The Role of Accounting Information in Decision-Making Processes in a German Dairy Cooperative

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International management accounting research has largely examined the use of accounting information in relation to decision-making strategies of top managers by focusing on evidence in the Anglo-American contexts. However, very little rigorous research has been conducted in other countries, which may have different historical, political, economic and social contexts largely because of the assumption that these Anglo-American strategies and practices are equally applicable and relevant in other countries. Rejecting these simplistic assumptions, this study examines the role of accounting information in a German cooperative and examines the political and economic aspects of decision-making by top managers. The objective is to show how the board of directors and senior managers use accounting information as part of their decision-making strategies and importantly how this use of accounting information is influenced by Germany’s unique political, cultural, economic, social, legal and historical environment. This case study applies institutional theory in order to analyse the impact and influence of the broader institutional environment on accounting and its role in decision-making. Indeed, this case study of a German dairy cooperative, provides evidence of the uniqueness of decision-making strategies in Germany and identifies the integration of accounting and specific strategic objectives in the decision-making process. The findings indicate a greater focus on understanding important contextual influences than a dependency on narrowly defined technical aspects of accounting information. Additionally, strategies, long-term orientation and greater focus on participation are of particular importance. Moreover, decisions are based to a greater extent on both quantitative and qualitative data, which are evaluated in relation to the broader environment. In light of the ongoing globalisation process, the awareness of differences in decision-making processes will contribute to a better understanding of the role of management accounting in the globalising world. This research has significant implications for the international application of management accounting procedures and practices in decision-making processes. Multinational enterprises, governments and researcher would benefit from such insights into the utilisation of accounting information in various national contexts.
**Introduction**

In the debate on globalisation, the importance of contextual factors in decision-making strategies, processes and preferences has become a controversial issue in international management accounting literature. Arguments for convergence and uniformity in decision-making strategies, processes and preferences often emphasize the increasing adoption of similar management philosophies and system designs (Ittner and Larcker 1997; Granlund and Lukka 1998a, 1998b; Shields 1998; Carr 2006; Liu and Pan 2007). This debate questions the reasons for taking into account the economic, social, legal, political and cultural environment in studying decision-making strategies, practices and preferences (Granlund and Lukka 1998a). However, this focus on global integration of management styles is often contested by evidence that shows strong differences across countries (Carr et al. 1994; Edwards et al. 2002; Klarsfeld and Mabey 2004; Carr 2006). Indeed, evidence indicates that there is a greater degree of convergence on the technical level because of the application of similar management accounting systems and practices. However, differences remain in the specific application, integration and interpretation of data in decision-making strategies and processes. Furthermore, globalisation has induced an increasing complexity that requires managers to apply greater professional judgement. Importantly, judgement is strongly influenced by the economic, social, legal, political and cultural environment. As such, there is an increasing need for a greater understanding of differences in decision-making strategies, processes and preferences (Hopwood 1999; Brock et al. 2000; Edwards et al. 2002; Carr 2006).

This paper contributes to management accounting literature by providing insights into the decision-making strategies and preferences of managers in a German dairy cooperative by utilising an institutional theory approach that takes into account the importance of economic, social, legal, political and cultural environment. Importantly, this case study provides evidence that these contextual factors and manager’s preferences strongly influence the utilisation and interpretation of accounting information in decision-making strategies and processes. We argue that these differences in utilisation and interpretation limit the convergence process of management accounting practices.

Although several studies have emphasized the continuing importance of national differences in management accounting, these have largely focused on the application of specific management accounting practices and objectives (Carr et al. 1994; Carr and Tomkins 1998; Chow et al. 1999; Carr and Garcia 2003; Klarsfeld and Mabey 2004; Carr 2005, 2006). Indeed, only a limited number of studies in international management accounting research have focused on the role and utilisation of accounting information in the holistic context of
decision-making strategies, processes and preferences (Carr et al. 1994; Wouters and Verdaasdonk 2002).

