



The Accounting Podcast Series

S01E01: Gary Biddle

Transcript

Albie: Welcome to [The Accounting Podcast Series](#) – TAPS, as we like to affectionately call it. TAPS is a production of the Department of Accounting here at the University of Melbourne. My name is Albie Brooks, and I'm an Associate Professor of Accounting here in the Department. Working with me is Abbey Treloar, who actually makes this all happen. The objective of TAPS is to expose the research work of our staff and academic visitors, convey innovations and developments in our teaching program, and provide commentary on issues of the day in accounting. Through this, we reach out to the broader academic community, industry, the profession and the wider community. We really hope you enjoy TAPS. Also, don't forget we have links on our page should you require more information on our guest, the topics, or you just want to explore accounting here at Melbourne.

Our first guest is [Professor Gary Biddle](#). Gary is an international scholar, having worked on a number of continents with an outstanding global reputation to match. Gary joined the University in 2017, and delivered the [2018 CPA-University of Melbourne Annual Research Lecture](#). It's that presentation that is the focus of this podcast.

Gary, welcome to TAPS.

Gary: Thank you.

A: The CPA Lecture was a great success. You initially walked us all through the history of accounting. What do you think have been the really key moments in the history of accounting?

G: Thank you, Albie. This is one of them right here. I want to thank you and Abbey for starting this TAPS series that I think is so innovative and productive, just like the faculty here, which I'm so proud to join. The Lecture you mention is the Sir Alex Fitzgerald lecture, which started in 1940. I was so touched to have his daughter, Win Leslie, there, who is 92, and also Dennis and Erin Fitzgerald, who wrote a wonderful handwritten letter to me afterwards which I'm very touched by. I still teach at Columbia, LBS and around China, and what's really striking is the contributions made by the University of

Melbourne to accounting research, which I'll describe. To begin, the Lecture, to professional accountants, academics and others, I think, listening to this podcast, will have a natural interest in accounting, but even professional accountants don't quite realise how important accounting has been through history. It has actually been the key to human civilisation, profoundly so in the past, pervasively now in the present, and especially in the future, as I'll describe, derived from our "accountability". Why do I say this? If you ask what are the hallmarks of civilisation, one is, of course, writing. We can write things. We can do maths. Who invented these things? The answer is accountants in Sumer. The Sumerians didn't have much to work with except mud, but they created bricks out of them and built huge temples. In fact, they taught the Egyptians how to build pyramids. Also accounting tokens. And it's their standardised symbolic style of script dating back to 2500 BC, about 4500 years ago, that is the origins of both writing and mathematics that we take for granted today. Accounting as a profession has very much to be proud of. The legal profession, even legal codes, didn't start until centuries later. Medicine, of course, much later, as we know it. So this is kind of the context of the Lecture, to emphasise how important accounting is in the past, the present, and we'll come to the future.

A: Excellent. So how do you think the key moments historically have helped shape accounting today as we know it?

G: Thank you, Albie. Beyond giving us writing, math, and all these things we take for granted that way, another key date in the evolution of accounting has to be the 1490s, roughly the "Renaissance" of Europe from the dark ages after the fall of the Western Roman empire. There we find Luca Pacioli writing up his *Summa*, which is kind of a summary of things known at the time, which included a wonderful, descriptive and very natural for us today chapter on double-entry accounting that he ascribed to Venetian merchants. He had been a merchant himself. And it was previously described by Benedetto Cotrugli, who lived slightly before. China's four-column accounting method, evolving on the other side of the Eurasian landmass, also applied the same logic, if not the same format. Even Confucius was an accountant. He said "it must be proper, that's all". Leonardo da Vinci, it turns out – we all know him – was one of Luca Pacioli's students. In fact, he illustrated the *Summa*. Another one of their friends there was the contemporary Paolo Toscanelli, who liked to draw maps that Christopher Columbus used trying to sail west of China. He, of course, ran into the Americas on the way. Gutenberg's newly invented printing press at that time made Luca's *Summa* the most copied book after the Bible. And because of it, it popularised not only debits and credits, but also plus and minus signs and Arabic numerals. Up to that time, Europe was still using Roman numerals. Imagine keeping books in those. Advocates and adherents to the double-entry bookkeeping invention included the bankers of Florence in addition to the merchants of Venice, Benjamin Franklin over in the Americas,

German philosopher Johann Goethe, who called it “one of the greatest discoveries of the human spirit”. And double-entry accounting, importantly, also facilitated history’s greatest wealth and health creator, capitalism. In the year 1000, the average western European was slightly poorer than the average citizen of China and India. Because of double-entry accounting and the industrial revolution it facilitated, by the year 1900 western Europeans were five times richer than their counterparts in China and India. Today, this multiple is even times higher, and higher still for Australia. India is still below that one-fifth fraction. China is slightly above from quickly training more accountants than India. But China is still below Brazil and Mexico in per-capita GDP. So this is how profound accounting has been in the past in creating the civilisation we know.

