of accounting practitioners taking the roles of data sources, recipients, commissioners, endorsers and co-researchers of joint projects. For example, behavioural research often uses practitioners as subjects. Some journals such as the *Australian Accounting Review* have a specific mandate to connect business and intellectual thought, and to promote articles by leading practitioners and researchers. Businesses committing to cash and in-kind contributions to an Australian Research Council Linkage grant application are an example of endorsing and supporting research. However, such engagement often operates at an individual academic level and the stakeholders do not necessarily see the aggregation of these engagements to appreciate the extent of collaboration that does occur.

On the other hand, in spite of these examples of engagement, there are reasons why it is limited. The existence and popularity of extensive high-quality electronic databases have reduced the need for empirical archival researchers to use practitioners as data sources. Nevertheless, for case-based, survey and experimental researchers, access to practitioners and their data, responses or participation is paramount. To foster support for such research from the practitioner community requires strong and carefully managed networks, and a research agenda that is of direct and immediate interest to practitioners. An impediment to practitioners commissioning research is the divergence in their need for a timely product, and the researcher's need to independently and robustly conduct the research constrained by a timetable that also includes teaching and other duties.

The co-production of research is less prevalent. It is rare for practitioners to appear as authors on discipline-based research for several reasons. First is that issues of common concern to academics and practitioners, on which they might be co-researchers, are traditionally less likely to be published in academic journals. To the extent that such research is conducted, it may be published in practitioner-focused journals, which do not seem to attract the attention or the credit necessary for an academic's reputation and career enhancement. Second, co-production may be difficult to distinguish from (unpaid) commissioned research, and the academic may lose their independence in determining the direction of the project in exchange for access to confidential data or other key elements that the practitioner is able to contribute. Finally, co-production is rare because practitioners are not trained in the language or tools and techniques of research analysis. Leisenring and Johnson (1994, p. 76) support this explanation for the lack of co-production, commenting that 'practitioners do not understand the mathematics and statistics that characterises much contemporary research'. Consistent with the call for more research-led education mentioned earlier in this chapter, they propose research training for practitioners as a means of overcoming this gap in understanding and communication.

Establishing academy – practitioner networks is paramount to the creation, diffusion and utilisation of knowledge, and AFAANZ engages actively with the accounting professional bodies to explore networking opportunities for the two communities. It is particularly important to provide such opportunities for the communities to link as this interaction often spawns research ideas and creates an appreciation of accounting research. The practitioner – academic panel discussion series collaboration between the Institute of Chartered Accountants in Australia (the Institute) and AFAANZ, is an example of networking opportunities.

Making recommendations to the business and journal community designed to highlight the impact of faculty research (AACSB Recommendation 6); and disseminate information about best practices for creating linkages between academic research and practice (AACSB Recommendation 7)

In some regards, the research gap can be described as a communication gap. Increasing awareness of the contributions of accounting research to the efficiency and effectiveness of practice will make some inroads into 'bridging the gap'. As noted by Moehrl et al. (2009, p. 442):

We believe that if the practice community more fully understood the immense practical value of academic research, it would be willing to invest even more to support the expensive proposition of developing and retaining doctoral-trained accounting researchers. In addition, we believe

that talented scholars, armed with an understanding of the importance of our research, would more likely choose to pursue a doctorate in accounting and join us in the quest for important knowledge... We encourage authors to refer to these developments in their textbooks, and encourage our international colleagues to cite and discuss the academic literature frequently in classes so that the next generation of practitioners will more fully understand academicians' contributions to the practice of accounting.

How can we as academics respond to this need, to increase awareness of the contributions of past accounting research, and to demonstrate the potential contribution of current research? How do we build bridges in the first instance, and also highlight those bridges on an on-going basis?

One way to communicate research results is for academics to write versions of papers that are designed for practitioners. For example, more effective use could be made of abstracts. As summaries of the research, with an emphasis on its contribution and potential implications, abstracts could be circulated amongst interested practitioners, identified through one of the professional accounting associations, or personal contacts, or just placed on the author's webpage. Another more comprehensive way is to make greater use of a 'professional adaptation' of academic papers. For example, AFAANZ has a current project underway to convert suitable academic articles in one of its official journals, *Accounting and Finance*, into practitioner-focused summaries, to be disseminated around the practitioner community. Other options include 'state of the art' summaries, written by researchers for practitioners, highlighting recent developments in research, including an analysis of their implications for practice. As an example of this, the New Zealand Institute of Chartered Accountants (NZICA) publishes an on-line column, written by academic Steven Cahan, on research topics of interest to practitioners. On the topic of 'IFRS Measuring', Cahan (2010, pp. 56 – 57) reports, 'the effect of adopting international reporting rules is problematic'.

Another way to communicate research results is at meetings attended by both practitioners and academics. All professional accounting associations in Australia invite academic speakers to their general member meetings and conferences, and are ready to provide practitioners and professional organisation representatives to speak at academic conferences and meetings. For example, at the AFAANZ Annual Conference in 2011, a panel session will be held, bringing together journal editors and practitioners to discuss the relevance and impact of research and how the editors ensure that what's published addresses issues that are relevant both to practitioners and academics.

Conclusion

The consistent message throughout this chapter has been on finding the bridge between the academy and practitioners with regard to the direction and value of academic research. In some cases a bridge exists, and needs to be highlighted through effective meetings and communication. In other cases, a bridge needs to be built, changing academics by challenging them to address problems of relevance to practice, and changing practitioners by educating them about the contributions of academic research. The key to all suggestions is getting all of the stakeholders together, talking about research, critiquing the contributions and uses of existing research, encouraging better use in the future, learning from the other side, and working cooperatively for our mutual benefit.

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Chapter 6

Engaging with and Extending Organisational Practices: The Potential of Management Accounting

Suresh Cuganesan and Len Gainsford

Debating the relevance and impact of research on practice is an ongoing theme in the management accounting discipline, and has been prevalent since at least the 1980s. During this time, as proclaimed by Johnson and Kaplan (1987; see also Kaplan, 1983; 1984; 1986), the practice of management accounting itself was reportedly in decline. Management accounting research (MAR) was partially to blame through its focus on abstract models rather than managerial practices. Concurrently, others such as Anthony Hopwood encouraged management accounting researchers to get closer to practice and study management accounting within its organisational context (Hopwood, 1983; see also Hopwood 1978a; 1978b).

Since this time, management accounting researchers have sought to conduct more empirical research, especially from 'within' the organisational form, engaged in more interpretive and critical examinations of management accounting, and have attempted to innovate and extend management accounting practice such that it becomes more relevant for organisations⁷. This chapter represents the continuation of these efforts. It presents our (partial) perspectives on how MAR can contribute to improvements in organisational performance. It does not call for a 'revolution' in MAR but a continued commitment to developments in MAR that leads to better planning and control systems practices, however one may seek to define this term. In this regard, the focus is unapologetically pragmatic and practical, in keeping with the nature of the forum and this subsequent thought leadership book.

The impact of MAR on practice

A number of reviews of MAR have been conducted over the last few decades (for recent reviews, see Chenhall, 2003; Langfield-Smith, 2008; Otley, 2008; Hopwood, 2008; Birnberg, 2009). Largely in response to calls from academics such as Hopwood and Kaplan, a significant amount of empirically-based work has produced a greater understanding of the factors that drive variation in management accounting practice and the effects of these both across organisations at a given point in time as well as longitudinally. In addition, case studies of organisations have shed light on processes of management accounting change; the organisational actors that are involved and implicated in these processes; and how management accounting itself can perform different roles within organisations. However, the extent to which these more detailed and nuanced understandings of management accounting have

7. The focus in this chapter is on how management accounting research can pragmatically make contributions to organisational practice. Hence its focus is less on the interpretive work or the 'critical accounting project' (see, Roslender, 1996) and more on how organisational performance can be enhanced through management accounting.

translated into informing and enhancing practice remains an open question. In a recent reflection on North American research, Birnberg (2009, p. 7) comments:

Research-for-research sake is the dominant orientation in our journals. Contracting models appear to have strongly influenced this research activity. New studies have built on prior research, turning more and more 'inward' as we attempted to improve our models. While the research-for-practice sake line of research still is present, in North America it clearly is in the minority.

A more positive recounting of the shift in MAR by Scapens (2006, p. 28) highlights a gap in terms of impact:

From the 1970s, when the mathematical economic models were supposed to tell practitioners how to do their management accounting, and the 1980s when management researchers began to realise that we had little real understanding of management accounting practice, to today when we have a much better understanding of the complexity of the processes which shape management accounting practices, we have come a long way. But it has taken a long time; and the research has followed practice—with researchers seeking to understand and theorise what practitioners do and how practices evolve. **The challenge for the future is to use this theoretically informed understanding to provide insights which are relevant and useful for practitioners; for management accounting research to have more of an impact on practice.** [emphasis added]

Overall, a clear message for management accounting researchers is that more work needs to be done if, collectively, the academy is to claim to have an impact on practice.

In addition to modelling and understanding management accounting practice, management accounting researchers (and in some cases, consultants operating in similar areas) have sought to develop 'major' innovations that aim to improve management accounting practices. The most notable example of these has occurred in the area of costing and performance measurement. In the area of costing, activity-based costing was offered to remedy deficiencies in overhead costing practices and enable management accountants to provide cost information that reflected new and more complex manufacturing realities, in turn enabling more effective managerial decision-making. Later versions of these focused on activity-based management while the most recent evolution sees the practice of 'time-driven activity-based costing' (see Kaplan and Anderson, 2007) being promulgated. While significant claims were made about the impacts these techniques would have on managerial decision-making and organisational practice, these remain little used, with surveys of practice indicating low adoption rates across international contexts (Gosselin, 2007).

In the area of performance measurement, there have been several ostensibly new and different frameworks developed by researchers, practitioners and consultants alike, ranging from the ubiquitous balanced scorecard (BSC), to the performance prism, and encompassing a plethora of intellectual capital measurement frameworks. Of these, it is the BSC that has been the most popular in terms of use in practice, with some claiming it to be amongst the most influential management instruments of the 20th century (Sibbet, 1997) even though a high degree of flexibility in implementation has

been observed (Speckbacher et al., 2003). With the exception of the BSC, evidence of MAR having a considerable impact on practice through the development of 'new' management accounting techniques and practices is largely absent. More broadly, the set of practices labelled 'strategic management accounting' (SMA) (Cadez and Guilding, 2008) were held out as reshaping management accounting practice and making it more relevant and valuable for organisations. Yet despite a significant period of time lapsing since the ideas underpinning SMA were first disseminated, 'there is no compelling evidence that SMA ... is used widely in practice' (Langfield-Smith, 2008, p. 221).

In summary, reviews of the impact of MAR on practice highlight a need for researchers to do more to have an impact on practice. We certainly do not claim to offer the panacea to this problem; much needs to occur at national and institutional levels before researchers, let alone management accounting researchers, are 'enabled' to affect practice. But leaving these 'macro' issues aside, it is our position that a means of attempting to address this practice impact gap is to examine how MAR can extend not just management accounting practices but organisational performance through better planning and control systems and practices. This concept cannot be thought of as novel, and others in part have articulated these themes. However, as management accounting researchers know, it is careful implementation that is critical. Specifically, four implementation elements are worth highlighting.

First, there is a need to shift the focus from a narrow concern with what might be defined as 'management accounting' practices to a broader interest in improving organisational performance through better planning and control systems and practices. There are many reasons for this. The terms 'management accounting' and 'management accountant' themselves are being used less in organisations. Significant aspects of 'management accounting' work such as performance evaluation and control systems design occur across various organisational departments, and what could have once been thought of as the discipline of management accounting has diffused into more general organisational processes and practice (Langfield-Smith, 2008).

The second element is a preparedness to examine novel organisational issues that may not be readily conceived of as 'management accounting issues' or which necessarily and self-evidently link themselves to the related areas of strategy or operations, but which fall within the broad problematic area of planning and control. As an example, in recent times there has been increasing focus on managing the intellectual capital of organisations, which also includes information and knowledge resources (Sveiby, 1997). This raises issues of planning and controlling information use, flows and repositories. While this might be considered an issue for information technology (IT) departments of organisations and hence IT researchers, it is our contention that MAR should engage with these themes. Offering some support to these notions, management accounting researchers have been urged to examine conversations such as cyber security and whistle-blowing, amongst others, as a means of thinking 'outside the box' (see, Birnberg, 2009).

Following on from the above, the third element is the need for multi-disciplinary perspectives. If management accounting researchers are to examine novel organisational challenges that sit outside the traditional domain of the management accounting department then engagement with other disciplines is likely to be necessary. Indeed, on this point others have noted that pluralistic perspectives are likely to be of benefit in moving the MAR agenda forward (Otley, 2008).

The final element is a commitment to design and test planning and control systems and practices in organisational settings. While this might seem difficult and complex to some, this is where management accounting researchers can offer substantial value to organisations and have an impact on practice through the development of planning and control approaches for particular settings and the observation of their multiple effects, including on organisational performance. Action research approaches are certainly of relevance here, but so too are the models of practice that have been developed over time through the vast amounts of empirical research done to date. There is certainly a broader acceptance of the idea of taking these models out of the 'lab' and testing them in practice:

There are really exciting possibilities for accounting researchers to be involved in systems design, not least because they might have the time and the knowledge to think about design in ways that relate to particular configurations of organisational circumstances, which is something that consultants rarely have the resources and understandings to do. (Hopwood, 2008, p. 8)

The challenge is the building of relationships with organisational participants, the development of trust between researchers and practitioners and the generation of commitment to research-based research-informed practices from trialling new planning and control approaches. These take time but are achievable. The remainder of this chapter articulates how this was done with a particular case organisation within the public sector, specifically, the Department of Transport Victoria, which operates within the State of Victoria in Australia. Management accounting practices may be seen as relevant for manufacturing contexts primarily. However, there is an extensive tradition of management accounting's application in services industries. Furthermore, public sector imperatives for evidence-based approaches to improving and innovating activities, measuring performance and implementing strategy and policy makes management accounting practices highly relevant to government organisations.