Moreover, the limited availability of research on the role and utilisation of accounting information in decision-making strategies is often characterized by a tendency to overgeneralize obtained insights as national or regional characteristics. For example, some studies have emphasized European management strategies. In our opinion this is a questionable concept because it neglects the uniqueness of various countries in Europe (Goffee and Jones 1995). Moreover, these studies have tended to consider culture as an important factor, but have failed to provide a rigorous explanation of the various aspects of culture and of its institutional embeddedness (Wagenhofer 2006). Furthermore, research has often focused only on larger multinational enterprises with a lack of research in relation to other forms of business organisation (Carr and Garcia 2003).

Indeed, no study has examined the influence of contextual factors on the role and utilisation of accounting information in decision-making strategies and processes and managers’ preferences on this utilisation in a German cooperative. As such, our study takes into account internal factors such as managers’ preferences, information requirements, strategic and financial objectives and the importance of intuition in decision-making. Importantly, these preferences and practices are evaluated by taking into account the broader contextual and cultural environment such as legal regulations, the specificities of the dairy industry and German cultural preferences. Thus, our study contributes to the existing management accounting literature by providing a holistic insight into the role and utilisation of accounting information in decision-making strategies and processes and managers’ preferences on this utilisation.

The objective of this paper is to provide a holistic understanding of the influence of the broader contextual and cultural factors on the relationship between management decision-making strategies, processes and preferences and accounting information. We show that this relationship is strongly influenced by contextual factors, which limit convergence of management accounting practices. Previous studies have often focused on decision-making strategies and processes as well as managers’ preferences but failed to rigorously evaluate how these strategies, processes and preferences influence the role and utilisation of accounting information. As such, this study contributes to the existing management accounting literature by providing evidence that contextual factors such as culture, the cooperative structure, national and international regulations as well as managers’ preferences strongly influence the role and utilisation of accounting information.
Only a limited number of studies have provided rigorous evidence on how contextual factors influence the role and utilisation of accounting information in decision-making processes and strategies and manager’s preferences towards this utilisation of accounting information. Two aspects that have received researchers’ attention are the influence of strategic and financial objectives in decision-making processes as well as external pressures such as global integration and competition. In relation to studies evaluating the importance of financial and strategic objectives, a growing number of researchers suggest convergence towards short-term financial objectives and orientation (Ittner and Larcker 1997; Carr 2006) with a few studies showing country specific differences. Furthermore, researchers have provided evidence that management accounting practices become increasingly similar as a result of environmental pressures and with the objective to achieve and/or retain legitimacy (DiMaggio and Powell 1983; Covaleski and Dirsmith 1991; Granlund and Lukka 1998b; Lapsley and Pallot 2000; Ahmed and Scapens 2003).

We argue that the role and utilisation of accounting information in decision-making strategies and processes as well as managers’ preferences are divergent despite the existence of external influences that might drive convergence. Moreover, we argue that there is only limited convergence towards short-term financial objectives as financial and strategic objectives and the subsequent use of accounting information are strongly influenced by decision-making strategies, processes and managers’ preferences. Indeed, we provide evidence that convergence towards short-term financial objectives is limited in this case of a German dairy cooperative and more importantly, we reveal that the contextual influence on the role and utilisation of accounting information is driven by a complex interplay of numerous contextual, that is exogenous and endogenous factors such as national and international market pressures, the cooperative structure, justification pressures and company objectives. As a result, we find only limited and superficial evidence of convergence of management accounting practices. While there might be evidence of converging in the choice of applied management accounting practices, this refers only to the technical level of accounting practices. Indeed, technical convergence has to be differentiated from de facto convergence, which implies uniform application and interpretation of accounting data.

