The role of accounting information in the management of winery SMEs: a review of the broader existing literature and its implications for Australia’s wine industry

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Purpose This paper argues that our current lack of understanding about the management accounting practices of small and medium enterprises (SMEs) is of particular relevance to the Australian wine industry because industry conditions are such that management accounting information can be expected to be of significant importance.

Design/methodology/approach A review of existing knowledge as detailed in the management accounting literature is provided, with methodological concerns and theoretical inconsistencies highlighted.

Findings The management accounting practices of Australian SME wineries are yet to be explored. As a body, literature addressing the role of management accounting in the management of SMEs is contradictory and lacking synthesis. Paradigm related issues have been identified as a significant driver of contradictory findings, and other practical considerations have also been implicated. There is a clear need for further research to clarify, synthesise and extend current knowledge.

Practical implications Our lack of knowledge about the role that accounting information plays in the management of SMEs is of important practical relevance to the Australian wine industry because industry level stakeholders are engaged in initiatives to support and develop the business management practices of SMEs, and it is possible that such initiatives are based on invalid assumptions about how and why SMEs make use of management accounting information.

Key words: management accounting, SME, product costing
1. INTRODUCTION

This paper argues that our current lack of clarity and understanding about the management accounting practices of small or medium enterprises (SMEs) is of particular relevance to the Australian wine industry. The vast majority of participants in Australia’s $5.5 billion wine industry (WineAustralia, 2010, p. 5) are SMEs (Winebiz, 2010) and for the past decade and a half they have been facing significant challenges including oversupply, increased global competition, climate change, water shortages and reducing per litre sales prices in domestic and international markets. Industry level stakeholders have directed participants to respond to these challenges by adopting a quality over quantity strategy (WineAustralia, 2007). From an academic perspective, these pressures can be expected to increase both the importance and complexity of management accounting information. For example, high quality costing information is expected to be required to inform production and sales decisions (Gonzalez-Gomez & Morini, 2006, p. 195) and it is anticipated that increases in wine quality will lead to increased accounting complexity (Blake, Amat, & Dowds, 1998). Anecdotal evidence suggests SMEs are using product costing approaches that would, from an academic perspective, be considered suboptimal. To illustrate, the industry-produced document Directions to 2025 Small Business Benchmarking Guide (Deloitte Touche Tomatsu, 2007a, p. 24) reports that many small businesses are expensing production costs that should form part of the cost of inventory. WineAustralia and The Winemakers’ Federation of Australia1 have recognised a need for SMEs to financially upskill and have taken steps to support such development, including the introduction of business skills workshops, the provision of small and medium wine business benchmarking guides, and an online gross margin “ready reckoner” (WineAustralia, 2007, p. 19).

The apparent disconnect between conventional wisdom and business practice, and the wine industry’s attempts to address the divide, were the inspiration for this review of our existing limited knowledge about the role of management accounting information in the management of SMEs. As the practice of management accounting in the specific context of SME wineries is yet to be explored, this review looks to the wider SME literature. It finds that unfortunately, the dearth of knowledge about SME management accounting practices is not specific to the wine sector. Consequently, in some places, consideration is widened to include research conducted in large business settings, but this is done with caution, because we know that small businesses often display important and significant differences from large businesses (Perera & Baker, 2007).

The significant gaps in our knowledge and the lack of synthesis and clarity that exists between existing research findings is of important practical relevance to the Australian wine industry because initiatives to address challenges being faced by SMEs may be based on incorrect assumptions about what management accounting information SMEs use, how they use it, and why. Better understanding about SMEs’ use of management accounting information may facilitate more effective interventions, leading to better SME outcomes.

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1 Winemakers’ Federation of Australia is an industry association that is funded through voluntary levies with members representing over 90% of the industry in terms of organisations and 95% of the industry in terms of production (WineAustralia, 2010). WineAustralia is the Australian federal government agency that is dedicated to the regulation and promotion of the Australian wine industry.
In undertaking this literature review, pursuing understanding about the “what”, “how” and “why” of management accounting in SME wineries was the objective:

What management accounting information do SME wineries access or compile?
How do SME wineries make use of management accounting information?
Why do SME wineries have the management accounting systems that they do? Why do they use, or not use, the information that they access or compile?