A need for research informed practices in the public sector

Governance and performance in the public sector

The challenge of improving performance is evident in the public sector and, at present, no more so than in the Australian state of Victoria. While the challenge is typically set via a political process, the delivery of improved performance and performance reporting is largely seen as the responsibility of public servants, using government administrative processes.

How is this challenge to be achieved? First, theory must be applied to the practice of governance and accountability. Second, and as an extension of the first step, public sector innovation is needed to produce better stakeholder outcomes. Third is the delivery of greater accountability through public sector performance measurement and management accounting processes, which assist in the selection of relevant and appropriate performance indicators and provide management with information to make effective decisions to manage for results.

In their review of traditional corporate governance and accountability research, Brennan and Solomon (2008, p. 886) find adoption of an agency theory approach, focusing exclusively on resolving conflicts, to be of interest. They refer to shareholder-centric definitions of corporate governance. For example,

citing Parkinson (1993), they mention '... the process of supervision and control intended to ensure that the company's management acts in accordance with the interests of shareholders'. Brennan and Solomon find accounting researchers have concerned themselves with mechanisms of transparency (particularly financial reporting) which seek to align first with the interests of management and shareholders, and second with mechanisms of accountability such as audit committees, internal audit and risk management as assurances of the quality of financial accounting.

Brennan and Solomon (2008, p. 890) offer a broadening of coverage and a change in emphasis away from the traditional shareholder-centric approach towards a more stakeholder approach to corporate governance. They cite Parker (2007) to support a broadening in theoretical frameworks to incorporate other non-shareholding stakeholders. In answering the question 'Accountability to whom?' Brennan and Solomon (2008, p. 892) state that 'stakeholders representing any group who affect, or are affected by, a company's operations', and note a broadening of research into different sectors and different contexts: 'Research examining the suitability of private sector models of governance applied to the public sector is emerging (Clatworthy et al., 2000), with the governance needs of non-private sector models differing from traditional models (Vermeer et al., 2006)'.

Bolton (2003, p. 21) comments on public sector performance:

All public sector agencies exist to fulfill a particular mission – a mission inherently determined by society at large, though articulated and managed by a combination of elected officials and their executive support teams ... the 'critical success factor' for a public sector organisation is therefore the degree to which it fulfils its mission.

Further, Bolton (2003, p. 24) postulates that accountability can be delivered through public sector performance measurement. In his view, performance measures should: (a) be significant – they should measure the key success factors; (b) offer views from different perspectives; (c) reflect the concerns of all key stakeholders; (d) be used – and considered – together, not in isolation; (e) be balanced between quantitative ('hard') and qualitative ('soft'); (f) be discriminating – changes in the measure should be significant; and (g) be unobtrusive – collection of measurement data should not disrupt primary tasks.

The Australian Government's Department of Finance and Deregulation (DoFaD) (2010, p. 1) states that 'measuring program performance is essential to good management, to public accountability and transparency, and to internal learning and development'. DoFaD goes on to say that 'consistent, clear reports of performance provide an important record of an agency's progress towards meeting government policy objectives, how well public money is being spent and whether planned achievements are on track'.

Innovation in the public sector

The Australian National Audit Office (ANAO) (2009, p. 1) defines innovation as ‘the application of new ideas to produce better outcomes’. The ANAO (2009, p. 3) finds that:

... some aspects of public sector innovation are comparable with, indeed might almost be identical to, aspects of private sector innovation (examples include business process improvements and many aspects of information and communication technologies). However, there are other aspects of public sector innovation, particularly those associated with policy innovation, for which governments must bear responsibilities that greatly outweigh those borne by the private sector (examples are national security, counter-terrorism and pandemic preparedness).

With innovation, choices lie in when and how government might engage with the private sector to enhance its own innovation outputs and outcomes and particularly, where matters of public sector performance, risk and accountability are being contemplated.

In a public sector context, the application of good ideas is described by the ANAO (2009, p. 15) under a ‘develop, implement, check and adjust model’. The model must be ‘fit for purpose’, which means the adoption of risk management procedures and stakeholder engagement to maximise opportunities for innovative solutions. This is achieved through: refining existing processes (regular innovation); using existing ideas, processes or products in new areas (niche-creation innovation); and radical change of both the product/service and the market (transformative innovation). It is in this regard that interaction between the public sector and the academy and between public sector managers and practitioners and management accounting researchers becomes important.

Case study: Developing the potential to impact practice

The Department of Transport Victoria

The Department of Transport (DOT) is one of 11 ‘super Departments’ that administer to, and support, government in the State of Victoria. Its annual budget appropriation is in the order of \$9 billion, which funds both operating and capital responsibilities for the portfolio. Large capital works programs include the \$38 billion Victorian Transport Plan, which additionally attracts committed Commonwealth Government funding of \$4.1 billion.

In May 2010, the Victorian Auditor-General (VA-G, 2010, pp. vii and viii) reported on Performance Reporting by the (then) 10 Departments and found:

Overall, there is a lack of effective outcomes performance reporting across the departments, and the standard of reporting varies considerably. Only a few departments were able to demonstrate the extent to which objectives had been met. While departments are responsible for improving the standard of performance reporting, stronger central agency leadership is needed to drive the reporting standard to minimum satisfactory levels . . . The Departments of Transport, Innovation and Regional Development, Education and Early Childhood Development and Justice had made considerable progress in developing relevant performance indicators.

The first two being the only departments with a high proportion of both relevant and appropriate indicators.

Echoing what Brennan and Solomon (2008) (a more stakeholder-approach to corporate governance) and Bolton (2003) (greater accountability is able to be delivered through public sector performance measurement) found, the VA-G (2010, p. 1) states:

Performance reporting is central to achieving public accountability. It is important to demonstrate to Parliament and the community the extent to which public funds spent by agencies have achieved their intended outcomes. It is also critical for rational resource allocation and enables management to track performance against organisational objectives and outcomes, and to take appropriate and timely action.

How then is DOT performing in its stated mission of 'building a safer, fairer and greener transport system for all Victorians to create a more prosperous and connected community'? Movement by DOT towards Bolton's 'mission fulfilment' may be paraphrased via the VA-G's (2010) report as:

- Performance information reliably representing actual performance e.g., public transport punctuality and reliability performance indicator data (p. 22)
- Performance indicators in DOT business reports which play an important role in providing management with information to make effective decisions to manage for results (p. 24)
- Inclusion of outcomes performance indicators in DOT corporate plans (p. 26)
- Including results on (a limited number of) performance indicators covering a few departmental objectives (p. 28).

In the VA-G's opinion, DOT and the Department of Innovation and Regional Development were the only two Victorian Government Departments to demonstrate a high proportion of both relevant and appropriate performance indicators. However, while DOT was able to deliver performance and had developed a set of performance indicators to measure and review them, as well as report to external stakeholders, it was also dealing with issues considered important to the organisation. One of these related to the management of its information assets, with performance and control critical aspects of this.

A research project with the potential to have an impact on practice

In 2010, a collaborative research project was developed combining management accounting and IT that examined the control of information processes in DOT. Together with DOT, a research team comprising management accounting and IT researchers devised a project that included building models of its information practices and showing how these intersected with existing control systems through interviews and surveys; and an action research component, where new management controls elements that also include IT-based controls are developed for trialling in the partner organisations. Management controls as used here comprise management accounting practices such as budgeting, performance measurement and costing techniques as well as informal mechanisms that influence behaviour such as values and norms. This conceptualisation is consistent with Chenhall (2003).

Representatives from DOT working alongside the academics on the project are not 'management accountants'. Instead they are drawn from a variety of disciplines and departments, including (using generic rather than specific descriptors): human resources, IT, risk management, assurance and executive management representatives. Common to all these representatives however is their interest in improving organisational performance through better planning and control systems and practices.

Project background and overview

Control and security of critical information is vital for both organisations and governments in knowledge-based economies. However, research to date has focused on private sector organisations. This is despite government agencies facing equivalent if not more complex problems (de Jong and de Vries, 2007). Recent investigations highlight major control deficiencies both internationally (USGAO, 2010) and in Australia (VA-G, 2009; WAA-G, 2009).

While information management may be dismissed as an IT problem, it is well established that employees are the weakest link when it comes to information control and security (Warkentin and Willison, 2009). Government agencies – like all organisations – need to consider how they can control the information management practices of employees, rather than focusing on technology solutions alone (Boss et al., 2009). Here, management accounting practices and controls are relevant, comprising organisational culture and values, policies and procedures, performance measurement and monitoring, and rewards/sanctions (Chenhall, 2003) and IT is also relevant. As the medium of much information flow and storage, IT can facilitate and automate the operation of management controls through, for example, the monitoring of practices (Sewell, 1998) and the measurement of risk. However, two main reasons make the challenge of designing and operating management controls, including IT-based controls, for information management in government considerable.

First, government agencies face significant demands for intra-organisational information sharing. Effective decision-making and delivery of high-quality government services is often complex, requiring different parts of an agency to come together, interact and share information. Too much information control and security may lead to negative performance by restricting required information flows. Hence, government agencies need to design *intra-organisational* management controls that ensure appropriate *information sharing and security by employees*, with these practices impacting positively on agency performance.

Second, government agencies face growing demands for inter-organisational information sharing. 'Whole-of-government' policy formulation and implementation trends (Christensen and Lægreid, 2007) increasingly require joint work and information-based relationships between government agencies (G2G). Concurrently, the growth of public-private partnerships has expanded the sharing of information between government and business (G2B). Hence, government agencies need to also design inter-organisational management controls for their G2G/G2B relationships that result in appropriate *information sharing and security by the individuals participating in these relationships*, with these practices impacting positively on *G2G/G2B relationship performance*.

Thus there is a need to strengthen controls over information in government. There are also significant challenges in designing management controls so that appropriate information sharing and security occurs both within government agencies and across G2G/G2B relationships. Furthermore, there is a

lack of research on these issues. While at first glance this project seems far removed from the domain of management accounting, many of its elements suggest that MAR can improve practice.

First, the project is consistent with the call made earlier in the chapter that future MAR should concern itself with a broader interest in improving organisational performance through better planning and control systems. Second, the need for information about costs, value and risk at the level of particular information management activities makes MAR particularly applicable. In the past, MAR (and practice) has concerned itself with activity-based costing and management and measuring the value of business processes. More recently, risk management practices have been focused upon (see Mikes, 2009). Finally, the project is also aligned with the need for management accounting practices to be oriented to the changing operating environments of contemporary organisations, where information and knowledge (rather than historically important resources of physical and financial capital) are central to influencing organisational performance.

The overall aim of the project then was to determine how government agencies can achieve effective information sharing and security (a) within it using intra-organisational management controls including IT-based controls, and (b) across its G2G/G2B relationships using inter-organisational management controls including IT-based controls.

For DOT, the protection of infrastructure-related information from those engaging in criminal activity or seeking to profit from infrastructure-related information not in the public domain is critical. In addition, DOT needed to engage in numerous information-intensive partnerships with other government agencies and private-sector providers in delivering the Victorian Transport Plan, which involves a \$38 billion program of transport infrastructure initiatives. Hence it faced the challenge of managing information security within and across its organisational boundaries.

DOT also recognised the need to change the information management practices of its employees and as a result has commenced a program to do so. Its recent annual report observed: 'In 2008–09, DOT continued to improve its information management and security systems . . . New policies and procedures were released regarding the importance of information security' (DOT Victoria 2009a, p. 54). Concurrently, DOT recognised that it needed to balance information security with information sharing. Part of its three-year priorities (commencing 2009) is to: 'Build a collaborative and effective organisation . . . transform the culture of the Department to foster open and collaborative work . . . and ensure that transport infrastructure projects are developed and delivered effectively' (DOT Victoria 2009b, p. 40).

Hence, DOT was looking for ways in which it could achieve the right blend of information sharing and security. Planning and control of information flows, use and storage were thus critical issues faced by the organisation.

Project reflections

To our knowledge, the project is the first in Australia to examine how integrated management controls interact with IT to influence information management practices and related performance effects. In so doing, the project leverages latest developments in each body of literature (i.e., management controls and IT) and combines them such that the totality addresses under-researched areas in the constituent disciplines.

At the time of writing, the project is in the early stages of commencement. Thus we can only talk about its potential to shape practice. In this regard, we are highly optimistic and point to a number of characteristics of the project:

- **Trust and shared understanding.** This project represents an ongoing partnership between academia and the organisation where previous research projects have been conducted and concluded to the satisfaction of both parties. This has enabled the academics on the project team to learn about the DOT 'world' and likewise, for those within DOT to appreciate the perspective of the academic investigators and the performance imperatives that permeate the 'academic world'.
- **Identification of an important control issue.** Management and control of information behaviour is an important issue facing the organisation and the broader public sector. Actions are being taken by DOT to address this, and the research project will work alongside internal practitioners who are attempting to manage and control these organisational practices.
- **A commitment to trial new practices and to learn.** There is a recognition and commitment by the academic investigators to build and trial new control approaches as part of the project and by DOT to learn from the action research components of the project.
- **A platform from which to have an impact on broader public sector practice.** While in the first instance we will hopefully influence practices within DOT, the inter-agency components will mean that we will share findings across the broader public sector. Indeed, the involvement of multiple agencies in the research project allows us to broaden the scope of the research across the public sector arena.