This case study of a German dairy cooperative invokes institutional theory to evaluate the influence of the broader context on the role and utilisation of accounting information in decision-making strategies and processes. Importantly, evidence is provided that the strong focus on institutional isomorphism, that is increasing similarities of organisational structures and processes because of institutional pressures, needs to be re-evaluated. Institutional theory has long been established as an important perspective in management accounting research, because it provides insight into institutional dynamics and considers the
importance of contextual factors on shaping management accounting practices (Lounsbury 2007). Institutional theory and in particular neo-institutional theory, primarily advocated by DiMaggio and Powell (1983) and Meyer and Rowan (1977a) have become prevalent approaches in organisational and management accounting research and have largely focused on organisational isomorphism (Covaleski and Dirsmith 1988; Carruthers 1995; Fogarty 1996; Dirsmith et al. 1997; Cooper et al. 1998; Fogarty and Rogers 2005; Jang 2005; Robson et al. 2007). In contrast to this strong focus on organisational adoption and imitation, we will provide evidence that organisational isomorphism needs to be re-evaluated considering the importance of other institutional influences and multiple logics. As such, we follow Lounsbury’s (2007) call for greater attention to the broader cultural frameworks and actors within these cultural frameworks, which is important in overcoming the somewhat pervasive focus on isomorphism.

This case study of the role and utilisation of accounting information in decision-making strategies and processes contributes to international management accounting literature in at least three respects. First, only a very limited number of studies have evaluated the role and utilisation of accounting information in decision-making strategies and processes and more importantly, no study has provided evidence about the contextual influences that shape the role and utilisation of accounting information in a German dairy cooperative. Second, this paper also contributes to international management accounting research by refuting the assumption of increasing convergence in the role and utilisation of accounting information. Third, the paper contributes on a conceptual level by emphasising the limitations of a focus on isomorphism in institutional theory.

**Literature review**

A review of the literature on management accounting practices suggests that accounting practices are influenced by contextual factors including wider environmental and organisational factors (Flamholtz 1983; Hopwood 1987; Rayburn and Rayburn 1991). The influence of contextual factors is likely to lead to differences in the role and utilisation of accounting information in decision-making strategies and processes and importantly to differences in managers’ preferences. However, management accounting literature has also suggested convergence and uniformity of management accounting practices because of the increasing adoption of similar management philosophies and system designs (Ittner and Larcker 1997; Granlund and Lukka 1998a, 1998b; Shields 1998; Carr 2006; Liu and Pan 2007). Indeed, institutional theorists have argued that the embeddedness of organisations in their institutional context has resulted in similar organisational identities and structures leading to congruence between the external institutional environment and organisations (Meyer and Rowan 1977b; DiMaggio and Powell 1983).
In the move towards globalisation, the concepts of congruence with the institutional environment and organisational isomorphism have led to the assumption of convergence of accounting practices. Indeed, it has been argued that the increasing pressure of external factors such as market pressures, government regulations and/or financing requirements have resulted in organisations increasingly adopting similar management structures and processes (Ittner and Larcker 1997; Granlund and Lukka 1998a; Shields 1998; Carr 2006). While agreement exists that external factors have an influence on companies’ management structures and processes, the neo-institutional approach has been criticised for exclusively focussing on external factors (Greenwood and Hinings 1996; Hirsch and Lounsbury 1997; Lounsbury 2007). There is evidence, which reveals the influence of internal factors on management processes and structures; emphasizing the importance of a holistic analysis. Indeed, a holistic analysis enables the researcher to integrate other institutional influences, multiple logics and importantly it considers the cultural framework and the personal characteristics of decision makers (Lounsbury 2007). Accounting research has been criticised for its focus on technical aspects and importantly for neglecting the importance of culture and other contextual factors that influence professional judgement, which has to be applied increasingly across all accounting disciplines (Patel et al. 2002; Patel 2003, 2004; Lounsbury 2007).

The strong focus on isomorphism in management accounting research has resulted in a number of articles that provide evidence about increasing similarities and global adoption of management accounting practices and decision-making strategies and processes (Ittner and Larcker 1997; Granlund and Lukka 1998b; Ben-Arieh and Qian 2003; Carr 2005; Liu and Pan 2007). However, the role and utilisation of accounting information in these decision-making processes and strategies has not been rigorously analysed. Indeed, the literature provides evidence about differences in decision-making strategies, but has largely neglected the role and utilisation of accounting information in these processes. Importantly, the academic literature has failed to show the influence of contextual factors such as managers’ preferences and structural pressures to provide a holistic analysis.