A: Excellent. So what about – back to the more recent years. You’ve been a prolific researcher. When you reflect on the body of work, which are the pieces of work you’re most happy and proud of?

G: Thank you, Albie, for asking. As we come to the present, another thing that accounting has done which I use all the time – in fact, we all do these days – is computers. We use mainframe computers, of course, in research, we use personal computers, we carry them around in our pockets. And the internet, we’re always on it. Where did these come from? You know what, it’s the same answer: accounting. If you ask why did a company called IBM, which is a tabulator maker, invent mainframe computers, it was to keep track of accounting in the new US social security plan back in the late 1930s. Why do we have personal computers? Easy answer again: accounting. When IBM first brought out its personal computer, the software that sold it was VisiCalc and Lotus 123. It was accounting software, not internet, not word processing – none of that. It was about accounting. The internet? Same thing. John Chambers, the Chairman and CEO of Cisco, who would know, he says, “I know for a month my earnings, expenses, profitability margins. What people haven’t gotten yet is that this (accounting) will be the biggest payback application of the internet.” And it is. It’s about accounting, too.

Here we come to accounting research using these computers, and accounting research is alive, well, and actually soaring. We’re talking about over 500 published research studies per year in accounting globally. And I’m really proud to convey to anyone that doesn’t know it yet that here at UniMelb our accounting research publications productivity ranks top 5 per cent in the world, and analytical archival AIS auditing financial streams, top 2 per cent in the world overall. And one half of one per cent in managerial research, and these rankings are rising. So in other words, you have a global accounting research powerhouse right here in Melbourne at UniMelb.

A: So let’s talk about your own work. Which of those pieces of work that you’re most happy with and the impact that your work has had.

G: I've worked across a number of streams of research. Going back to my dissertation in the beginning, I was looking at how inventory taxes affected real inventory holdings, and found that they did. This is what they call real effects of accounting on real economic decisions. Also, early on, that accountants – really, auditors – are subject to decision biases just like the rest of us, which helped launch the behavioural and experimental research streams in accounting, and I'm proud of that, too. Another paper really discerned a difference between looking at incremental value relevance or incremental help in explaining share returns in an accounting measure, and a horse race between different accounting measures, or sets of them. This distinction led to a whole range of research on what's called value relevance. I'm quite proud to have made that contribution and distinction. I've done a lot of work on EVA, which – and again, I want to really thank my co-authors here for all their important contributions, EVA – economic value added – we found can be helpful both for value creation of companies and also for valuation of companies. These are very different things, and it's an important distinction to make. You've got to be real careful in how you apply EVA in those two very different, it turns out, contexts. Also, I've worked with co-authors on showing how accounting numbers relate to firm value stock prices, if you will, and what the proper specification of that is. And, by the way, it's not price earnings. It's non-linear, and there are five major terms in there, as you might expect, reflecting growth and so on, as our intuitions would suggest. Also, back in 2007 – and this is something I'll do as a public service from time to time – I put an article in the paper in Hong Kong where I was living for a couple of decades as professor and dean there. I put an article in the paper entitled, "Get Ready for a Stock Collapse". This article appeared on July 9th of 2007. As you may recall, just two months later, markets around the world fell. It's something we called the Global Financial Crisis. So quite proud to have warned people of that; I hope they read my article that day.

A: I wish I had.

G: I'll do that from time to time as kind of a public service. By the way, I haven't predicted the next market meltdown, but we do need to be heads-up about it, particularly here in Australia, because of conditions in the world right now. And I'll come back. Also accounting conservatism: it's something that's been part of accounting since, well, Egyptian times. And you might ask why. I have a paper that I'm quite proud of pointing out that conservatism helps companies conserve cash. You can say to counterparties, "I can't pay you so much right now because my profits aren't so high." And this is exactly what a capital provider would want to say to an enterprise to which they're providing capital. Well, as a result of this, the company has more cash. In other words, more conservative accounting conserves their cash. And bankruptcy is not a function of profits, it's a function of cash. So what this leads to is – more conservatism in financial accounting leads to more cash, which leads to lower bankruptcy risk, something which is quite important for the IASB and FASB to know, members of which