A review of the “what”, “how” and “why” of management accounting in SMEs, as considered in existing research, is following. This paper will then move on to consider the relevance of this knowledge, and the implications of gaps identified, in the specific context of the Australian wine industry.

2. EXISTING KNOWLEDGE ABOUT ACCOUNTING AND SMES

Management accounting research tends to focus on large firms. This is concerning because, in the words of Welsh and White (1981, p. 18), “a small business is not a little big business”. We cannot assume that knowledge we have about large entities will hold true in an SME context. Perera and Baker (2007, p. 12) list the characteristics that differentiate SMEs from larger businesses as including, ‘personalised management, little devolution of authority; severe resource limitations in terms of management and manpower as well as finance; reliance on a small number of customers, and operating in limited markets; flat, flexible structures; high innovatory potential; reactive, fire-fighting mentality; and informal, dynamic strategies.’

Management accounting research that has focused on SMEs has suggested that many firms lack qualified internal accounting capabilities (Mitchell & Reid, 2000, p. 368) and SME managers’ accounting knowledge is often deficient (Charters, Clark-Murphy, Davis, Brown, & Walker, 2008; Marriott & Marriott, 2000). Such findings are concerning when considered with reference to research that has linked more sophisticated financial reporting practices in SMEs to positive business outcomes such as growth (McMahon, 1999). However, assertions about skill deficiencies and lack of sophistication are in stark contrast to the findings of, for instance, Curran, Jarvis, Kitching and Lightfoot (1997) who found the management accounting systems employed by the SMEs they examined to be complex and sophisticated, albeit informal.

2.1 SMEs and management accounting: “What” do they do?

Perren and Grant (2000, p. 392) describe existing research into the management accounting approaches of small business as being broadly applicable to Burrel and Morgan’s (1979) framework within the sociology of regulation, divisible between the different ends of the objective and subjective continuum. Research from an objective viewpoint focuses on the extent that particular accounting approaches are employed within a business. According to Perren and Grant’s (2000) review, such research tends to find that very small businesses have deficient controls, little management information and use ad hoc decision-making processes. Conversely, research from a subjective viewpoint focuses on the study of management accounting that exists idiosyncratically within a business. Perren and Grant (2000) claim these studies tend to establish that effective information and control is obtained through informal means, and conclude that firms demonstrate sophisticated decision making. This review will consider examples of both types of research, as well as suggesting other sources
of contradiction in findings. The social construction perspective presented by Perren and Grant (2000) as a way to avoid paradigmatic polarisation is also discussed later in this review.

2.1.1 Management accounting research from an “objective” viewpoint

As noted above, research conducted from an objective viewpoint focuses on the extent that particular accounting approaches are employed within a business. Examples of such research include:

- Marriott and Marriott (2000) interviewed small firms (turnover < 350,000 pounds) about their use of computerised accounting systems, their relationship with their external accountant, and their financial management skills and the authors found that ‘where the company prepared management accounts, they were often incomplete and inaccurate’ (Marriott & Marriott, 2000, p. 486).

- Sian and Roberts (2009) surveyed small business owner managers and accountants about small business use of accounting information. The authors concluded, ‘the majority of SoME (small owner-managed enterprise) respondents were found to not be particularly financially aware with few having any training in accountancy or business management, this being reiterated by the accountants that were questioned’ (Sian & Roberts, 2009, p. 301).

2.1.2 Management accounting research from a “subjective” viewpoint

Management accounting research in this area from a subjective viewpoint is concerned with the meaning of ‘accounting information’ constructed by key players. For example:

- A 22 year longitudinal case study undertaken by Ansari and Euske (1987) examined the cost accounting system that evolved in a military setting. It focused on explaining why the system evolved and existed as it did, and so a discussion of its findings are delayed to the “why” section of this review (section 2.3).