Conclusion

This chapter argues for reinforced commitment to developments in MAR that leads to better planning and control systems practices that ultimately translate into organisational performance. Specifically, we argue that four elements of this implementation are important. These are: (1) a need to shift the focus to a broader interest in improving organisational performance through better planning and control systems and practices; (2) a preparedness to examine novel organisational issues that may not be readily conceived of as 'management accounting issues'; (3) a need for multi-disciplinary perspectives; and (4) a commitment to design and test planning and control systems and practices in real organisational settings.

This chapter discussed a research project in the public sector context, which offers significant potential to have an impact on practice. In this regard, it is our view that the challenge of improving performance in the public sector is able to be met through first, the application of theory to the practices of government agencies and second, the use of public sector innovation to produce better stakeholder outcomes. In the public sector, pressures for performance, accountability and innovation are high. With innovation, choices lie in when and how government might engage with the academy to enhance its own innovation outputs and outcomes and particularly, where matters of public sector performance, risk and accountability are being contemplated. Planning and control practices that lead to greater public value are paramount in this regard.

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Chapter 7

Audit Research and Practice: A Dialogue on 'Relevance'

Philomena Leung, Lee White and Barry Cooper

There are a variety of international academic journals that publish accounting and audit research. However, only a handful of these specialise in audit research. McKee (2010) reviewed three specialised audit journals and measured their relative 'impact' for the six-year period 2001 – 2006 using a citation count method⁸. McKee (2010) found that the top 10 articles in *Audit: A Journal of Practice & Theory* averaged 73 citations compared to an average of 40 citations for *Managerial Audit Journal* and 27 citations for *International Journal of Auditing*. He also commented that the order of these three specialist audit journals in terms of number of citations parallels their order in terms of age of journal. The three journals also vary significantly in terms of number of articles published per year, but this did not appear to affect their citation frequency.

Citations provide information about the impact that a journal or article has on research (O'Leary, 2009) and impact is important in assessing the contributions of that journal or article and its relative importance within its field (McKee, 2010). Academics are interested in how often their work is cited. The ability to publish an article in leading journals is generally taken as a significant achievement demonstrating high quality research, which is often construed as recognition of the impact of the piece of research by an author's peers. As Hopwood (2008) pointed out, making a decision to research issues, or use research methods that do not appear to be of interest to such journals, is often perceived by emerging and established scholars as potentially highly damaging to their career prospects. This system is also considered by some to deter wider dissemination and knowledge transfer activity to non-academic users of research (Unerman and O'Dwyer, 2010).

On the other hand, as reported by Parker et al. (2010), accounting research has become too far removed from the interests of the profession and practitioners and its impact is not so easily discernable (Tilt, 2010). Even in 1993, Bindenga (1993) presented a highly critical view of audit research. He believed that extant audit research lacks practical relevance and that a number of important audit issues have not been adequately addressed by research. While Biggs et al. (1994) disputed Bindenga's views, arguing that audit research not only meets the high standards of scientific inquiry, but also makes several significant contributions to the practice of audit, the question of the relevance and impact of audit research to audit practice remains a highly debated matter.

8. Thomas E McKee (2010, pp. 724 – 733) used a Google Scholar citation analysis to examine the 'impact' of three leading international auditing journals: *Auditing: A Journal of Practice & Theory*, *Managerial Auditing Journal* and *International Journal of Auditing*, for the period 2001 – 2006. The top 10 citations from each of these journals were used to analyse relative journal citation frequency, publication topics and leading authors.

This chapter offers an overview of the perceived relevance and impact of audit research on audit practice. It provides some evidence regarding the perceptions of usefulness of some of the audit research from the accounting profession's viewpoint and attempts to address the question of what are the likely issues that lead to such perceptions⁹.

A review of audit research

This first section provides a scan of the extant audit research literature and identifies common areas that are contemporary and which are captured in both audit research and practice.

The editors of *Managerial Auditing Journal (MAJ)*, a non-North American journal, celebrated 25 years of the journal's publication in 2010. In an analysis of the trend of published articles over 25 years using key words, eight areas of audit research were identified: audit and assurance issues; ethics; financial reporting; controls; organisational matters; governance; management reporting; and risk management. While research in areas of audit and assurance issues remained strong over the period 1986 – 2009, financial reporting and governance appear to be the areas most audit researchers have focused on in recent years. This trend may reflect the global development of the International Financial Reporting Standards (IFRS) and the growing awareness of corporate governance in the market, and suggests that academics have responded to the contemporary business agenda.

**Table 1: *Managerial Auditing Journal* (Emerald Group Publishing Limited)
A summary of areas by key words**

Key areas	1986 – 1995 (1st 10 yrs)		1996 – 2005 (2nd 10 yrs)		2006 – 2010 (last 5 yrs)	
	No.	%	No.	%	No.	%
Audit and assurance issues	282	60	346	49	156	42
Ethics*	78	17	107	16	28	8
Financial reporting and other reporting topics**	14	3	48	7	72	19
Controls	28	6	51	7	18	5
Organisational matters	32	7	44	6	24	6
Governance**	12	3	38	5	46	12
Management reporting	10	1	44	6	12	3
Risk management	16	3	27	4	17	5
Total	472	100	705	100	373	100

* Ethics areas fluctuate suggest an impact of regulatory change.

** Significant increases in the research topics of financial reporting and governance.

9. The authors explore the contexts of the issue through a literature review, and through a dialogue that was recorded at the Adelaide Forum titled *The Relationship between Academic Accounting Research and Professional Practice* organised by the Institute of Chartered Accountants in Australia (the Institute) and the Centre for Accounting, Governance and Sustainability (CAGS) at the University of South Australia, in February 2011.

A further analysis of the 756 auditing and assurance articles that were published in *MAJ* over the 25 years shows a broad spectrum of topics researched. They include internal audit, audit fees, the profession, audit conflicts, audit quality, independence and autonomy, auditing standards and guidelines, audit failures, and technical matters such as judgement sampling, value-for-money audit and online reporting. However, the majority of the audit papers concentrated on 'audit practice'.

Solomon and Trotman (2003) found that 670 auditing papers had been published between 1976 and 2000 in five accounting journals¹⁰. Using the Solomon and Trotman (2003) database, together with a review of the articles published in *Auditing: A Journal of Practice and Theory*, *Behavioural Research in Accounting* and the *Journal of Accounting and Public Policy*, Humphrey (2008) divided the audit research discipline into two broad groups. The first group addressed specific auditing issues such as: audit quality; audit structure; audit fees; auditor independence; non-audit services; auditing expectations; risk assessment; audit history; regulation and liability; and auditor reputation. The second group explored the research approaches applied in the field of audit research, ranging from experimental judgement and decision research to contextual, historical and critical audit research. Although much audit research has discussed audit practice, Humphrey (2008) challenged the extent of academics' knowledge of 'audit practice', highlighting a variety of concerns with dominant research approaches, and pinpointing a range of research questions which offer potentially rewarding insights into the audit practice arena. He argued that audit research can be of value when the focus is directly on understanding the practice of audit and the work of associated regulatory associations. Humphrey (2008) also observed that Francis (2004) and Defond and Francis (2005) encouraged further questioning of the nature of audit practice by asking questions as to what is an optimal level of 'audit quality' (that is, how much auditing and auditing regulation is enough?).

Also, there is the perspective that audit research has been hindered by the desired attachment to the so-called 'scientific rigour' and academics' reluctance to undertake a more 'qualitative' or 'critical' approach. Humphrey (2008) and Diamond (2005) also acknowledged this. The North American educational approaches have also played a dominant role in the research agenda, but there are grounds for suggesting that there has also been a shift of gravity in terms of the global status of the International Accounting Standards Committee (IASC)/International Accounting Standards Board (IASB) and the European Union (EU) since 2005. Humphrey's (2008) review highlighted the complex nature of the divide between audit research and practice and the emerging status of the European ideas with the increasing impact of globalisation. Also, following the recent spate of corporate collapses in the early 2000s, regulatory changes such as the *Sarbanes-Oxley Act* in 2001, and the Global Financial Crisis (GFC), it appears that high-level debates are now being fostered in Europe.

10. The five journals are: *Accounting, Organizations and Society*, *Contemporary Accounting Research*, *Journal of Accounting & Economics*, *Journal of Accounting Research* and *The Accounting Review*. Solomon and Trotman (2003) used as their starting point the database of auditing articles published between 1975 and 1999, compiled by the American Accounting Association's auditing section.

The changing landscape in the audit environment

Using a dialogue between two academics (Leung and Cooper) and an experienced representative of the profession (White), the next three sections explore the perceived relevance and impact of some examples of audit research within the common areas identified in the literature review. This dialogue is followed by a discussion of the factors that contribute to the perceived relevance and impact of audit research on practice¹¹.

In the United Kingdom, the Select Committee on Economic Affairs of the House of Lords commented in July 2010 on the domination of the Big Four auditing firms (the Big 4) in the audit market, resulting in the narrow field of choice that has raised concerns about competition, concentration, and audit quality, with possible conflicts of interest between audit and consulting in large firms. Questions were also raised regarding whether auditors could have mitigated the banking crisis of 2008 by alerting investors to the riskiness of the assets held by banks. The House of Lords released its request for submissions for an inquiry on 'Auditors: Market concentration and their role' (Select Committee on Economic Affairs, House of Lords (2010)).

In October 2010, the European Commission (EC) also published a Green Paper on audit policy and set the scene for wide ranging debates on a number of controversial matters relating to the audit environment globally (Linklaters, 2010). They include:

- Making the appointment and remuneration of auditors the responsibility of a third party, such as a regulator (rather than the company being audited)
- Mandatory rotation of the audit firm (a concept considered but rejected by regulators following the fall of Enron, Parmalat and Ahold in 2002 – 2003)
- Prohibiting the provision of non-audit services by audit firms. Currently they may provide such services subject to safeguards to preserve audit independence
- Mandatory formation of an audit firm consortium to include smaller audit firms for the audit of larger companies. This is intended to reduce the domination of larger audits by the Big 4
- Considering the introduction of contingency plans, such as 'living wills', to address the threats posed by the risk of a systemically important audit firm failing
- The possible reversal of the consolidation of large audit firms over the past two decades. The EU seeks comments on whether this is desirable and how this could be achieved
- The potential for a real internal market for audit, possibly involving a single European passport for auditors and audit firms and implying the creation of a European-wide registration system with common professional qualification requirements and common governance, ownership and independence rules across the EU.

11. This chapter is based on research and a presentation by the three authors. Professor Philomena Leung and Professor Barry J. Cooper are presently joint editors of *Managerial Auditing Journal*. Mr Lee White is the Executive General Manager of the Institute. Mr White represents over 25 years of accounting and audit practice experience, and is involved in the global development of the audit profession. The chapter reports the viewpoints of auditing researchers (Leung and Cooper) and the profession (White).

The key issues raised by the EC are the concentration and competition in the audit market and the role and quality of audit. The EU posed a number of questions surrounding these areas to which practitioners and professional bodies were invited to respond.

As audit research develops, it is worth considering the development of the current changing audit scene and how it may be reflected in academic research. With respect to the changing audit scene, White indicated that there will be significant changes in the global audit landscape that will affect academics in the field as well as practitioners and the profession:

Right at the moment globally, in the audit space, it is a very special time, so these two reviews happening in Europe coming out of the GFC, it means that the status quo will not remain the same. That's the message.

So with that comes challenges for bodies, practitioners, academics, all of us who have a focus in this space, but equally comes a great time of opportunity if we can get it right. But the sense is – that audit is becoming more and more irrelevant in what it's delivering. So if we could leave this view for reflection and then come back to the question, then that should really drive what we talk about as to how we make sure we get the relevance from audit research.

White's concern regarding the relevance of audit research is examined through the following questions: What does audit research mean to the profession and the market?; How does the profession react to audit research?; What research methodology is easier to understand?; and finally, Will audit research become more relevant to the profession?

What does audit research mean to the profession and the market?

While the profession is very much concerned about research underpinning policies and standards, it is not clear how the profession and the audit market view audit research. This section examines what audit research means to these stakeholders.

From a research standpoint, there is much on concentration and competition in the audit market, which are matters about market structure, or the economics of audit. This area of research includes audit pricing, audit fees, non-audit services, professional standards and professional practice. It also covers mergers, specialisation, audit affiliations, the effect on share prices, specialist competition and audit choice. Research on audit quality considers areas such as independence, earnings management, internal audit and audit committees, all of which are covered in the EU paper. It can be argued that accounting academics view audit research from the perspectives of audit quality and practice but on the other hand the audit environment has emphasised the market importance of the economics of auditing, leading to research into areas such as audit structures, fees, pricing, concentration and autonomy.

A preliminary review of the research into the two broad audit areas mentioned above, namely, the economics of auditing and the role and quality of audit, shows an interesting result. For the period 2000 – 2011, 101 articles on audit quality and audit roles were listed in the Emerald database, of which 60 refer to audit pricing and matters concerning the economics of auditing. The Emerald database

represents *Accounting, Auditing and Accountability Journal*, *Managerial Auditing Journal* and *Asian Review of Accounting*.

Another database, Business Source Premier, which represents journals such as *Contemporary Accounting Research*, *Auditing: A Journal of Practice and Theory*, *Journal of Accounting Research*, *Accounting and Finance*, *Journal of Accounting, Audit and Finance*, *Journal of Accountancy*, *Accounting Horizons* and *The Accounting Review*, contains 2439 published articles on the economics of audit over the period 2000 – 2011. These journals, though largely North American-based, use empirical data, with statistical research methodologies.