I know, and I've conveyed this to them over dinners. Controlling interests also on boards of directors – I'm doing some current research right now on this. This study arose from a conversation at a symphony. A friend of mine in Hong Kong named David Webb is a corporate governance activist. He's quite well-known for this. We were sitting there and I said, "David, you know, in accounting research we have lots of studies on corporate governance which say, in effect, if you change the nature of boards you change the nature of companies. For example, you have more independent directors. Okay, that leads the company to have better financial reporting. This kind of thinking. We looked at each other and said, "No. This isn't how it works." David knows from his deep knowledge of corporate governance, especially in Hong Kong, and I know from sitting on boards of directors. No, this is not what actually happens, especially in Hong Kong. You have powerful controlling interests that actually control the nature of the board. It's not the board controlling the company, it's more the controlling interests of the company control the board. This led us into a discussion of how we could document this, and this launched a research stream we're working on right now with my former doctoral student, now professor, at Virginia Tech, Michelle Lowry, where we took a couple of years, actually – more than used up a research grant and contributed privately to the effort, all of us – to gather information on who actually controls every Hong Kong company. Hong Kong is important because that exchange has concentrated ownership. And this is more typical of the stock exchanges of the world than, say, of the US markets or the UK market in London. Ownership is concentrated, and we were interested to know who actually controls these companies. This data collection took over two years. We're just coming to the end of it, and this is what we now know. It looks like bushes, actually, when you map out the ownership trees of Hong Kong companies. When you trace down who actually owns them, we now know for the first time who does. Now, why might this matter? Not only from the research perspective, where we're looking at how these concentrated ownerships affect decisions about financial reporting quality, for example, and how companies respond to regulations around accounting and auditing of accounting, and so on – you can see the potential here, and we're pursuing those now. Another illustration of how important knowledge is coming from research – and this is just one small example; colleagues here at UniMelb have many, many more which I'm sure you'll share in future blogs. David Webb, who has a [webb-site.com](http://www.webb-site.com) – and if you aren't familiar with it, check it out – www.webb-site.com. David looked at our data and he said, "What I notice here is we have not just concentrated ownership, but webs of concentrated ownership," in other words, cross-ownerships across companies. When he put these data – really his assessment of these data – up on his website, he titled it, "50 Stocks I Would Not Own". When market participants noticed this on his website, it led to US\$6 billion worth of equity market cap vanishing in one day from the Hong Kong Stock Exchange

last year. You may have read about it, as it was written up by Bloomberg and other financial press publications.

A: So our research is commonly criticised for not being all that impactful. So here's a really good example where the work that you're involved in had significant impact. Tell us about how that unfolded as it occurred at the time, what were the reverberations?

G: Well, David, because of postings like this, is rather famous. He attends Davos and other global gatherings on corporate governance for this reason. Also infamous. If he shows up at the AGM of your company, you're in trouble.

A: Okay.

G: And in this case, he called it the "Enigma Network". He's recently come out with another companion piece in the financial press noting another such network. So it can be very impactful. And you're right, we often think accounting research may be esoteric and kind of unrelated to the real world. But once in a while, we do get insights that can make a real difference to markets and to market participants, and that's something we also wish to do.

A: So looking ahead – you've explained that particular piece of work that's had significant impact. Not just in financial accounting – we know that in management accounting some of the developments that have taken place over the last 15, 20 years have had significant impacts on practice as well and on industry, and this is where the accounting research can make significant contributions. Looking forward, what do you think are the really big issues that, as researchers, accounting needs to be focusing on?

G: Great question, Albie. As we've noted, accounting has been profound in its implications for the development of civilisation in the past, coming from Sumerians, the innovations around the renaissance, and to the present with computers, even. In the present, accounting is vitally important to the functioning of modern economies, every one of them, even what you might call hybrid economies like China's. So it's vitally important. Looking ahead, even more so. When I think about accounting research we might conduct as researchers, integrated reporting comes to mind immediately. Here we can be more inclusive in our value creation incentives, not just financial measures, but also social measures, environmental measures. We know in accounting that you get what you measure. And so when we start measuring these things, you start to see decisions being made around them that are different than, say, what would have been made just based on the financial numbers. So we can help mitigate the negative externalities, things like global warming, by bringing those measures into the purview not just of market participants broadly, but especially

