

REFLECTIONS ON THE RESEARCH AND PRACTICE OF COSTING

Christopher S. Chapman and Anja Kern
Imperial College London

ABSTRACT

Laments about the research–practice gap are frequent in accounting and the wider discipline of management. If theoretical vocabulary is sometimes considered as contributing to this gap, we argue in this article that, in contrast, theory is one of the strongest tools for organising and communicating thought on complex issues. This paper aims to show that a theoretically informed reflection on practice – we take here the example of Activity-Based Costing (ABC) – can support practitioners. We argue that a theory-informed analysis of a management accounting practice may facilitate the identification of patterns across different situations, and thereby the development of a deeper understanding of practice.

COSTING OFFERS INTERESTING OPPORTUNITIES TO LOOK AT HOW RESEARCH AND PRACTICE MIGHT DEVELOP A FRUITFUL ENGAGEMENT

Accounting scholars continue to lament the fact that academic knowledge is felt to be irrelevant for practice (e.g. Parker, Guthrie and Linacre, 2011). Similar laments can be found in the wider discipline of management (e.g. Daft and Lewin, 2008). The readership of articles in scholarly journals is largely confined to academics themselves. Academics see practice mainly as a source to develop theory and write academic publications, but may have little intention to guide practice (Baldvinsdottir, Mitchell and Nørreklit, 2010). Theory can be seen as an obstacle for practitioners to engage with academic research, making articles incomprehensible to the general public (e.g. Baxter, 1988). Yet, theory is one of the strongest tools for organising and communicating our thoughts on complex issues (e.g. Chapman and Kern, 2012; Ohlson, 2011).

This paper aims to show that a theoretically informed reflection on practice can support practitioners. Our argument builds on the understanding of the researcher's role as carrying out a theoretically informed reflection on practice (Chapman and Kern, 2012). Academics seek to understand practice in ways which practitioners are neither trained to undertake, nor have the time or distance to support. Such theoretically informed reflection on practice is the unique and original contribution researchers can make to practice. This is something that we would do well to remember when faced with discussions about research lagging behind practice, or suggestions that research should lead practice or that it should merely report on practice.

For the purposes of this article our reflection on research and practice focuses on Activity-Based Costing (ABC). ABC might be understood as one of the major management accounting innovations of the twentieth century (Johnson and Kaplan, 1987). It is a costing technique which is supposed to improve accuracy and usefulness of cost information, particularly for firms with a high percentage of indirect costs and diverse products and services (Cooper and Kaplan, 1998). Yet, even though ABC is supposed to bring about these advantages, the evidence that we have is such that the adoption rate of ABC has been relatively low, and that many organisations which have implemented it have often not realised the hoped-for benefits. This disappointing result is sufficiently well-documented to have been given a name – 'the ABC paradox' (see Gosselin, 2006 for a comprehensive review of the ABC literature).

The point of our analysis here is not to come to know the 'real' percentage of ABC implementations that were successful, however. This kind of reporting from practice does not play to the strengths of academic work. Instead, we will briefly sketch some of the main areas of debate in the research literature concerning the potential and limitations of ABC. We hope to show that the contribution of the literature and academic thinking to such basic questions as 'Is ABC good or bad?' is to break them down into smaller questions that might have more useful answers. In this way, we argue that analysing a variety of research findings on a certain management accounting practice, i.e. ABC in this case, may facilitate the identification of patterns across different situations and thereby inform a deeper understanding of this practice.

HOW RESEARCH HELPS US TO BETTER UNDERSTAND THE POTENTIAL AND LIMITATIONS OF ABC

In this section, we discuss a limited selection of studies that focus on ABC, drawing on a variety of different theoretical perspectives. Gaining a deeper understanding of ABC practice, we aim to reconsider the ABC paradox. Some specific evidence that potentially makes this paradox very visible is to be found in Bhimani, Gosselin, Ncube and Okano (2007). Their research entailed a survey of ABC use across seven countries. Notable in their results is the finding that the number of respondents in Japan perceiving a potential usefulness of ABC is 86.3 per cent, the second highest among the countries surveyed. However, the rate of abandonment of ABC

reported in Japan is 69.5 per cent, significantly higher than any other country in the survey (the next highest is Italy at 15.8 per cent). It is tempting to read this as clear evidence of the ABC paradox, where initial optimism was cruelly disappointed. Undoubtedly, some of the abandonments seen in these figures will represent such disappointment; however, the research literature also puts forward the basis for a different interpretation.