The debate about the relevance of this audit research is not new. Hay et al. (2006) and Knechel and Willekens (2006) have argued that this whole field of research [about audit fees and pricing] has been characterised by a production-orientated approach and has ignored potential demand-side factors that may well drive audit fees.

Where is the impact coming from the actual research? White argued that audit research means quite a lot to the profession. However, he noted:

We at times might focus a lot on outputs and not a lot on the outcomes. So I try and think about some audit research that has actually had a significant influence, and I can think of some, but they're probably more the exception than the norm. So those statistics that you quoted earlier – 2439 articles – that's a lot, and I'm not sure I'm seeing a lot of influence or outcomes from this type of research.

How does the profession react to audit research?

This second question explores the types of reactions from the profession's standpoint regarding some examples of audit research that directly deal with the contemporary topics of audit market and quality. In soliciting deeper insights, three examples of audit research are discussed: the economics of auditing; audit roles; and quality. Each of the following articles is briefly discussed. The responses to the cases are produced below.

Case 1: A study (Hamilton et al., 2008) on the economics of auditing which investigated whether audit markets remained competitive in the wake of Arthur Andersen's demise and merger with Ernst & Young to create the Big 4. Macro-economic in nature, the study relates directly to the audit market and high profile events. The authors found evidence of a big firm brand name price premium when estimating the audit fee model across all clients, and when estimating it separately across large and small clients.

White observed that if he understood correctly, not a lot happened in the pricing after the demise of Arthur Andersen. He further observed that he could have made that comment without being referred to the case. White remarked:

From the profession's perspective, the 'so what question' arises.

Case 2: Using a large sample of United States (US) audit client firms over the period 2000 – 2005, this study investigated whether and how the size of a local practice office within an audit firm (i.e., the office size) is a significant, engagement-specific factor determining audit quality and audit fees over and beyond audit firm size at the national level. Jong-Hag et al. (2010) measured audit quality using unsigned abnormal accruals, and the office size was measured in two different ways: one based on the number of audit clients in each office and the other based on a total of audit fees earned by the office. The authors found that the office size has statistically significant positive relations with both audit quality and audit fees, after controlling for national-level audit firm size. The positive relations support the view that large local offices provide higher quality audits compared with small local offices, and that such quality differences are priced in the market for audit services.

In reflecting on the message coming from this case, White 'believed' that such research does not provide a significant influence on the profession except by confirming the obvious practice:

It's moving to a different place but I'm not sure that's still the right place. What I mean by that – I think that is quite interesting and it does attract thinking when we talk about what the drivers of audit quality are. So at the highest level, they would say the drivers are, or one of the key ones is, the skills and experience of people involved in the audit, undertaking the audit.

... good audits can be done in large and small offices and not-so-good audits can probably be done in large and small. So it's interesting. It hasn't really hit the mark.

Case 3: A working paper¹² presented at the Accounting and Finance Association of Australia and New Zealand (AFAANZ) in 2010 which re-examined the long-standing debate of whether consulting fees earned by auditors affect their independence. The authors used a model that predicts a negative relation between auditor supplied non-audit fees and auditor independence. The test examined auditors' propensity to issue a going concern opinion for a sample of US companies experiencing financial stress. The authors documented a reliable negative relation between non-audit fees and their proxy for auditor independence.

In responding to this case, White reflected that research may not always come up with a solution to some problems. As the problems about audit independence and non-audit fees are not only topical, the profession is also interested in any insightful research on the matter:

In this instance, the research actually is confirming where there are different perceptions or views around the business community and with regulators. The one that keeps bubbling around is whether non-audit services of any level leads to somehow a compromising of audit quality and ultimately the audit opinion. So I actually think that's a very vital piece [of research] because these perceptions do get bandied around, and that actually would be very helpful in contributing to not only the discussion but then potentially whatever public policy settings might come – and inevitably they will – in terms of non-audit services. So I actually find that really quite useful.

12 'Non-audit fees and auditor independence: New evidence based on going concern options for US companies under stress', www.afaanz.org/openconf/2010/modules/request.php?module=oc.

Lee was asked if such research findings change a professional's viewpoints. He replied:

The short answer is yes. Maybe you're attracted at times to research that is aligning with your gut feel or your sentiments... But I think you'd be a fairly naive leader if you only rely on your gut feel and not with people who are actually conducting some rigorous research. So I think when that research might come out to a different point to what you're feeling, I think you should show some courage to want to then engage with it and not be dismissive of it. That's where I'd be on that sort of view.

The issues of research methodology

In an assessment of the respectability of audit research, Biggs et al. (1994) referred to three criteria for evaluating research rigour (mainly from a North American perspective). First, research provides scientific answers to questions rather than opinion. That is, research addresses questions through the development of logical theory and the systematic analysis of empirical evidence. Second, scientific answers nearly always involve replication of results across multiple studies. Third, research-based answers to many complex practical questions often involve time-consuming development of scientific knowledge. Biggs et al. (1994) claimed that this type of audit research has already provided some results that have been highly relevant to audit practice, but not all issues of practical importance can be addressed. For instance, theoretical work that seems irrelevant one day may provide the basis for highly relevant research in the future.

The authors further pursued the issue of rigour and sought the views of the profession regarding the issue of relevance. Though the research methodology used is largely dependent upon the research problem, the use of research methodology is somewhat dictated by the users of the publications concerned. For example, professional journal users would be receptive to simpler data; an academic journal known for its quantitative approach would publish research articles with highly sophisticated quantitative and statistical analyses. In Humphrey's (2008) analysis of 'scientific rigour', he questioned the tendency of researchers to fail to contemplate a qualitative mode of research and pursue a more quantitative-based approach, even though the research question is ideally suited to the former. Nearly all of the 2439 audit research articles in the Business Source Premier are statistical empirical analyses. However, White's view is quite different. The following highlights the view of the profession regarding rigour and statistical research:

From my perspective, you sort of get a quite mathematical style of approach in a quite systematic style of research. At other times you can get – not survey but a lot of engagement in conversation – qualitative conversations. I suppose both of them have some pluses... that always lead me a little bit to the rigour question. You know, how do you actually strike the right approach in determining research?

Research undertaken by the profession, though often without statistical analyses, is often regarded as acceptable in the business community as reliable and good quality research. On the other hand, some qualitative research is recognised and well accepted in the area of social sciences research. With respect to preference of research methodology, White will typically favour an approach that is easier to digest:

For me, when I – I’m just casting my mind back to when I’ve looked at different pieces of research, the ones which are a highly mechanical, statistical approach, I must admit, leave me generally pretty cold. And that’s even as a – previously as a practitioner who used to do all sorts of models in terms of altered evidence and all this sort of stuff. I find it a pretty hard read.

Will audit research become more relevant?

This section explores various means and considerations to enable more relevant audit research to be published and used by the audit profession. In making a piece of research relevant, it is important that the reader becomes ‘engaged’ with the research:

If that’s [the highly mechanical and statistical approach] used in the methodology, then you really need some very good commentary at the front ... to really engage the reader, to capture that sleepless night or whatever the real point is of it ... On the counter side, the qualitative, where there’s the engagement – if it’s a great case study, generally I’m quite interested in reading that and engaging. You can feel it obviously quite realistically. (White)

Another issue in respect of a relevant audit research approach is its forward-looking aspect. For example, the Institute published a booklet in November 2009 titled *The Benefit of Audit: A Guide to Audit Quality*. The purpose of the guide is to enhance the communication between external auditors and audit committees. It describes five drivers of audit quality: firm culture; skills of audit partners and staff; audit process effectiveness; factors outside the control of the auditors; and the reliability and usefulness of audit reporting. The profession will find it useful if it provides some initial ideas for research, where researchers could conceptualise and further explore it. White also noted:

So at the highest level, doing some further work around that piece I think would be quite valuable. The second is, by picking up that piece of work that we’d already done and trying to explore it further I think is tremendous. The timing sounded great for me.

It was also noted that through engaging with the profession, the researcher will be able to:

broaden the research so that it’s actually got a wider impact and influence than perhaps just in one element that has already been identified by the profession ... if there was a type of deliverable or an outcome that we’d be really looking for research, it’s got to be forward looking. And so when I talk with my team at the Institute in our policy area and looking at leadership and quality, we’re continually trying to focus in on what are the two or three issues in 12 to 18 months’ time that people are actually going to be talking about in this space, whatever the space might be – audit, accounting, sustainability, tax – because I think the relevance of the Institute can be that if we can get there quicker and identify the right issues – and that’s really hard to do; you know, it’s sort of like six out of 10, you’ve done really well – but if you can get there quicker than others, then your relevance is only going to be stronger. And I would have thought that’s the same challenge for academic research, being forward looking and positioning yourself for the conversation already happening. (White)

Another matter highlighted in the dialogue is the timeliness of the research. White pointed to the value of earlier research work that is timely:

A piece I'll just add to this about taking too long is that when we did our submission to the House of Lords and were asked to then present oral evidence to the House, the reason some of that – the Institute's submission was recognised because some of the research that we'd been engaged in and had been provided to us actually added a lot to our composition. So it wasn't just hot air coming from us at a point in time. We'd actually done earlier some of the research work.

Conclusion

Although there is research published in respect of 'audit quality' and 'audit practice', one has to question whether such research is well understood and is used in the development of audit policy. Clearly the discussions on the implications of the EC's Green Paper and the UK's House of Lords' review demonstrate the lack of success.

Also, the discussion above has provided some understanding of types of audit research and how they are viewed by the profession. In order for the values of the accounting and auditing profession to remain aligned with the values of the profession, relevant accounting and auditing research is the key. In auditing, audit policy is developed from audit research and audit practice – it is the nexus between the two. The relevance and impact of audit research can be seen from how it can influence practice and, to a larger extent, how it can shape audit policy.

We consider that published audit research, while wide-ranging, has only partly addressed the questions of audit practice, such as regarding 'audit quality'. In terms of audit policy, for example, the restrictions by the *Sarbanes-Oxley Act 2002* regarding non-audit services and independence, means that audit research seems to have assumed a subordinate role. As Humphrey (2008, p. 181) pointed out, 'There has to be a questionable value to audit research if it is destined only to test the empirical validity of regulations, knowing full well that the demands and pressures on regulators can lead to changes in regulations on the grounds of political necessity and expediency, rather than being based on solid empirical evidence'.

For the audit profession, the challenge lies with the development and engagement in thought leadership. Post-implementation reviews of standards, for example, are important. Policy does not stand alone; it must be continuously revised and the role of research is crucial to enable feedback and engagement. A good starting point when thinking about research is how are researchers going to sense the impact of the research? Engagement between the audit profession, audit practitioners and the academic audit community, dissemination of research findings and ultimately participation in policy debates, are all part of the development¹³.

13. One example that was quoted was the commissioned research projects by the Association of Chartered Certified Accountants (ACCA) and the International Association for Accounting Education and Research (IAAER) for two IFAC (International Federation of Accountants) Committees, namely the IAASB and the IAESB. Researchers are commissioned to conduct research on the agendas set by these Committees and deliverables are reported back twice a year to representatives of all the parties involved.

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Chapter 8

Leveraging Academic Research to Improve Financial Reporting

Tyrone Carlin

In a recent newspaper article, the Vice Chancellor of Macquarie University, Professor Steven Schwartz was quoted as opining that 'Universities in Australia need to look at what our real purpose is and that is to teach people, not become accounting degree factories' (Sainsbury and Edwards, 2011). Whilst perhaps not flattering to the domain of accounting education, the statement is nonetheless very revealing in what it suggests about the importance of accounting and business education, at least from a financial standpoint, to Australian universities.

Schwartz's perspective is undoubtedly shared more widely. It stems from the disjuncture between the financial and intellectual epicentres of Australian universities. Success on the part of business schools in producing 'cash flows' has not, in general, been matched with proportionate success in the domain of research and knowledge creation. Indeed, the void between the two is often gaping.

A convenient and often recited explanation for this phenomenon is what might be termed the 'expropriation theory' of university finance. Under this view, a combination of inadequate public funding arrangements and excessive regulatory imposts, which constrain freedom of agency, conspire to force universities to survive on the basis of a series of implicit cross subsidy arrangements.

Business schools (and hence accounting programs) are particularly susceptible to this approach to university financial management because their operating costs can be successfully constrained relative to income streams. Consequently, most of the surplus financial value generated within business schools is available for expropriation by the 'centre' to different end uses, leaving little for reinvestment in the business school itself.

A seductive implication of this chain of logic is that were vice chancellors less inclined to cast business school deans into the role of ravaged victim, to their robber baron, the torchlight of inquiry in accounting might shine far more brightly and the gap between cash and knowledge production be much diminished.

It is the contention of this chapter that it would be unwise indeed to be seduced into this view. There can be no doubt that much of the potential for valuable knowledge production within the accounting academy goes untapped by reason of the diversion of funding flows described above. But other factors are also likely at play. These include the nature of modern scholarship and research in accounting, the parties who undertake and publish that work, and the parties who consume it.

A dearth of end users

Much of the seductiveness of the 'expropriation theory' for the challenged state of accounting research in Australia stems from the fact that forces outside the control of the ranks of the accounting academy may be conveniently blamed for the comparative lack of impact of accounting research. In essence, the chain of logic is very clear. If only more money were left in the pot, the argument goes, more time could be devoted to higher quality research, and the product of that process would gain greater prominence and impact.

But it is always possible to throw good money after bad. And it would appear that there has been a visceral sense of this within sections of the international community of accounting scholars for some time. This was captured by the president of the American Accounting Association (AAA), Judy Rayburn (2006, p. 4), who in her 2005 presidential address stated:

Accounting research is different from other business disciplines in the area of citations. Top-tier accounting journals in total have fewer citations than top-tier journals in finance, management, and marketing. Our journals are not widely cited outside our discipline. Our top-tier journals as a group project too narrow a view of the breadth and diversity of what should count as accounting research.