- Simon, Kozmetsky, Guetzkow and Tyndall (1954, p. 22) examined the ‘use (or non-use) of accounting data’ by managers and produced a typology of scorekeeping, attention directing and problem solving.

2.1.3 Sources of variation in findings

It has been suggested that methodological issues could be responsible for contradictory findings in the literature. Curran et al. (1997) criticised the methodological strategies employed in studies that generated the perception that small businesses use crude, cost-plus costing systems and lack financial management skills. They reported that data collection, even in face-to-face interviews, commonly used closed questioning so respondents were not given the opportunity to fully explain their practices, resulting in over simplification and an apparent lack of sophistication. The authors argued that while conventional wisdom with regards to pricing is built upon assumptions of instrumental rationality, i.e., owners act to
maximise profits, in practice small business owners’ actions display a combination of procedural rationality, expressive rationality and instrumental rationality.

Diverse findings might also be attributable to sampling differences. There is no universal definition of SMEs, with classifications usually being made on the basis of employee numbers with or without reference to turnover (Graves & Thomas, 2006; Maguire, Koh, & Magrys, 2007; Sousa, Aspinwall, & Rodrigues, 2006). A definition commonly applied in Australian research is that of the Australian Bureau of Statistics (2010): entities with less than 20 employees are regarded as small and entities with between 20 and 200 employees as medium. It is intuitive that significant diversity can be expected between businesses ranging in size from no employees through to 200 employees. We know that knowledge gained in a large business setting cannot automatically be expected to transfer to a small business setting (Perera & Baker, 2007; Welsh & White, 1981) and it follows that knowledge gained in a micro business setting cannot necessarily be expected to hold true in a medium business, or vice versa. Dyt and Halabi (2007) collected empirical evidence about the accounting practices of small and micro businesses and found that while 80% of small businesses prepared a profit and loss statement, only 65% of micro businesses did, and while 74% of small businesses prepared a balance sheet, only 44% of micro businesses did (Dyt & Halabi, 2007, p. 6).

A researcher’s interpretation of what constitutes sophistication can also lead to diversity within objective viewpoint research. For example, Al-Omiri and Drury (2007) contrasted previous research which had focused on adoption or non adoption of activity based costing (ABC) to their study which considered four different proxies for system sophistication:

- Number of cost pools;
- Number of different types of second stage cost drivers;
- Extent to which transaction or duration drivers are used (i.e., ABC or not); and
- Extent to which costs are directly allocated.

The authors reported that while previous, ABC centred studies had generally been inconclusive and unable to link ABC adoption or non adoption to particular contextual factors, their more detailed assessment of system sophistication enabled them to positively associate system sophistication to the importance of cost information, use of other innovative management accounting techniques, competition intensity, size, use of JIT/lean production techniques and business sector (Al-Omiri & Drury, 2007, p. 399). Another example of an alternative measure of sophistication is Brierley’s (2010) consideration of all costs included. Brierley (2010) conducted an interview study with the intention of finding the determinants of sophisticated product costing systems. His measure for sophistication was the inclusion of all costs and the determinants he identified were ‘whether the parent company determines the software used by the operating unit; the power of the software chosen by the operating unit; the effect of parent company specifying the importance of product costs in decision making on managements’ demand for product cost information; the lack of funds available to invest in product costing system; and the effect of having solely customised sales on the level of manufacturing technology, and the quantity of different materials and labour included in the product’ (Brierley, 2010, p. 218).
2.2  SMEs and management accounting: “How” do they use information?