An alternative explanation of the high abandonment rate seen in Japan (Bhimani et al., 2007) comes from a reading of Briers and Chua (2001). This study presents an analysis of the implementation of an ABC system that was introduced to make a specific product retention/discontinuance decision. At the end of the study the implementation was regarded as a success (in that it had allowed the decision to be made), yet the firm abandoned ABC. The abandonment was made on the realisation of how expensive it was to maintain routine reporting of ABC information.

One of the most fervent critiques of the benefits of ABC comes from the Theory of Constraints (TOC) (e.g. Goldratt and Cox, 1986). Labelling cost accounting as 'enemy number one of productivity' (Goldratt, 1983, as discussed in Noreen, Smith and Mackey, 1995), the critique is based on an understanding that focusing on fixed costs takes attention away from short-run cash flow and the maximisation of throughput. The concern over misplaced priorities generated by ABC echoes Johnson's (1992) colourfully expressed concern that hoping ABC would improve traditional costing comes close to rearranging deck chairs on the *Titanic*.

Accounting researchers have analysed the TOC and its implications for accounting (e.g. MacArthur, 1993; Noreen et al., 1995). This research concludes that the TOC and ABC are not simple substitutes and may potentially be complements. In an environment in which there are relatively few indirect costs and where simple processes prevail, the focus on throughput is likely to be the most valuable tool for efficiency improvement. Keeping the timeframe of analysis to the short run, the emphasis of the TOC becomes even more dominant. As the analytical time horizon extends outwards however, the idea that some costs are simply 'fixed' and must be lived with becomes less defensible and efforts at more comprehensive product cost management as offered by ABC become more valuable (MacArthur, 1993). Hence, some studies suggest integrating the TOC and ABC, as they both serve different purposes, with ABC supporting managers in understanding relationships between activities and the TOC enabling them to better prioritise improvement efforts (Buchwald, 1996). Whilst this last area of research seeks to compare and contrast ABC with another management technique, by far the greater portion of the literature seeks to add to our understanding of the variety of different technical characteristics that might make up an ABC system in practice and the variety of purposes to which such systems might be addressed. The research literature offers a strong resource for thinking through these matters to form a more precise and specific understanding of the potential and limitations of ABC.

Common concerns with top-down approaches to ABC are its relatively high costs of implementation and its inflexibility once implemented. This concern prompted the development of Time-Driven ABC (Kaplan and Anderson, 2007) as an approach that attacks both of these problems through a bottom-up analysis. This aspect of the expense of routine costing has been addressed in a range of research

studies, offering a variety of insights into how the general framing of ABC as a system (whether top-down or bottom-up) benefits from a more precise analysis of the specific purposes of the system.

In this regard, one of the earliest studies to unpack more specifically the nature of ABC is Gosselin (1997). This paper opened the black box of ABC, building its analysis around three sequential steps in the development of costing as an organisational practice. The first of these is Activity Analysis. The second is Activity Cost Analysis (the attribution of cost and drivers to the activities derived in Step 1). The final step is Activity-Based Costing, which is the development of routines of data collection, analysis and reporting of the activity costs identified in Step 2. Gosselin (1997) then analyses the settings under which the steps offer performance improvements. An important finding is that many organisations derive value from the early stages and do not bother with Step 3. Time-Driven ABC offers one way to face common concerns over the challenges of cost and inflexibility. The research literature prompts us to remember that the costing system is not there to serve itself but rather to inform decision making.

This point might seem too obvious to need reinforcing, yet the research literature also shows us that when it comes to the evaluation of systems, the emphasis on decision making and performance is often a case of assumption. Pizzini (2006) gathered responses about managers' estimations of the quality of their systems across a number of different aspects, and then analysed performance data to assess the degree to which assessed system usefulness and organisational performance were aligned. One of her dimensions of usefulness was 'frequency of reporting', yet this dimension was not found to be directly linked to performance. The dimension that did have strong links to performance related to the ability of the system to render operations visible.