Detailed empirical evidence relating to citation patterns shows not only that articles published in journals often regarded as 'elite' by members of the accounting scholarly community are cited less often than articles published in similarly rated journals in other business disciplines, but that scholars in other disciplines show comparatively little interest in the intellectual product of accounting academics¹⁴.

Heck and Jensen (2006) explain this lack of interest by arguing that much of what is passed off as accounting research actually has comparatively little to do with accounting. Rather, 'accounting' scholars undertake studies using techniques and methods developed in, and central to, other disciplines (e.g., econometrics, finance, psychology, statistics), with accounting or accountants as almost coincidental variables of investigation.

Since much of this work is in essence derivative, it is of little interest to the base fields that were the 'donors' of the theoretical insights or methodological techniques drawn upon for the purposes of the 'accounting' research, hence comparatively low citation rates for accounting scholarship outside accounting journals.

The picture darkens when the subject turns to questions about the use of, and demand for, accounting research outside the academy. Here, work by Sanders et al. (2002) is enlightening. Based on a survey of financial controllers working within Fortune 500 companies, the authors gleaned insights into the awareness of, and demand for, scholarly accounting research on the part of senior accountants working in practice.

14. By contrast, accounting scholars have a much higher propensity to cite works from outside the discipline of accounting in their own papers.

The key findings were that accountants in practice had rarely heard of the journals many accounting scholars regard as leading outlets for research and, where they had, tended not to read them but rather focused their attention on 'professional journals'¹⁵. Accounting research produced by academics was regarded as lacking authority, relevance and especially, accessibility. How ironic that these concerns should closely echo similar sentiments expressed decades ago by leading figures in the accounting scholarly community (see, for example, Zeff, 1978).

Perhaps the most fascinating revelation to be gleaned from the Sanders et al. (2002) study relates to readership of *The Accounting Review*, still widely regarded as the most prestigious scholarly accounting journal globally. This journal was better known, more widely read, and believed to have more influence by practitioners, than any other scholarly journal¹⁶. Yet this prominence seemed to be a function of time since graduation, with older and more senior accountants expressing greater awareness and regard for the journal and younger accountants far less so.

One potential explanation for this phenomenon is argued to be the decreasing proportion of practitioner-authored or practitioner-involved manuscripts published in *The Accounting Review* over time. This seems a reasonable argument. As Heck and Jensen (2006) demonstrate, over the first three decades of its existence, around 30% of articles published in *The Accounting Review* were authored by non-academics.

Even as late as the early 1970s, some 15–20% of articles published in the journal were authored or contributed to by non-academics. From the 1980s onwards, this proportion fell essentially to zero, where it remains.

This should deeply trouble accounting scholars. Not only is their work apparently of comparatively little interest to fellow scholars in other disciplines, but it is little known to, or highly valued by, the vast majority of the accounting profession itself – accountants in professional or commercial practice.

An existential question

Even under the cloud of the expropriation model of university finance described above, accounting research in Australian universities carries on. Importantly however, it does not follow from the fact that the vast majority of the financial surplus generated via the teaching of accounting and business students is transferred to other end uses, that substantial sums are not being invested in accounting (and business) research.

Quite the converse is true. To the extent that accounting academics are employed on the basis that they will undertake teaching and research activity (as well as general service to their institution and community), that proportion of their agreed workload devoted to research represents an implied research dollar cost. Particularly in the presence of salary loadings common amongst accounting

15. The professional journals in question were largely analogous to publications familiar to Australian audiences such as *Charter* and *Intheblack*.

16. Though far less prominent and relevant in the minds of practitioners than 'practitioner' journals.

faculty and substantial on-costs¹⁷, these costs rapidly escalate to material sums. The direct costs associated with research (e.g., conference funding, travel funding, faculty funded research grant schemes) are likely to be relatively immaterial compared with the embedded or implied costs of research suggested by typical workload models, but nonetheless further expand the cost function.

It is not inconceivable that either by reason of external shocks or the adoption of a more clinical approach to resource allocation preferences¹⁸, this state of affairs may be disturbed. Indeed, the current operating environment of Australian universities is dominated by a cocktail of factors that are distinctly unhelpful and potentially toxic to their financial health. These include: the reputational damage suffered by Australian universities in the wake of concerns about the safety of international students and their treatment by their host institutions and society more broadly; poorly thought through visa and work regulations confronting international students; an incredible surge in competition from institutions in the United States and elsewhere, in markets traditionally prominent in the recruiting plans of Australian universities; high Australian fee rates and living costs compared to key competitor jurisdictions; and the soaring value of the Australian dollar relative to other currencies.

These factors, most of which are likely to be more persistent in their character than transient, are already making themselves felt. They will operate to constrain the quality of students Australian universities are able to recruit at given target volume settings, volumes of students holding quality settings constant and the capacity to escalate fees, irrespective of any other considerations. And because of the configuration of the sales process and the relative length of the revenue pipeline once a student is recruited, the consequences of severe market pressure cascade through university cash flow profiles for years.

Because of the disproportionate reliance most Australian universities place on business school sourced cash flows, disruption of these cash flows in turn has a material ripple effect throughout the remainder of the institution. The *realpolitik*, where these effects are of magnitude orders outside tight tolerances, is that university leaders are forced to defer or cut costs in response. Given the large portion of the cost base consumed by employee-related expenses, one logical consequence is headcount reductions, including academic faculty headcount reductions. But these are enormously politically sensitive, reputation damaging and often difficult to reverse when the cycle turns. Consequently, recourse to this solution has typically been used only sparingly.

In any event, the reliance placed by universities on cash flow streams from business schools means that it is imperative that these operating units still be in a position to produce a fee base. Thus, the logical place for the 'axe' to fall, if it must, is not so much in those parts of the broader enterprise that produce surplus cash flows, but in those that consume them. However, this does not mean that business school faculty members are not at risk. A less obvious but just as effective means of attacking the cost base is to change work patterns and load norms in certain areas of the enterprise in such a way as to preserve the capacity to execute the teaching mission, but leave little if any room for a meaningful research agenda.

17. Notably, generous employer superannuation contributions and payroll taxes.

18. The second of these may be triggered in response to the first, or occur in absence of an external shock.

This strategy too, carries industrial risks, but at a far lower threshold than, say, recourse to involuntary separations. It can also be executed on a creeping basis and in a highly targeted manner, as a means of minimising visibility, risk and operational disruption. Those groups of scholars whose work is of the lowest prominence, visibility and end use relevance are exposed to the highest risk of being subjected to this type of strategy, or similar, in the event of an external shock or simply by reason of the application of a more clinical resource deployment model. In light of the analysis above, accounting research is particularly vulnerable.

A way forward

That a risk exists does not ensure that it will crystallise. But the existence of a risk or threat should evoke a response amongst those with wisdom. And there should be no doubt that a response is required in the case of the domain of accounting research.

As noted previously, a key contention of this chapter is that dangerously few people, whether within the academy or without, are aware of, interested in or pay heed to accounting research, particularly, it seems, that class of research accorded elite status within the accounting academy.

Much of the basis for this likely turns on the nature and quality of questions posed by accounting researchers. In the particular case of financial accounting and reporting, forensic analysis of reporting practices by reporting entities and critical commentary on the content of financial reporting standards is almost wholly absent from the pages of the 'elite' accounting journals. Briloff (2004, p. 790) regarded this as a travesty, characterising the world of financial accounting and reporting research as populated by:

First-rate accounting scholars, carrying on their research as second-rate finance-economic scholars, e.g., the efficient market, working with third rate mathematical models, programmed with fourth rate aggregate data, collated from fifth rate databanks, compiled by sixth rate drones.

If the dominant approach consists of intricately executed studies of ultimately trite or derivative questions, an important step forward for the accounting academy is to collectively consider the types of questions which might be fundamental to the discipline of accounting itself and, in consequence, to the profession and those interested in, or dependent on, its product.

In financial reporting, a matter of fundamental concern is whether the information produced and disseminated by reporting entities corresponds to some real or factual underlying economic state of affairs. Much turns on the answer to this question. This was clearly salient to Chambers (1993, p. 19) when he noted that:

*Whether or not a person or firm is able to pay debts, can maintain a given level of consumption or trade, is adding to a capital stock, and so on, are matters of perennial concern on which the products of accounting *may* shed light. But *will* shed light only if the figures correspond to discoverable facts from time to time.¹⁹*

19. Italicised words appear in the original.

The same concern was prosecuted in clinical detail by Sterling (1988; 1990) and in his own unique style by Briloff over essentially the entire span of his career (Briloff, 1972; 1990; 2004). It has also motivated bodies of work by other authors including Nurnberg (2006), Mulford and Gram (2007) and Comiskey and Mulford (2008).

All of these authors had as their primary concern the degree to which reported numbers could be reconciled with underlying empirical referents. This is a question of fundamental importance. Yet judged on the basis of the proportion of financial accounting and reporting research devoted to this theme and the frequency with which manuscripts devoted to this theme appear in the pantheon of the elite accounting journals, it is treated as relatively unimportant by accounting scholars.

The dominant research agenda in the realm of financial accounting and reporting has diverged further and further from the dominant concerns of the domain of accounting practice over the past three decades in particular. During that period of time, success in financial accounting and reporting research has turned less and less on mastery of the subject matter of accounting itself, and more and more on the mastery of large datasets and complex statistical and econometric techniques.

Meanwhile, the domain of practice has become increasingly complex, subject to change at greater and greater rates, subject to a greater array of more prescriptive regulatory influences, requirements and risks than ever before. Organisational forms and structures are also becoming more intricate, more international and serving as placeholders for more complex transactions of greater value than ever before. In this dynamic environment, the limits of existing rules, regulations, standards and techniques are being continuously tested. In turn, this generates fertile territory for high value added research.

Yet, because of the schism between practice and the academy, those engaged in the latter are deeply disadvantaged by their lack of 'line of sight' to the ever changing boundary of problems, techniques and conventions confronting those engaged in the former. Thus, the void between the domain of practice and the academy represents a key structural impediment to the production of highly influential research because it dramatically reduces the capacity of scholars to frame insightful and interesting questions.

The hard truth is that levels of genuine engagement between business school academics (of whom accounting scholars represent a significant proportion) and the business community, government and regulatory community are very low. There are myriad reasons for this, including the vast narrowing of the talent and connections envelope driven by the demand for PhD qualified staff, many of whom are recruited direct to PhD programs upon completion of their undergraduate degrees and from their doctorates direct to the academy.

But more broadly, the formal incentives for business school scholars to engage with the business, regulatory and government communities in their capacity as researchers are few. Kudos is given for success in obtaining research grant funding from industry sources but the relative lack of tractability of this 'product' is rendered palpable when the immateriality of the sums involved is clarified by way of comparison to business school (and accounting department) taught program fee streams.

Arguably then, the most potent driver for improvement in the relevance of financial accounting and reporting research, and in consequence, its capacity to drive improvements in practice, is the pursuit of more meaningful and systematic engagement between scholars and the broader business and professional community. There are numerous ways in which this can be fostered, ranging from more structured approaches to the discussion and identification of interesting research questions via roundtables, to placements of academic staff within businesses, regulatory agencies and professional services firms for extended periods as an alternative form of outside study program²⁰.

The accounting professional bodies themselves have great latent potential to be catalysts to more meaningful engagement programs and as institutions with substantial constituencies and interests in both the university and 'business' sector have the necessary networks and credibility to meaningfully support this agenda. More than this, business school leaders and faculty members should have structured key performance indicators in relation to engagement as a key element of their accountability and professional development frameworks.

But even progress down the path towards greater engagement, with the potential this holds to improve the relevance of research questions and investigations, does not complete the circle. Just as it is vital that scholars gain greater line of sight to the challenges confronting communities of practice, so too is it vital that practitioners are provided with more meaningful access to the product of scholarly research.

This will require further behavioural and incentive shifts within the academy. Importantly, the fact of publication in a scholarly journal alone should not be treated as the end point in the journey of research. Rather, research studies conducted to high academic standard and expressed in the ritualistic language of the academy need to be translated into terms and forms meaningful to non-academic audiences.

This is unlikely to happen on any systematic basis if the metrics against which academic research performance are assessed focus solely, or even dominantly, on success in bringing content to market through recognised peer reviewed scholarly channels. Whilst these will remain important for many purposes within the scholarly community, they represent a costly barrier between the scholarly community and non-scholarly communities.

This is so not only because of accounting practitioners' low propensity towards reading or being influenced by content published in leading scholarly journals in the field, but also because of the serious lag time to market phenomenon associated with publishing through these channels. Thus, business schools need to give serious thought to the configuration of incentive structures that promote not only a greater diversity of research product forms but also promote the use of channels that dramatically shrink time to market, allowing research to be brought to bear far sooner than would otherwise be the case.

20. A logical corollary of this is that greater investment in bringing leaders from the accounting profession onto campuses and into the scholarly life of universities ought also to be regarded as a matter of priority.

The emergence of open source distribution platforms such as Social Science Research Network (SSRN) can serve as a substantial enabler for the realisation of this objective. It should not be assumed that the written form represents the only, or even the most appropriate, approach to the encapsulation and communication of accounting, and more broadly, business research. As audiences diversify the modes and channels through which they access, consume and store content, those on the supply side of the content equation must take this into account in order to maximise accessibility.

Conclusion

The methodological rigour with which academic researchers undertake their work represents a point of comparative advantage, as does the relatively generous availability of unstructured time during which to pursue deep insights into phenomena of interest. By comparison, line of sight to cutting edge problems and resources, including financial and access to data and contacts, are comparative advantages of the domain of practice.