Management accounting is traditionally tasked with providing information to aid decision making (Kaplan & Atkinson, 1989). However, Ansari and Euske (1987, p. 551) compiled a list of the uses ascribed to accounting systems by other research to include ‘providing information for resource allocation decisions, motivating individuals to perform certain actions, aiding the exercise of influence and control, increasing confidence in decisions made in uncertain and ambiguous situations, performing functions to legitimate organisations, and furthering particular interests in an organisation.’ Despite being aware of such applications, recent literature has noted that we have a surprisingly limited amount of knowledge about how accounting information is actually applied by managers to serve such purposes (Halabi, Barrett, & Dyt, 2010; Hall, 2010).

2.2.1  Informal use of information

Bruns and McKinnon (1993, p. 104) reported that they were surprised by ‘the extent to which hard, numerical data were disseminated orally, in addition to the soft, qualitative data we expected to be transmitted orally.’ They found that the written reports acted as a reminder of what managers had already learned from discussions. Preston (1986) found that informal information sources were not used because of limitations in formal systems; managers made use of informal sources regardless of the formal information available to them. A 1997 study undertaken by Curran et al. found that informal systems should not be assumed to lack sophistication (Curran, et al., 1997, pp. 21-22):

What was increasingly clear from the detailed accounts offered by respondents was that descriptions of the process as ‘simple’ cost-plus price making were wide of the mark. Respondents often had a very detailed knowledge based on experience, wide knowledge and a highly intelligent assessment of the market in which the business operated. This knowledge and assessment was not committed to paper as it might be in a large enterprise but invoked as required.

2.2.2  Differences between information compiled and information used

Existing research has alerted us to the fact that there can be significant differences between information produced and information used. DeThomas and Fredenberger (1985) found that 81% of the small businesses they surveyed produced summary financial reports, but only 11% used those reports to inform decision making, despite the fact that 61% felt the information could be useful.

2.2.3  Management accounting information as a component of information used

Case studies undertaken (in large businesses) by Bruns and McKinnon (1993) found that managers tended to use count based data, as opposed to dollar based data, for short-term production related decision making. However, they also found that as the relevant time frame for the decision lengthened, the use of financially based data increased.
Curran et al. (1997) found ‘cost-plus’ to be a common start point for pricing but described the determination of the ‘plus’ component of ‘cost-plus’ as complex and highly variable, with owners not only considering economic factors such as supply and demand, but also non-economic factors such as fairness to customers, fairness to employees and the notion of charging the ‘right’ price (Curran, et al., 1997, p. 22). Greenbank (1999) examined pricing decisions made by micro-businesses conducted by accountants, builders and printers. The findings were similar to those of Curran et al. (1997) in that consideration of individual context and social context was required in addition to economic context to explain pricing decisions.

2.2.4 Symbolic or non-technical uses of management accounting information

Research has also suggested that management accounting is used for symbolic or non-technical purposes such as gaining power or displaying legitimacy (Ansari & Euske, 1987). Because the discussion of such uses indivisibly incorporates the reasons for such uses (e.g., it is asserted that firms use management accounting because it enables them to establish external legitimacy), these uses are discussed below in the “why” of management accounting in SMEs.

2.3 SMEs and management accounting: “Why” do they use, or not use, management accounting information?

The existing research considering why firms use the management accounting systems and approaches they do that has been included in the following review can be divided with reference to its focus on contingencies or on institutional considerations. Examples of each approach are presented, followed by a discussion of literature considering the reconciliation or synthesis of the two streams of research.

2.3.1 Contingency focused research

Contingency theory, as applied to management accounting, posits that firms’ management accounting systems are shaped by particular circumstances (contingencies). Contingencies considered by this stream of research are usually classified as being related to environment, organisational structure or technology (Reid & Smith, 2000).

Contingency focused research can frequently be characterised as being positioned at the “objective” end of the Burrell and Morgan framework (1979). While the “objective” viewpoint research discussed in the “what” section of this review (section 2.1) was focussed on whether or not firms use a particular approach, contingency focussed research is concerned with discovering why this is the case. For example, Reid and Smith (2000) interviewed new Scottish micro firms to positively associate the timing of specific events such as cash flow crises or significant innovation to changes being made to management accounting systems.