An exception to the limitations of management accounting research in relation to differences in the utilisation of accounting information has been provided by Carr et al. (1994) and Carr (1994; 1998) who have shown that national differences exist in relation to the focus on strategic and financial objectives and importantly that these differences can lead to variations in the role, interpretation and utilisation of accounting data such as Return on Investment (ROI) (Carr et al. 1994; Carr and Tomkins 1998; Carr 2006). In their study of the automobile industry in different countries, Carr et al (1994) provide evidence that similar management accounting tools are applied but that the interpretation of the data and the focus on these
accounting figures differs between countries. Importantly, they revealed a preference for longer term strategic objectives in Germany compared with the shorter term objectives of British automobile manufacturing firms.

While Carr et al. (1994) provide valuable insights into the role and utilisation of accounting information in decision-making processes and strategies and managers preferences on this utilisation, they nevertheless do not engage in a deeper and more contextual analysis of the drivers of this utilisation of accounting information and managers preferences. Indeed, they do not consider the complexity that determines managers’ preferences for certain objectives. As such, Carr et al. (1994) provide evidence that shows the existence of national differences, but they do not attempt to provide a holistic explanation. Importantly, international accounting literature and in particular cross-cultural studies have been criticised for neglecting the importance of relevant historical, sociological and psychological literature to explain differences and often address culture as a ‘black box’ (Harrison and McKinnon 1999; Patel et al. 2002; Patel 2003; Doupnik and Tsakumis 2004; Patel 2004). In contrast, this study addresses the influence of strategic and financial objectives by taking into account relevant historical, sociological and psychological literature to provide fresher and sharper insights into the complexities of this topic.

Later studies by Carr (2005; 2006) indicate that intra-country differences exist in relation to convergence of management approaches and that these differences can be related to ownership structures. Carr (2006) argues that differences between strategic approaches of Anglo-Saxon and German public companies are diminishing with a stronger focus on short-term financial perspectives as a result of convergence pressures. However, these changes are far less prominent in German family firms that Carr (2006) perceives as being less influenced by institutional changes. Although Carr (2005, 2006) only provides a limited analysis of the factors that shape strategic objectives in different settings, his emphasis on the relevance of ownership structure is important. Indeed, no study has evaluated the role and utilisation of accounting information in decision-making strategies and processes and managers’ preferences of this utilisation in a cooperative setting. Along Carr’s (2005) line of argument, we evaluate the influence of the cooperative structure on the role and utilisation of accounting information in decision-making in general and the influence on short-term financial versus long-term strategic objectives in particular.

Research on the influence of other contextual variables on the role and utilisation of accounting information is very limited, in particular in relation to the influence of internal factors. As mentioned earlier, neo-institutional theory has largely focused on external factors such as increasing competition, market pressure and international regulations but has failed to provide insights into the influence of internal factors, which are likely to limit convergence
of management accounting practices and preferences (Greenwood and Hinings 1996; Hirsch and Lounsbury 1997; Patel et al. 2002; Patel 2003, 2004; Lounsbury 2007). It is the objective of this paper to provide a holistic contextual analysis. As such, the evaluation of the role and utilisation of accounting information considers a number of behavioural factors such as the German culture, the influence of intuitive decision-making as well as organisational culture and objectives.

Psychological studies have provided evidence that intuition can be an important part of decision-making (Mintzberg 1976; Simon 1987; Hall et al. 2007). Researchers have argued that intuition is part of every decision and that intuition and analysis are complementary (Meyer and Scott 1983; Simon 1987; Frantz 2003). Furthermore, intuition is not seen as an abstract concept, but as the result of a subconscious process that considers previous decisions and experiences. Intuition is thus thought to be sourced by concepts, techniques, patterns and beliefs that are impressed on people’s minds and increase through experience, knowledge and education (Barnard 1938). Intuition has also been regarded as rational, because of its ability to extend the limited boundaries of rationality by drawing on knowledge, experience and recognition of familiarities (Simon 1987). Furthermore, intuition is thought to be particularly important in ill-structured situations, in which managers face time and information restrictions. The subconscious feeling of experienced managers can then be a powerful factor that leads to successful management, while a focus on rational management could result in a “paralysis by analysis” (Mintzberg 1976; Hurst 1984; Langley 1995; Kuo 1998; v. Werder 1999).