The endemic lack of engagement between accounting scholars and practitioners serves as a substantial barrier to the leveraging of these comparative advantages. This drives substantial opportunity losses for scholars, practitioners and consumers of 'accounting product' alike.

Strategies to improve engagement, enhance access and leverage these comparative advantages are potentially far more potent drivers of improvement in the quality, relevance, timeliness and impact of accounting research than further investment in the development of incremental methodological sophistication.

The opportunity to change direction and, in consequence, to influence practice much more deeply is real. But embracing that opportunity will require leadership and that leadership may involve a potentially confronting need to recant a series of tightly cherished values and assumptions, established over a period of decades.

This may prove painful, particularly for those steeped in the traditions of the present. But it is strongly arguable that the greater peril would flow from an unwillingness to change. There may be considerable truth in Francis Bacon's admonition that universities incline wits to sophistry and affectation. It seems equally plausible, however, that the resources necessary to perpetuate this practice in the domain of accounting research will sharply contract. It is to be hoped that the first rate scholars to whom Briloff alluded comprehend this and act accordingly.

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Chapter 9

Leveraging Academic Research to Improve Financial Reporting: A Standard-setter's View

Kevin Stevenson

As a standard-setter I strongly encourage academic researchers to explore financial reporting issues that will assist in the setting of accounting standards. This reflects the author's biases²¹, but also enables me to use a standard-setter's interest as something of an illustrative case study to explore the intersection between standard-setting and the interests of researchers.

Those outside the academy often bring some preconceptions about how and why academic research is undertaken. These raise a series of questions, such as: Are research efforts sufficiently needs driven? Does the reward system for research influence those efforts? By attempting to better understand how research is used and analysing the needs of users of research, it is possible to identify more opportunities for research. Moreover, it is important to educate the community about the findings of research and the rewards that can flow to researchers in meeting the needs of policy makers and practitioners.

Mindsets

It is fundamental that academic research be unfettered and be allowed to be carried out with integrity. It may even be widely accepted that this is so. But is this a licence to research anything and to research without accountability? Ultimately, research has to be driven by the needs of users in the non-academic community. This does not mean that users, who may have limited insight into the role that research can play, should direct or limit that research. The researcher needs the freedom to experiment and the user must be somewhat patient and trusting, but hopefully not disinterested. This places a responsibility on researchers to use professional judgement about the potential relationship between their research and community needs and to communicate to ensure that users know they have not been forgotten.

Does this research ethic drive academic research in accounting and finance? To the outside observer it sometimes seems that there is an unacceptable level of academic game playing – largely on an intra-academy basis – that conditions research. Are researchers really trying to meet users' needs or are they intent on being published in the right journal? Are they intent on findings or on exercising (or re-exercising) the latest methodology? Is their choice of research topic objectively determined or captive to the particular paradigm currently published in top journals? Is the focus on usefulness for policy or practice or meeting institutional metrics? Even if the research ticks all the right boxes in terms of intent and methodology, are its findings communicated in a manner that people can, on a timely basis, see the mosaic or picture being pieced together, or are they confined to staring for long periods at an

21. The views expressed are those of the author and not necessarily those of the Australian Accounting Standards Board or Financial Reporting Council.

unrecognisable and isolated pixel? Further, is research driven by that which will be accepted in the academic literature or by policy makers and users of financial reports?

'Outsiders' are often surprised by how much influence the academic reward system has and how much it seems to skew endeavours in what seem to be unnecessarily rigid ways. They observe that academics tend to be held to the same standards when it stands to reason that it is impossible that all could be published in the handful of elite journals. Also, those journals are often limited in scope²² in terms of what they will publish. There appears to be a pervasive psyche that 'good' research, relevant to users' needs, and publication in A-grade journals are the same thing. This is not necessarily the case. Unlike most businesses, the academy has not considered changing its delivery mechanisms to better suit its users.

Funding for accounting and finance departments is heavily conditioned by this narrow publishing metric. For those outside higher education institutions, there is an expectation of good teaching, quality teaching materials and enhanced learning. Publishing in top-tier journals seems to be an odd proxy for these fundamentals.

The above questions and observations are not intended to be harsh – but rather to observe that self-imposed restrictions may be standing in the way of progress towards more useful research. The complexity of the problems to be solved should be the primary constraint, not the accessibility or meaningfulness of research to users. For this reason, when academics approach potential users of their research, they should be conscious that they may have to overcome scepticism.

Learning from consulting

Culturally, it may not appeal to academics to think that they can learn from the consulting community when it comes to developing research. But consultants are skilled in discerning needs, through dialogue with their clients and from their experience. They know how to get beyond the needs externally communicated to the issues that really concern the executives who have control of the 'wallet'. Even more critically, they know how to build credibility with clients through ongoing relationships.

Consultants rely on a relationship of trust. To reach that level of trust, consultants must reach a level of intimacy with the client in which the consultant can freely acknowledge limitations but the client respects the problem-solving capability. Do academics reach this state of trust with the users of research? Where once academics were considered to be the font of wisdom for an a priori analysis of the financial reporting issues facing standard-setters, preparers or auditors, now the academic literature and expertise are considered largely irrelevant. Where once it might have been a 'sin' to be ignorant of the latest academic articles, now there is surprise if something emerges from such articles.

There are now so many sources of information that the academic researcher has no inherent comparative advantage in terms of informing the standard-setter about the latest developments nationally or internationally – in the sense of being a carrier of news. Those days are long gone. Nor are academics necessarily still the natural candidates when it comes to the development of conceptual

22. This is not a comment on quality.

frameworks, given that as individuals they have had little exposure to that specialised discipline in recent decades.

The comparative advantage of academics is their capacity to undertake thorough research and to have a grasp of the significance of their own and other research findings. Having users appreciate the need for rigour and having researchers effectively communicate findings are two key ingredients to a mutually beneficial relationship. While publications are essential, they are even less read than annual financial reports. This means they cannot be the sole means of communication to users for research findings.

Intersecting needs?

How can academic researchers and the potential users of their research be connected? At least sometimes, this will come in the intersection of interests, through academics' need for data in their research, which will bring them into contact with practitioners and policy makers. Many users need information about populations with which they work, for example, groups of reporting entities engaged in types of transactions or sharing similar circumstances. In the case of a standard setter, there may be the need to understand the incidence of certain types of intangibles in business combinations over time in order to see how to refine an accounting standard to ensure more consistency and rigour in the recognition of those intangibles. An academic may be engaged in capital markets research and interested in the relationship between the recognition of intangibles and share prices. While the research and the needs of the user are not completely aligned, they intersect.

Standard-setter's needs: A case study

In the case of standard-setting, the needs of the Australian Accounting Standards Board (AASB) are outlined in their strategic directions:

- Keeping pace with the International Accounting Standards Board (IASB) as it deals with the wave of issues stemming from the global financial crisis, convergence and the maturation of major projects such as insurance (12 new standards and four further exposure drafts are due within 2011)
- Rejuvenating the public sector agenda
- Improving not-for-profit reporting in the private sector
- Establishing the requirements for differential reporting
- Closely monitoring and influencing the development of the conceptual framework by the IASB, Financial Accounting Standards Board (FASB) and the International Public Sector Accounting Standards Board (IPSASB)
- Harmonising Australian and New Zealand reporting requirements
- Playing a leading role in Asia Oceania as standard-setting regionalises around the world
- Revising selected Australian-originated standards after post-implementation reviews
- Ensuring that the AASB resources (human and information resources) are both adequate and sustainable and that its processes are open and accountable.

Each of these areas could involve many research questions and timely research input into the policy project.

Due processes and data access

The AASB, and similar standard-setters elsewhere, depends on due process as the primary means of finding information for its purposes. But due process does not always equate to thorough research. So it should be that researchers could provide valuable input. This is happening to some degree, but not extensively. Additionally, standard-setters increasingly need to be well connected domestically and internationally, so they can understand practice and leverage the work of others. The mechanisms for 'reaching out' are becoming quite elaborate (as can be seen from the fevered activity of the past couple of years). If academic and standard-setting interests can be aligned, academics might be surprised at the sources of data and contacts that can be opened up. And standard-setters could be better informed by more thorough research into the data available.

There is a considerable body of knowledge about International Financial Reporting Standards (IFRS) and their application around the world. In particular, the large accounting firms actively maintain large databases that record precedents arising from practice – both on topical and industry bases. Standard-setters often are able to solicit the assistance of the firms and others to gain such information. The informal parts of Generally Accepted Accounting Principles (GAAP) – developed through practice – where professional judgement has found revival, are providing information that academics can seldom hope to emulate. The AASB is also able to gain non-confidential information from regulatory bodies in the Commonwealth and States.

Regulatory impact statements

Increasingly, the AASB's processes are required to incorporate more formal assessments of the potential impacts of the proposed requirements. In Australia, as standards are incorporated into law, their preparation needs to comply with regulatory impact statement (RIS) requirements and those requirements involve embedding assessments contemporaneously through the development cycle as decisions are being made. The focus of RIS is not quite the same as the traditional assessment of costs versus benefits in the accounting literature. It is more focused on proposals that will see business incurring costs in adjusting systems. Thus a topic that might be controversial as to what is shown, for example because of what it reveals, may not be as consequential from a RIS perspective.

Sleepless nights

To have a comparative advantage with a user of research it is necessary to go beyond publicly available information and consider the needs of that user. What are they losing sleep over? What would cause them to pay cash to have problems solved?

From a standard-setter's perspective, what is causing sleepless nights? Firstly, the need to contribute to the re-design of the conceptual framework before the window of opportunity closes. The IASB and IPSASB are both working on revising the conceptual framework and this is likely to result in two frameworks. This means creativity and constructive criticism are needed relatively quickly on traditionally difficult issues. The timeframe is not suited so much to new research but to making sure decision-makers appreciate past relevant research and its currently documented limitations – the big pictures to be derived from research over time. Standard-setters run the risk of being slow to

pick up research findings and slow to put them down when they are debunked. It is also very useful if academics provide contacts to people they know can help. The relationships through which they customarily try out ideas might not be evident to the outsider.

Another concern for the sleepless standard-setter is the need to manage the hugely risky avalanche that is 'IFRS Wave 2'. This brings with it far more change than was involved in the adoption of IFRS 1. Apart from the technical validity of the changes, there is the question of education and change management on a fairly grand scale. What live data can be gathered as to how entities may be impacted by the changes, and so, when they do change, how can the outcomes be assessed? For researchers this is likely to be another '2005' for pre- and post-change research.

Standard-setters would like to see a focus on key individual changes within IFRS topics that can have cross-cutting consequences. Contemporary topics include financial instruments, revenue, leases, insurance, consolidation, de-recognition, provisions, measurement, and presentation and disclosure. Many individual decisions are made by standard-setters and there are a great many cross-cutting issues. This could be a recipe for inconsistency and unexpected consequences. How can researchers help analyse the implications of those issues that run across topics?

There is a need for research support for choosing the direction and pace of change in not-for-profit sector reporting whilst keeping a weather eye out for international developments that some see as being as significant as IFRS. The AASB has for nearly 30 years actively pursued the development of financial reporting across sectors, so that similar requirements apply in the public and private sectors and for for-profit and not-for-profit entities. But there is still little research into financial reporting outside the corporate world in Australia or on a global basis. The absence of leads from United States (US) research may be a reason for this, as may the convenience of capital markets databases. Australia is regarded as a leader in public sector reporting and yet there is some pressure to adopt IPSASB standards. There is a paucity of information about the adoption of those standards internationally or their relative merits, other than at a high level.

There is a significant opportunity for research in Australia where standard-setters can play a leading role in the Asia Oceania Standard-Setters Group (AOSSG). The AASB quickly realised the significance that AOSSG might have and was determined to play a role in its development. The AASB is part of the executive of the AOSSG and will chair it from November 2011. The need to understand regional 'issue populations' exacerbates the needs already commented upon for the domestic scene. The maturity of equivalent standard-setters in the region varies quite considerably. The academic literature is patchy in its coverage of the region, despite the number of foreign honours and postgraduate students undertaking accounting and finance research into their home countries. With a less than homogeneous region, we face increased problems in understanding the impact of likely financial reporting changes, as they impact countries differentially.

It is also important to understand the shifting platforms of other regulators and their possible impacts on financial reporting. The AASB (and the Auditing and Assurance Standards Board) have struggled with the burdens faced by entities complying with accounting or auditing requirements imposed by other regulators. Those requirements often see general purpose financial reporting requirements, or unrealistic audit duties, being established by regulators who are not expert in reporting or auditing.

This is bad enough, but complicates matters such as differential reporting. The AASB and Financial Reporting Council (FRC) are keen to map the financial reporting framework in Australia and to work to rationalising requirements.

There is a demand among standard-setters for the evaluation of research from a sponsor/consumer of research perspective that will identify key findings and trends. A recent descriptive article that summarised the various types of capital markets research carried out in Europe and related them to US equivalent work contained a useful synthesis and brought home the fact that knowledgeable researchers can be very good communicators, albeit that in spending the time to do a sizeable descriptive piece the authors were probably not helping themselves in the academic rewards system. These descriptive articles are not highly regarded by the merit system in place in the Australian higher education system. We need more researchers to unlock and synthesise findings.

There is a critical need in Australia and internationally for the development of industry-specific data sets relevant to issues in insurance, banking, extractive and superannuation industries. Policy makers try to avoid industry-based standards. Consequently it seems inevitable that 'big ticket' issues such as impairments, valuation of financial assets and structured finance revolve around industry practices. There is room for maintained databases of reporting practices and industry characteristics for a select number of industries, for issue resolution, post-implementation reviews and for agenda setting. These could be domestic, regional or global in nature.