Research has suggested that SMEs may make sub-optimal use of accounting information because they do not possess the skills to understand or apply the information (Marriott & Marriott, 2000; Sian & Roberts, 2009). Charters et al. (2008) interviewed owners and/or
managers of Western Australian SME wineries and while most identified financial management skills as important for long term survival, many also assessed their skills as deficient in this area. This echoed the findings of an earlier survey of SME tourism and hospitality businesses from Victoria (Becton & Graetz, 2001).

2.3.2 **Institutionally focused research**

Institutional theory considers how people, organisations and actions are shaped by their position as a component of a broader social structure. It is concerned with how rules, routines and norms gain authority and influence behaviour (Scott, 2004).

Ahmed and Scapens (2000) undertook a historical analysis of the evolution of cost allocation in Britain (not specific to SMEs) and found that they were not able to rationalise development in terms of cost economics or labour control alone; broader economic, political and legal contexts were also identified as important.

Similarly, Ansari and Euske’s (1987) longitudinal field study (conducted in a military organisation as opposed to an SME) questioned the validity of the profit maximisation rationality that is implicit in the “aid to decision making” view of the use of accounting. They considered the design, implementation and use of a costing system and found no technical-rational justification for the system. Instead, they found the continuing employment of the system was explainable with reference to institutional theory because it offered political benefits through increased power and legitimacy from the perspective of external stakeholders. Similarly, Dirsmith (1998) warned that management accounting rhetoric can be used by SME owner/managers as a way of symbolically demonstrating commitment to rational practice.

2.3.3 **Social Construction Approach**

The social construction perspective of accounting was developed during the 1980s and 1990s, mostly focussed on accounting as a legitimating institution within large organisations (Perren and Grant, 2000). Perren and Grant (2000) reconsidered data collected in four firms for the purposes of a functional (objective) assessment of management accounting processes (Perren, Berry, & Partridge, 1998) using ‘the broad paradigmatic lens of Berger and Luckmann’s (1967) social construction’ (Perren & Grant, 2000, p. 399). They described the later approach as being useful in considering the evolution of the firms’ systems, as opposed to just focussing on the systems that had emerged, i.e. it offered a useful way to consider why firms had developed the systems they now had. The study resulted in a framework of the social construction of accounting which considers that SMEs’ management accounting systems are a product of macro-level (external) objectified management accounting influencing (in several ways) the micro-world (internal) constructed by the owner/manager and employees.

3. **RELEVANCE TO THE AUSTRALIAN WINE INDUSTRY**
This section consists of a discussion of the relevance of our limited and contentious understanding of management accounting in SMEs to the Australian wine industry.

Conditions in the Australian wine industry are such that conventional wisdom would expect sophisticated, formalised management accounting information to be of significant and increasing importance. Industry level stakeholders have positively and proactively responded to this expectation via a series of initiatives aimed at helping industry participants develop sustainable business strategies. The most significant, currently relevant initiative is Directions to 2025, which was launched by WineAustralia and the Winemakers’ Federation of Australia in 2007, with the intention of developing an industry wide strategy for sustainable businesses (WineAustralia, 2007).

In December 2009, and again in December 2010, the Winemakers’ Federation of Australia, Wine Grape Growers’ Australia, the Australian Wine and Brandy Corporation and the Grape and Wine Research and Development Corporation issued a statement to the Australian wine industry expressing concerns that structural surpluses, entrenched discounting and inefficient and/or inappropriate vineyard and winery operations are hampering the industry’s pursuit of Directions to 2025 targets (Winemakers' Federation of Australia, 2009, 2010).

Implicit in the accounting based industry initiatives is a positivistic assumption of rational maximisation. For example the 2009 industry statement asserted, “Bailouts are not an option and neither governments nor industry bodies should be expected to provide the answers; tough, informed decisions must be made by individual growers and wineries, from as early as the 2010 vintage” (Winemakers' Federation of Australia, 2009). However, industry level stakeholders are also clearly aware that assumptions of rational maximisation may not be valid for all industry participants; the 2010 statement laments that “a combination of unrealistic expectations, non-commercial motives and short-term opportunism continues to motivate many operators to resist change” (Winemakers' Federation of Australia, 2010).