Although intuition has been established as a relevant factor in decision-making processes, its influence on the role and utilisation of accounting information has not been evaluated. The literature on convergence of management accounting practices suggests an increasing focus on short-term financial objectives that are driven by financial performance analyses, which might limit the importance of intuition in decision-making strategies and processes (Carr 2005, 2006). However, the extent of this convergence towards short-term objectives is still debatable. Moreover, a number of questions remain regarding the relation between intuitive decision-making and the use and utilisation of accounting information. An interesting aspect is the extent to which intuition can become a substitute for accounting information and the extent in which intuitive feelings lead to an engagement in a deeper analysis of accounting information.

Other influencing factors that are likely to determine the use of accounting information and managers’ preferences on this utilisation are the cultural, social and educational background of managers. The German culture and people have been known for a tendency to follow rules and analytic or technical evaluations (Djursssa 1994). Indeed, Germans are said to
focus on objective information and a desire to enable reliable analyses that anticipate opportunities as well as possible risks (Carr et al. 1994; Lubatkin and Floyd 1997). These assumptions indicate that decision-making should rely to a greater degree on the use of accounting information than on intuition. However, the influence of culture has to be seen in the context of other factors. Thus, this study evaluates the role and utilisation of accounting information in the context of the dairy cooperative setting and under consideration of both external and internal factors of influence.

In relation to the focus on analytical thinking and reliable information in the German culture, emphasis has also been placed on information requirements and financial analysis, which are important aspects of decision-making strategies and processes (Wouters and Verdaasdonk 2002; Hall et al. 2007). Studies have provided evidence that the complexity of financial decision-making has increased and importantly that it has resulted in an increasing implementation of sophisticated and efficient analysis techniques by managers in different nations (Zopounidis and Doumpos 2002). Moreover, an increasing dominance of sophisticated Discounted Cash Flow (DCF) methods has been indicated, which are however less used in strategic investment decisions (Pike 1983). Yet again, the literature on these aspects does not provide a holistic explanation when and how managers use this accounting information (Wouters and Verdaasdonk 2002).

Despite the scarcity of literature on the subject of information requirements and analysis of accounting information, an important aspect in relation to this study is the evidence provided by Carr’s (1994) study that shows that business decisions in Germany are often not the result of formal financial evaluations. In contrast, his analysis of German companies has revealed that decisions often have an incremental basis with the intention to preserve flexibility and reduce risk (Carr et al. 1994). However, no research has yet analysed to what extent the conflicting forces that is the cultural focus on analytical thinking and the relatively low preference for formal financial evaluations, influence the role and utilisation of accounting information.

In relation to general information requirements, the literature suggests that information increases confidence in judgements (Arkes et al. 1986; Stewart et al. 1992; Gill et al. 1998; Hall et al. 2007) and importantly that justification pressures lead to an increase in utilised information (Huber and Seiser 2001). As a preference for reliable and objective analysis is evident in the German culture, managers should have a relatively high demand for information in general and accounting information in particular. Furthermore, justification pressures are an important feature of a cooperative company structure as managers often need the members’ approval for decisions. As such, we would expect elaborate information requirements. However, the influence of one factor should not be measured without
considering the relevant context. Thus, this case study provides evidence about the importance of these factors within the institutional cooperative setting.

Indeed, we reveal that the cooperative setting and other contextual factors such as the German legal environment, the dairy industry and European and German politics need to be considered to evaluate the role and utilisation of accounting information in decision-making strategies and processes. Importantly, we integrate other contextual factors such as German culture to provide a holistic evaluation and to capture the full complexity of this phenomenon. Although it is out of the scope of this paper to provide a literature review of all factors of influence, the following paragraphs focus on the cooperative setting because of its specific importance to this study.