This result helps to reinforce the finding of a stream of studies that the effects of the introduction of costing systems on performance are not direct, but indirect through decision making at operational level (Banker, Bardhan and Chen, 2008; Ittner, Lanen and Larcker, 2002; Maiga and Jacobs, 2008). The research literature shows us that ABC has an effect on profitability if it helps members of the organisation to make operational decisions. On the basis of a cross-sectional study in the manufacturing industry, Banker et al. (2008) suggest that there is no direct effect of ABC on plant performance, in terms of unit costs, cycle time and product quality. Rather, a positive impact of ABC on plant performance can be observed in combination with operational performance measurement tools. Using a cross-sectional sample of manufacturing plants, Ittner et al. (2002) demonstrate that ABC use is associated with higher quality levels and improvements in cycle time and quality. Furthermore, their study suggests that ABC use is indirectly associated with manufacturing cost reductions through quality and cycle-time improvements. The association between ABC and accounting profitability depends on the plant's operational characteristics (Ittner et al., 2002). In a similar vein, Maiga and Jacobs (2008) provide evidence that ABC use is associated with quality, cost and cycle-time improvements. Their study shows that the relationship between ABC use and manufacturing plant profitability is not direct but, rather, plant operational performance measures act as intervening variables in the relationship between the extent

of ABC use and profitability. ABC as a regular reporting tool may not add value, rather it is its use for managing operational activities which determines its effect on profitability.

Our analysis of the literature so far has emphasised the importance of understanding the purposes of ABC in order to achieve an appropriate balance between the costs of costing and the technical characteristics appropriate to produce the specifically desired benefits. A further important strand of research looks at the nature of the implementation process through which such fine judgements might be made. Research on the factors determining the success or failure of ABC implementations points to the role of behavioural and organisational variables (Shields, 1995). This research underlines, for example, the importance of top management support and of the ownership of ABC among non-accountants for reaching financial benefits. This result is confirmed by a field study by Eldenburg, Soderstrom, Willis and Wu (2010), which found that the participation of non-accountants, e.g. physicians, in developing an ABC system results in post-implementation improvements in resource utilisation. Similarly, Cardinaels, Roodhooft and van Herck (2004) show that the interests and support of non-accountants may influence the cost system design process.

CONCLUSION

The limitations of space preclude that we undertake more than a brief sketching of some of the main contours of what is a vast research literature concerning the potential and limitations of ABC. A comprehensive overview was not the intention however. The intention was to respond to on-going concerns over a research-practice gap. As academics come under increasing pressure to be seen to address this gap we worry that many of the characteristics of our work that make it academic (e.g. curiosity driven, long time horizon, theoretically informed) might be relinquished, inadvertently threatening not simply the distinctiveness of our knowledge but also its validity (Chapman and Kern, 2012).

Using the example of Activity-Based Costing, we have sought to show how individual studies build to form a broader understanding of the limitations and potential of a given theory. Whilst any individual study might seem overly focused on rather limited and fussily precise questions, it is just this degree of focus that offers a solid foundation on which to build such a broader understanding. A point to underline then is that individual papers are unlikely to be the way for us to address the research-practice gap; rather, it is the understanding that we might develop through our engagement with streams of literature which build in small incremental steps to help us to see broader patterns.

This understanding of the nature and value of academic knowledge as residing at a higher level than that of the individual article throws the emphasis on the vital significance of teaching as a core component of academic activity. Whilst there is a danger that the spheres of research and teaching become instrumentally separated, they share important aspects. Research requires clarifying and structuring complex topics. This is surely a skill that is required for effective teaching also. Beyond that,

however, failing to bring the research literature strongly into our undergraduate teaching (not least) means that we potentially set back the next generation of PhD students. In relation to the central focus of this article on the research-practice gap, however, reticence about introducing the research literature to our undergraduate teaching can only make it more difficult for the next generation of practitioners to understand how and why academic research can have practical relevance.

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