Understanding the motivations of those industry participants that are not rational profit maximisers, and the effects these motivations have on such business’ management accounting processes and systems, may be a key component in achieving meaningful interventions. Curran et al.’s (1997) arguments about the potential invalidity of rational economic maximisation assumptions are likely to be of particular relevance to the wine industry, where previous research has established that owner motivations can include factors other than profit (Scott Morton & Podolny, 2002).

An assumption that formalised, sophisticated management accounting practices are not only desirable, but necessary, has been implicit in industry initiatives. For example, the Directions to 2025 Small Business Benchmarking Guide asserts a gross margin of 50% is required for a wine business to be sustainable (Deloitte Touche Tomatsu, 2007a, p. 4). This gross margin target is based on the use of full absorption costing and the same document expresses concerns that wineries may be incorrectly calculating the value of inventory, for example by not including all production labour (including a commercially realistic representation of owners inputs) or not including depreciation of winery equipment (Deloitte Touche Tomatsu, 2007a). Existing research can be extrapolated to suggest that such directives may be concerning from both contingency and institutional theory perspectives:

**Concerns informed by contingency theory:**
Firstly, from an accounting skills point of view, expecting those firms that are deficient in terms of accounting expertise to really understand the concept of full absorption costing and the need for, and reasonable quantification of, commercial proxies for costs not actually incurred (eg where owners work for non-commercial rewards and or winery equipment is already substantially written off) is an ambitious expectation. Secondly, even in firms where the concepts are understood, dealing with the logistics of maintaining records can be expected to be onerous in terms of time, software and staff resources.

Research undertaken in this area will also need to be conscious of the potential for contradictory results driven by different measures of what constitutes an appropriate and or sophisticated system for an SME winery. The manufacture of wine has the potential to be a highly complex process, but on the other hand many businesses outsource grape processing. Similarly, the types of products included in a winery’s portfolio and the target markets pursued can all influence the level of complexity involved in running the business. As such, the systems that are most appropriate for maximising the utility of one winery might be quite different from the system needed by another winery, and this complexity is likely to be difficult to capture in research.

Concerns informed by institutional theory:

It is the intention of industry stakeholders to support SMEs development in terms of accessing and using meaningful management accounting information. However, previous research has alerted us to the fact that firms can employ management accounting information to pursue alternate ends. The use of management accounting information for legitimating purposes is of potential relevance in the industry. Talk of sustainability and the need for rationalisation and upskilling may prompt stakeholders to adopt a facade of sophisticated, formalised management accounting processes, as per Dirsmith’s (1998) warning that management accounting rhetoric can be used to symbolically demonstrate commitment to rational practice.

4. CONCLUSION

Prior studies examining “what” SMEs do with regards to management accounting have resulted in a contradictory and inconclusive body of literature that is yet to be reconciled or synthesised. Factors that have driven contradiction including varying levels of business complexity and the disputed validity of assumed rational economic maximisation are likely to be of particular relevance to the Australian wine industry. Before we can investigate how and why SMEs use accounting information, we must first establish what constitutes “management accounting” for an SME winery.

Research considering “how” SMEs use management accounting information has identified disconnects between information compiled and information used, and between what conventional wisdom (e.g., text book knowledge) expects to be useful and what SMEs appear to consider useful. This is of particular relevance to the Australian wine industry because industry level stakeholder attempts to support and develop the management accounting efforts of SME wineries may be based on incorrect understanding of such entities’ actual information needs.
Existing research has alerted us to the significant but often overlooked contribution to be made by informal management accounting systems. There is a potential for future research to add value by examining the management accounting systems of high achieving SME firms with a view to perhaps discovering innovative, informal approaches to accessing and utilising meaningful management accounting information.

References