Of concern to standard-setters is the need to develop valuation knowledge in a manner that complements measurement objectives. Increasingly, valuation and accounting have come together, for example, in relation to derivatives, share-based payments, business combinations and other financial instruments. In the larger firms, valuation practices have developed across these types of issues, spreading their wings from equity or business valuations. Accountants have become heavily involved in these valuations, but many lack the formal finance training to complement their accounting knowledge or to resolve technical issues in valuation. Finance academics often find their time in demand in business circles on some of the issues involved. The issue of integrating valuation, finance and accounting needs to be addressed at an educational and a research level. At the moment the AASB is establishing valuation hierarchies for fair value. But little is known about the methodologies that might be used at level 3 of the hierarchy, the incidence of their use, their adequacy or how they might be changing over time.

Communicating with the community

Communication is key to a successful connection between research and research users. This is a two-way opportunity, in which research is disseminated to policy makers and practitioners, but also, consumers of research can raise questions and stimulate ideas that might lead to original research. In return they may provide access to new data sets and knowledge and add credibility to researchers' claims of relevance when seeking government and other grants. There is the possibility of opening up contacts at senior levels in both private and public sectors to researchers and, through partnerships

consumers of research can provide funds and other resources for relevant projects. Finally, consumers of research can provide opportunities for alternative means of publication so that results are disseminated more widely and to those most likely to benefit.

Conclusion

There seems to be renewed interest in financial reporting research on mainstream topics. There are more topics in journals that are of interest to policy makers, as well as presentations at conferences such as the annual AFAANZ conference. This is encouraging. But does academic research play a major part in my decision-making? The answer, for now, is no. But it should. It is my belief that if the academy is to be truly liberated to conduct research in a manner that is well regarded and resourced, it must have user support. That support should be seen as more important than institutionalised incentives for certain types of research and publication.

Potential users of research need to understand the benefits that are possible from engaging in research. This means that there is a responsibility on both sides to educate and communicate. For policy makers and practitioners, their key requirement is that research topics are relevant. The grounds for research are fertile.

Chapter 10

Sustainability Accounting Research and Professional Practice: Mind the Gap

Roger Burritt and Joanne Tingey-Holyoak

Over the last 40 years, recognition of the connection between social and environmental issues and the accounting profession has been growing (Mathews, 1997; Gray, 2001). The now somewhat distant catalyst encouraging professions to engage was provided by the *Bruntland Report* (UNWCED, 1987), which in the context of discussing a sustainable future for Australia advised (p. 25):

The integration of economics and ecology is the fundamental message of *Our Common Future*. Each of us will need to assess our responsibility and ability to contribute to a sustainable future. Professional organizations, for example, especially integrating professions such as engineers, economists, urban and industrial designers, and landscape planners, could have a large impact on social values and productive practices.

Notable is the exclusion of accounting as an integrating profession, given that accounting is said to provide the language of business, the ultimate integrator.

In recent times attention has moved towards concern for climate change, a low-carbon economy, water accounting, biodiversity accounting and waste accounting. These issues are catching the attention of academics and the profession as markets are formed (for example, in carbon emissions) and transactions begin to affect the financial bottom line of organisations. Accounting has not hitherto held itself out to be an integrating profession, but is now forced to consider the competitive and public interest aspects of sustainability issues (Burritt and Schaltegger, 2010; Schaltegger and Burritt, 2010). Accountants have a dual role: to apply technical expertise to the production of business information, while also providing independent and objective information for the public interest (APESB, 2008). These two roles will be essential for any moves by business to incorporate sustainability. Accountants play a pivotal role where there is integration of the concepts and instruments of environmental and social management with traditional economic management.

The links between academic accounting and professional practice have been heavily criticised, especially in the wake of management fraud in major corporations such as Worldcom (Enofe, 2010, p. 53) and the 2008 sub-prime banking crisis and ensuing credit crunch and global financial crisis (Unerman and O'Dwyer, 2010, p. 5). For instance, Unerman and Dwyer (2010) highlight two criticisms, both of which are vital in any assessment of the relationship between sustainability accounting research and practice. First, is the suggestion that academic accounting research does not question key assumptions and practices underpinning prevalent economic and business models. They point to under-theorising and a focus on the short term when long-term thinking is essential. Second, the curricula of business schools are criticised for failing to inculcate a sense of ethical responsibility among

their graduates. In essence, at a time when accounting has been accused of being complicit in the financial problems faced by the world, the opportunity to grapple with the critical problems of the day and re-establish the credibility of the accounting profession should be seized.

If sustainability issues are to be part of the future practices of accountants (Bebbington et al., 1994; Medley, 1997), then relevant research is needed to inform practice. However, there is considerable literature suggesting a distinct lack of engagement of members of the accounting profession with sustainability (Gray and Collison, 2002; Lamberton, 2005; MacKenzie, 2009; Jones, 2010), despite the growing pressures of society, clients and professional bodies (Gray and Bebbington, 2001; CPA, 2005; NIA, 2005; Lamberton, 2005; Clarke and O'Neill, 2006; Institute of Chartered Accountants in Australia, 2008). In considering the gap between sustainability accounting research and practice the following questions are posed. How are sustainability accounting research and professional accounting practice related? Who can change the current relationship? What changes are feasible in the near and medium terms? How can these changes be introduced? These are the critical questions facing those trying to close the gap.

What is sustainability accounting research?

Striving towards sustainability is a policy goal in an increasing number of countries (Schaltegger and Burritt, 2000). The definition of sustainability accounting is problematic because of a lack of general agreement as to what sustainability means. Definitions include attempts to integrate aspects of social, environmental, and economic disciplines. Hence, transdisciplinary research is at the core of movements towards sustainability. Academic accounting research is examining the pressures on accounting practices to engage with sustainability issues. For example, sustainable development requires transdisciplinary research and practice to solve the ecological crisis. According to Wickson et al. (2006) transdisciplinary research has three particular characteristics: to solve problems that are complex and multi-dimensional; to use methodologies that are appropriate to the problems under investigation integrated from different disciplines; and to encourage collaboration between researchers drawn from different disciplines with stakeholders and the community (Thompson-Klein, 2004) to provide a reality check on research processes and outcomes. Transdisciplinary research in the sustainability space implies a rethink of the foundations of sustainable economic performance of the clients of professional firms and the integration of strategic and operational decisions in relation to different types of capital – economic, social and natural (Unerman et al., 2007).

Despite some early pioneers (Deegan et al., 1995; Guthrie and Parker, 1990) the editors of leading academic accounting journals (publication in which is an ultimate prize for academics, but of dubious value for practitioners (Hopwood, 2008)), encourage narrow technocratic research, rather than research that engages with the broader societal or environmental implications of accounting practices (Arnold, 2009). Unerman and O'Dwyer (2010, p. 16) observe the dearth of academic accounting articles published between 1999 and 2008. They consider publications in six top-rated, peer-reviewed international accounting journals addressing the social, societal and/or ecological impacts of organisational activities, the professions, and how accounting can help provide information to mitigate negative externalities where costs of business activity are imposed on others. Figures indicate that one

journal, *Accounting, Organizations and Society*, published 98% of all articles addressing issues of society, 72% social impacts, 63% environmental impacts, 50% sustainability, and 55% professional issues.

A form of new sustainability accounting dialogue has arisen internationally as accountants learn to account for carbon. In the Australian context, the Emissions Trading Scheme (AETS) has been the subject of much policy debate in Australia (Australian Government, 2008). This is particularly so in relation to the present lack of an accounting standard to prescribe how companies will account for and disclose their carbon emissions (Institute of Chartered Accountants in Australia, 2008; Cook, 2009; MacKenzie, 2009), which creates uncertainty about how to account for short-term financial implications resulting from purchased allowances, year-end matching of actual emissions with allowances, and recognition of subsequent assets and liabilities and resulting tax effects. Despite the postponement of implementation of ETS legislation in Australia, the lack of agreement on how to account for pollution allowances in practice (Schaltegger and Burritt, 2000; Engels, 2009) highlights the requirement for relevant sustainability accounting research. In addition, a recent estimate suggests that 45% of businesses intend to use accounting firms to account for their carbon footprint (KPMG, 2009), highlighting a need for relevant research in order to establish whether accounting practitioners are already responding to calls for sustainability accounting and whether they consider sustainability accounting education as important for their current and future operations.

The moves toward accounting for the environment have advanced rapidly and the focus is no longer completely on carbon. Recently there have been moves toward more formalised water accounting, with the recent release of Exposure Draft Australian Accounting Water Standard 1 (EDEWAS1), and biodiversity accounting, with the recent release of an international manual on how biodiversity can be managed by corporations (Schaltegger and Bestandig, 2010). Waste accounting too has developed from its early beginnings (see Laughlin and Varangu, 1991). Material Flow Cost Accounting (MFCA), where physical flows and stocks of materials in process are traced and costed, thereby highlighting the cost generated by and/or associated with material losses, is gaining popularity with an ISO standard (ISO 14051) expected to be released in 2011 (Kokubu et al., 2009). In light of the emerging demands on business to account for and report sustainability measures, the relative importance of a foundation of relevant sustainability accounting research needs to be addressed in order to consider the gap between research and practice.

What is professional accounting practice in this space?

Accounting is one of the disciplines particularly relevant to sustainability because it provides the language of business, and business activity has considerable environmental, social and economic impact. With accountants' knowledge, skills and experience, there is a clear opportunity for them to play a leading role in the development of sustainability accounting (Lewis, 2000). Accounting research has examined the role of the accountant in environmental accounting practice (for example, Deegan et al., 1995; Wilmshurst and Frost, 2001) with findings generally indicating that accountants have been slow to engage with sustainability issues. Mathews (1997) suggested that professionals are not motivated to engage with the rapidly developing sustainability agenda and, more recently, MacKenzie (2009) and Jones (2010) suggest that engagement of accountants with sustainability issues is in its

infancy and requires significant development. While past lack of development of sustainability activity for accountants may have been due to its perceived lack of relevance, recently market forces have created an upsurge in interest as markets in emissions trading have emerged. In 2005 the International Accounting Standards Board attempted to regulate the accounting for the European Union's new Emissions Trading Scheme under the Kyoto Protocol. While there were difficulties for accountants in capturing emissions under existing standards, the exercise allowed for both assessment of the limitations, but also the possibilities, of accountants' involvement in the treatment of emissions rights as a measure of sustainability accounting (Cook, 2009; MacKenzie, 2009).

Who can change the current relationship between sustainability accounting research and accounting practice?

Those who employ and regulate researchers and practitioners, and therefore influence the spheres in which they operate, can be agents for change in the relationship between sustainability research and practice. Others who can create change are governments, the professional bodies (CPA Australia, the Institute of Chartered Accountants in Australia), clients, employees, and more broadly, society as a whole. While pressure from regulators can be a strong force for sustainability accounting instrument use, particularly as it relates to the potential for emissions standards (Cook, 2009), another major driver of sustainability accounting services are the professional accounting bodies who provide support for change within the accounting profession (Greenwood et al., 2002; Tingey-Holyoak and Burrett, 2009). Professional accounting bodies create legitimacy for the role of the accountant and also monitor compliance with societal norms (Greenwood et al., 2002). Internationally, professional accounting bodies are acting on the sustainability agenda (Collison et al., 2007). In Australia the professional bodies release information on sustainability accounting (Institute of Chartered Accountants in Australia, 2002; 2008; CPA, 2005; NIA, 2005), include details on sustainability in regular publications such as *In the Black* and *Charter*, fund research into sustainability (e.g., NIA, 2009) and offer professional syllabi reflecting this discourse (e.g., CPA, 2009; Institute of Chartered Accountants in Australia, 2009). This indicates that the professional accounting bodies are poised to address sustainability accounting issues; to some extent they have started already. By facilitating change the professional bodies can be a driver for increased social and environmental accounting and reporting. Independent of their professional associations, accountants not only have a diverse set of skills and technical expertise that can be applied to the production of usable social and environmental information under codes of responsibility to their clients (APESB, 2008), but they are also part of a profession with a commitment to provide independent and objective information for the benefit of society (APESB, 2008). Less addressed in the literature, however, is the pressure from employees for businesses to engage with sustainability. Research suggests that the business case for many social accounting programmes has been increasingly driven by the impact on employee attraction, retention, commitment, motivation and absenteeism (e.g., Henderson, 2002; DTI, 2003).

Standards and indicators help to fill a gap between theory and practice. The Global Reporting Initiative (GRI) and its derived indicators provide one such foundation and present the challenge for management to obtain the data to measure these indicators. The objective of the GRI is to have an

integrated reporting standard in full effect by 2020. The sustainability accounting and reporting product is provided by an external institution (the GRI) and is only marginally influenced by the specific needs of managers concerned to maintain their discretion over the indicators relevant to their own situation. Therefore it is not well integrated to the day-to-day activities and information requirements of the business in relation to such issues as reduction of energy use, waste water and carbon emissions. In August 2010, the International Integrated Reporting Committee (IIRC) was established to create a framework that brings together financial, environmental, social and governance information in a clear, concise, consistent and comparable format, in the form of 'integrated reporting'. This will go further than the GRI to bring together the financial and the non-financial in an integrated framework that supports the information needs of investors, by showing the broader consequences of decision-making, reflecting the interconnections between environmental, social, governance and financial factors. The key difference between these and the GRI is that the information will be able to be used by management to run the business on a day-to-day basis, irrespective of whether the business is small or large.

At present much of the academic emphasis in sustainability accounting and reporting is based on identifying special circumstances for different industries, in order to support relevant sector-specific indicators such as GRI. However, how can these indicators be mainstreamed into strategy, operations and reporting so that owners and managers can make the best decisions for their business about financial, social and economic capital within an acceptable governance framework? How far can such indicators be reduced for different businesses before their purpose is lost?