managers inside of companies who make the real research allocation decisions. Another couple of things that I think are quite important for us to research in accounting is derivatives. We have six hundred – excuse me, it's not with a B, it's with a T. We have US\$600 trillion worth of derivatives sitting on companies' balance sheets right now, particularly big banks. In magnitude, this is six times gross world product. These amounts appear in footnotes but not actually on the balance sheets because of netting. And I think this is a real risk to us as accountants going forward, especially during the next financial crisis, and there will be one; there always is. We've got to be heads-up about this. Another thing is fair values. In lots of countries around the world, fair values are not being estimated in any way you'd call reliably. And again, I think we've really got to be heads-up about this, because the credibility – the reputation of financial accounting is at risk here with these two, the derivatives and the fair values. Also, I think we really need to get a grip on intangibles. In other words, we really have to account for them. In this regard with intangibles, we're kind of like physicists, who recently realised that to explain the universe's accelerating expansion, all of the visible universe comprises only 15 per cent of matter. In other words, everything that we've been seeing in the sky since the beginning of humanity and wondering about, we now realise is only 15 per cent of matter. 85 per cent of matter is dark. And the physicists don't have any idea yet as to what it is. They're still trying to figure it out. Now, we as accountants are better off in the sense that only 80 per cent of firms' assets are now missing from balance sheets. 80 per cent is missing, absolutely. If you compare the market value of equity with the book value of equity of companies, you'd find that 80 per cent of the value of companies is now missing from balance sheets. So we're just like the physicists in this sense, that there's just lots of dark matter here. Not quite as much as physics, but 80 per cent of firms' assets are now missing from balance sheets, and this is rising. Why? Because of intangibles. Now, we're also better off than the physicists a bit in that we kind of know what it is. If you look at a company, say, like Microsoft, their brand names alone are worth US\$100 billion. Even the name "Microsoft" alone, that word is worth 100 billion in the marketplace, it's estimated. On their balance sheet? Zero. This is what we mean. So we need to start coming to grips with this. Now, if you ask what's causing it, it's actually more of a legal problem than an accounting problem. Why? If you walked into Microsoft and said that you wanted to buy their brand name word Microsoft, "Here, I'll give you \$100," they'd say, "What do you mean? No way. If you want to start at 100 billion, we'll start talking." How do they know this? They know this from their managerial accounting. They know very well inside the firm what that brand name is worth. They manage it every day. It's just that they don't show it in the financial statements because of the risk of being sued. It's really a legal safe harbour issue than more of an accounting issue, but quite important for us to deal with. Finally, I think we must mention the biggest wave of all coming. And it may be the biggest wave ever to sweep over humanity. And, of course, you know this

is artificial intelligence. Artificial intelligence, to put it in perspective, is actually not artificial. It really is intelligence. We might even call it – and I'm not joking here – we might call it accounting intelligence. Why? Because accounting, as we know over the centuries in these examples, has extended our intelligence many times before with writing, with math, with logic, with debits and credits, which give us financial intelligence, tabulating with computers. So we have been expanding intelligence forever as accountants. We've always encompassed data, data analysis, data security, recently software selection, integration, these are accounting roles. If you ask what's going to happen going forward, China has recently announced work on a superconducting quantum AI superbrain. For what purpose? Well, for environmental, weapons and surveillance applications. And we know Alexa is already listening to what we're saying. And herein lies the next and, perhaps, most of all profound contribution of accounting. In the time remaining before already self-learning AI itself becomes self-aware, and as it does so, we as accountants have an immense opportunity to preserve and advance civilisation as we know it – and earn great salaries while doing so, by the way – by serving as humanity's interface with AI, to be the adults in the room who help realise its benefits for health, wealth, energy, environment, and things we can't even yet imagine, while also preserving and advancing the things that we value most and call civilisation. If you ask the question will private sector companies or governments, even, be the adults in the room for AI as it evolves, the answer is, quickly, no. This is more naturally the role and the profound remit of accountants, to be the ones in humanity who interface with AI, to choose it, to evaluate it, to assess it, to interpret what it's saying or not saying. This is our natural role as accountants, and perhaps the most profoundly important role ever.

A: Well, Gary, thank you. Wonderful note to finish on, what lies ahead for us all. Thank you so much for taking some time out to come and have a chat to us, sharing your insights with a bit of history, a bit of the impact of so much of the work that you've done, and giving some insight as we look forward into the binoculars to see what lies ahead for us, and the very important role that you see accounting playing within that. Thanks for joining us here at TAPS, and we look forward to having another chat soon. Thank you.

G: Thank you so much.