What changes are feasible in the near term, and the medium term?

Given the gap between sustainability accounting research and practice, it is evident that work towards what can be accepted as sustainability accounting and associated tools (Schaltegger et al., 2002; Herzig and Godemann, 2010) is required. For example, in environmental management accounting, over the last 10 years, a definition and a set of tools for practitioners have been widely discussed. These include, for example, environmental and material flow cost accounting and environmental investment appraisal (both monetary tools) and material flows and stocks accounting. Given the difficulties associated with arriving at a common view of what sustainability is then a 'working' notion of sustainability is a potentially useful track to follow.

Also required is identification of the main parties interested in using sustainability accounting and the uses to which sustainability accounting information can be put. For example, emphasis might be placed on regulatory bodies, professional associations, or clients. Also environmental managers, non-government organisations and other sustainability professionals in organisations are major players in addressing the business – sustainability agenda and an understanding could be gained of how sustainability accounting can be brought into the mainstream through the interaction of these groups.

Further initiatives include: expanding the regulatory mix in sustainability accounting research and practice areas to include a range of incentives beyond command and control; researchers continuing to challenge assumptions about what accounting means; and building networks with practitioners to interact about recent developments in sustainability accounting research and practice.

How can such changes best be introduced?

For researchers, changes can be introduced in at least three ways. First, a change in focus can be brought about through recognition by governments and mainstream accounting researchers of the breadth of what is considered high quality accounting research. For example, the Australian Government recently evaluated the quality of accounting research, promoting the recognised quality of *Accounting, Auditing and Accountability Journal* to the top tier, while lowering the quality of previously ranked top journals such as the *Review of Accounting Studies* (Unerman and O'Dwyer, 2010, p. 20; De Lange et al., 2010). Second, by including accountants in transdisciplinary teams to incorporate different perspectives. Burritt et al. (2011) provide a benchmark of the extent to which transdisciplinary teams are being used by leading German companies in the context of managing carbon accounting. Based on the results of interviews with 40 people in 10 German listed companies, the researchers found that the companies' information systems are complex and multi-dimensional, use methodologies that are appropriate to the problems under investigation integrated from different disciplines, and make use of collaborations between researchers drawn from different disciplines with stakeholders and the community providing a reality check on research processes and outcomes (for discussion of these transdisciplinary approaches see Thompson-Klein, 2004). Third, by researchers adopting a pragmatic approach to theorising, greater emphasis will be placed on theory that is useful to practice (Schaltegger and Burritt, 2000). For example, Ahrens and Chapman (2007) used a practice-based theory approach to show that accounting can make significant contributions to the ways in which organisational motivations take shape and coordinate. Conducting theoretical research that is useful to corporate managers in practice has long been recognised (Lawler, 1985), as theory based on a pragmatic orientation (Pfeffer, 2008) is necessary if sustainability accounting is to demonstrate its fitness for purpose. Effective theorising requires: the creation of meaningful indicators and information using a range of tools; support for meaningful interpretation and relevant use of these indicators and information; a sustainability accounting system that is reliable and transparent and, thereby, provides a credible basis for decision-making and accountability; and a new definition and understanding of accounting boundaries.

For practitioners, changes can be introduced in at least three ways. First, greater recognition and demand for a sustainability accounting education system. Second, a more proactive approach to emissions regulation and standards. Third, leading theory by engagement with sustainability, thereby strengthening the role of the profession in confronting the sustainability agenda.

Conclusion

Although practitioners' involvement in sustainability accounting would strengthen the role of accounting as a policy tool for use by government and organisations, a critical area where the sustainability accounting gap could be reduced is through the collaboration of researchers and practitioners. Collaboration is already underway with the professional bodies and several firms, but there needs to be further hands-on collaboration with practical application. Collaboration, combined with continuous dialogue, will result in stronger links between sustainability accounting research and the tools in use in professional practice in order to move toward constructive developments in the relationship between the academy and practice.

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Chapter 11

Sustainability Research and Practice: Bridging the Gap

Geraldine Magarey

Why have accountants not embraced sustainability as central to their roles? While research is coming out of our universities about sustainability and its importance to business this does not always translate into useful information for accountants.

Key for everyone in the accounting profession – professional bodies, academic institutions, policy makers and other stakeholders – is the need to engage practising accountants in the sustainability debate. While many accountants are fully engaged and challenge their clients and organisations to embrace sustainable business practices, there are too many at the other end of the spectrum. Messages such as ‘It’s got nothing to do with accountants’, or ‘It’s a green issue’ are prevalent in practice. In part this reflects a lack of understanding by practising accountants of sustainability as a business issue and reveals some misconceptions. These misconceptions are, to some extent, created by confusing language and terminology and, more generally, by a lack of understanding of the business case for sustainability.

The current position

Where are we today in the debate about accounting research and practice in relation to sustainability? A growing number of organisations are embracing sustainability and understand it as a key business issue, for example, Woolworths Ltd, Intrepid Travel Ltd, Blackmores Ltd and World Vision Australia. These organisations understand the importance of implementing sustainable business practices, including the impact on the environment and the community. Sustainability is core to their ongoing business strategy.

A number of organisations and their accountants are aware of sustainability’s importance but are unsure how to begin the journey towards sustainability. In contrast, other organisations are concerned that sustainability will bring a significant cost burden. With many organisations still experiencing tough financial conditions, there is a reluctance to launch into something new that may incur further costs. However, it is important that these organisations begin to see sustainability not as a cost but as an opportunity. In the long term the cost to an organisation of doing nothing is a far greater risk to the long-term viability of the business.

A small number of accountants and organisations still do not see sustainability as their concern and do not wish to engage with the issue. Sustainability is viewed as a ‘green topic’, rather than central to contemporary business issues. Not only are environmental impacts of importance to all organisations, sustainability involves much more than consideration of environmental factors.

Terminology: What is sustainability?

When looking at the current status of sustainability amongst accountants a common theme stands out. There is a lack of understanding as to what sustainability actually means. For some it means green or environmental issues, or corporate social responsibility, while for others it includes a bit of both. How can we deliver a consistent message that business leaders understand? That sustainability is a business issue involving environmental and social responsibility. That it is about long-term risks potentially facing business?

For students, higher education provides the starting point on their journey into the world of accounting. Their studies provide an introduction to the fundamentals of accounting and also to the world of business risk. There is an enormous opportunity for educators of future accountants – some may argue an obligation – to include sustainability issues in accounting education. It is an opportunity to ensure the world of accounting is viewed through a sustainability lens.

Sustainability is part of the curriculum at some higher education institutions. However, at times there appears to be a disconnect between what students learn in class and what they apply in their professional careers. Do we need to change the message to ensure accountants understand the importance of sustainability as a business issue?

Getting the terminology right has been the approach adopted in a number of organisations that have successfully ensured sustainability issues receive the attention of senior executives. Sustainability managers within organisations are finding that the language they use is a crucial step towards getting the right people engaged. At one large listed Australian company, the term ‘climate change’ is no longer used. It was found the term triggered a range of responses and debates that detracted from the real purpose of the discussion. Today the debate at that company is about ‘lowering emissions’ and all staff, including senior executives, understand the importance of the issue and are committed to ensuring the company is indeed working to lower its emissions. This is just one example of how getting the terminology right can assist in delivering results and improved performance.

Another area where there is confusion about terminology is in the field of biodiversity. A question often heard is ‘What is biodiversity – what does it mean?’ To avoid this confusion and engage accountants, terminology is again crucial. Many organisations are starting to phrase biodiversity in the language of the accountant, using terms such as ‘natural capital’ or ‘accounting for nature’.

Is there a business case?

Getting the terminology right is only one part of the solution to getting accountants to engage with sustainable business practices. The single most important factor is demonstrating that there is a business case. Talking about sustainability as a business issue is one thing – in practice it is crucial *to demonstrate* sustainability is a business issue.

For the vast majority of organisations their core purpose is to generate a financial return to their shareholders. While acknowledging business has a responsibility to the wider community and other stakeholders, it is the financial return that secures the organisation’s long-term viability. Therefore it is vital when implementing sustainable business practices that their impacts can be measured in financial

terms. Conversely sustainability considerations should always form part of the business case when an organisation has truly embedded sustainability into its DNA.

Many organisations have struggled to attribute a value to sustainability initiatives. Sustainability practitioners often cite examples of issues that do not fit within current valuation methods. Even externally, analysts and other stakeholders have struggled to place a value on organisations' sustainable business practices. This is an area where the academic community can provide leadership. New valuation methods, or adaptation of existing valuation methods, need to be developed to solve this problem. Accounting graduates completing their studies at university need to have been introduced to, and have in mind, sustainability and non-financial measures when they undertake valuations or prepare a business case. In addition, practitioners need to be familiar with and engage with innovation.

The role of innovation

Innovation is the key piece of the puzzle in solving the individual sustainability challenges many organisations face. In particular, when looking at contemporary environmental challenges, such as carbon excesses and water shortages, the real solution is innovation. Reducing water use and lowering emissions, while continuing to operate in the same way as the past, is a short-term solution. Organisations actually need to do things differently. This is an enormous challenge but also a massive opportunity for those who get there first.

The innovation challenge will need to involve multi-disciplinary teams, and accountants have an important role to play in these teams. We are beginning to see the use of such teams in organisations and professional services firms, where engineers, hydrologists, scientists and accountants work together. Again it is important that future accountants understand and are prepared for their roles as strongly contributing members of these teams.

Research is the backbone of innovation. The business community needs to support the academic community in its research in order for innovative solutions to be developed and commercialised. This support may be financial or in-kind but it is vital for business to support these research initiatives in order for innovation to succeed. If organisations are involved with innovative solutions they also need to benefit, not least in terms of their reputations and this involves reporting of performance.

Sustainability and reporting

Sustainability reporting is emerging as an important consideration for organisations. Once an organisation has embraced sustainable business practices, it is important that their impact is measured and reported. At present only a small proportion of organisations are choosing to report on their sustainable business practices. Some of these businesses are producing comprehensive sustainability reports, but the usefulness of some of these reports has been questioned by analysts and other stakeholders who perceive them as marketing documents.

The Institute of Chartered Accountants in Australia (the Institute) has recently advocated a move towards a more integrated style of report. In November 2008 the Institute released a paper, *Broad Based Business Reporting: The Complete Reporting Tool*. This argues that stakeholders require financial

and non-financial performance information properly aligned to strategy in order to build the models from which they make their varying decisions.

There is a lot of interest in integrated reporting both globally and within Australia where some organisations are beginning to integrate their environmental, social and governance information with financial information in their annual reports. Integrated reporting provides an opportunity for organisations to be transparent with their stakeholders and to demonstrate the wider impact of their activities. One issue highlighted by the global financial crisis was the failure of traditional financial reporting as a tool to identify fundamental business risk.

The Global Reporting Initiative announced jointly with HRH The Prince of Wales' Accounting for Sustainability (A4S) Project, the establishment of the International Integrated Reporting Committee (IIRC). The IIRC brings together an international cross section of leaders from major investment houses, global corporations, regulators, standard-setters, stock exchanges, sustainability organisations, accounting firms and other experts. The Steering Committee has a clear mandate and a number of active working groups. According to the IIRC's website, www.theiirc.org/the-iirc, the mission of the IIRC is:

To create a globally accepted Integrated Reporting Framework which brings together financial, environmental, social and governance information in a clear, concise, consistent and comparable format. The aim is to help with the development of more comprehensive and comprehensible information about organisations, prospective as well as retrospective, to meet the needs of a more sustainable, global economy.

The IIRC's objectives for 2011 include releasing an integrated reporting discussion paper for initial company, investor testing and public consultation in June 2011. A proposals paper and the discussion paper summarising the outcomes of the public consultation will then be presented to the G20 Finance Ministers in November 2011 for consideration and action.

Conclusion

It is important that accountants of the future commence their careers with the mindset that sustainability is a business issue in the same way that more traditional areas such as tax, audit, accounting and reporting are seen as business issues. The way sustainability is taught and the terminology that is used will be critical to creating this mindset. However, it is vital when considering the implementation of sustainable business practices into an organisation that the business case for implementation is demonstrated.

The impact of sustainable business practices needs to be measured and reported. The trend both globally and within Australia is for an organisation to move towards an integrated report that provides both financial and non-financial information for stakeholders. The report needs to align with an organisation's strategy to demonstrate the wider impact of an organisation's work. It is here, by developing tools for reporting, that academics can help to bridge the gap between research and practice.

List of Contributors

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Barry Cooper is Professor of Accounting and Head of the School of Accounting, Economics and Finance at Deakin University. He has previously been Head of the Accounting Schools at Hong Kong Polytechnic (1987 – 1991) and RMIT University (1993 – 1997), and also National Director – Member Services of CPA Australia (1998 – 2000). He returned to RMIT University in 2001 before moving to Deakin University in 2007 where, in addition to his Head of School role, he teaches and researches in the areas of auditing, professional ethics, corporate governance and accounting education. Barry is also Vice President of the global accounting body, the Association of Chartered Certified Accountants (ACCA).

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Stephen Pike is Research Director at Intellectual Capital Services and is responsible for researching, developing and implementing intellectual capital methodologies for the emerging business environments. Stephen is expert in knowledge management and mathematical modelling. He has also worked with the European Union Commission and the European Industrial Research Management Association on knowledge management and creativity, and in 2000 the European Union Commission appointed him as a reviewer of a EU-funded knowledge management project. Stephen is co-author of several book chapters and numerous articles and papers on intellectual capital. He is an active researcher in the field of intellectual capital and related subject areas.

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