**Cooperatives in Germany**

Germany has a rich and longstanding cooperative tradition with cooperatives being an important organisational structure in the German economic environment from their early beginnings in the middle of the 19th century until present times of global integration (Engelhardt 1971; Schaeffler 1981; Zerche 1981; Duelfer 1984; Jaudzims 1985; Aschhoff and Henningsen 1996; Theurl 2004; Theurl and Schweinsberg 2004). Recently, it has been argued that cooperatives provide a sensible strategic option that could act as a cultural and economic counterbalance to the negative consequences of globalisation through providing valuable achievements in the region and for the society as a whole (Santer 2004; Theurl and Schweinsberg 2004; Gleber 2006). As such, this study provides insights into a topic that might be of increasing interest in relation to future developments.

Cooperatives need to be distinguished from other forms of social organisation because of their structure and their different main objectives that focus on members’ welfare. Essentially, cooperatives are businesses that are owned and controlled by a group of individuals with the basic mandate to advance the economic and/or cultural/social development of these members (Henzler 1970; Boettcher 1980) (Genossenschaftsgesetz, §1). The literature distinguishes cooperatives often on the basis of three characterising principles. First, cooperatives are legally bound to follow the user-benefit principle with the objective to promote economic efficiency and profitability or the social and cultural interests of the members (Genossenschaftsgesetz, §1). Second, the members provide the cooperative with equity while being the cooperatives’ suppliers or customers at the same time, which is known as the user-owner principle or principle of identity. Finally, cooperatives are bound to the principle of user-control and democratic procedure that relate to members’ participation. The members have equal rights and are eligible to take part in the cooperatives’ self-autonomy. Within this structure, the members can become active in voluntary capacities on the board and supervisory board of the cooperative. Importantly, these characteristics of a cooperative
have profound implications for management and decision-making. For example, the objective of cooperatives is to optimise performance and value for their members, which has to be distinguished from the objective of profit maximisation in corporations (Roy 1969; Aschhoff and Henningsen 1996; Katz 1998; Greve 2001; Runkel 2003).

The differences in objectives influence decision-making strategies and processes (Katz 1998; Kyriakopoulos et al. 2004) and are thus likely to influence the role and utilisation of accounting information. For example, researchers have argued that agricultural cooperatives follow more risk averse strategies, because their members assume risk in their primary enterprise and do not wish to increase risk through the operations of the cooperative (Katz 1998). Moreover, the user-control and user-owner principles influence the strategic orientation of cooperatives. Owners are likely to prefer timely distribution of profits to long-term strategic investments because of the varying planning horizons between them and the cooperative as a whole. Indeed, the distribution of profits benefits the owner directly, while the share of benefits from long-term strategic investments is dependent on the remaining time that the owner intends to remain a member of the cooperative (Theuvsen and Ebneth 2004; Schramm et al. 2005). Both factors are likely to influence the role and utilisation of accounting information in decision-making strategies and processes and managers’ preferences on this utilisation. Importantly, this evidence suggests a short-term orientation of cooperatives while cross-cultural studies on German companies provided evidence of a greater focus on strategic long-term goals (Carr et al. 1994; Carr 2006).

Another important factor that has to be considered in relation to any analysis about German cooperatives are the regulations set out in the cooperative law (Genossenschaftsgesetz) as German cooperatives are private-enterprise entities. Besides the earlier mentioned mandate to advance members' welfare, the cooperative law sets a number of requirements in relation to members' representation and auditing requirements. For example, cooperatives with more than 20 members are required to have a board and supervisory board with the board being the cooperatives judicial and extra-judicial representative (Genossenschaftsgesetz §9). By law, cooperatives have to be members of an auditing association which has to audit the cooperative in accordance with the German commercial code (Genossenschaftsgesetz §§.53,54 & 55). In addition, the cooperative’s statutes have to determine aspects such as the registration of resolutions and the summoning of the general assembly in which the members or their elected representatives exercise their rights (Genossenschaftsgesetz §§ 5-7; 43 & 43a).

These requirements that are set out in the cooperative law are likely to influence the role and utilisation of accounting information. We have already emphasized that the company’s structure and in particular its ownership is likely to influence strategic orientation and
emphasize risk aversion. Furthermore, the participation of members is likely to result in justification pressures. As pointed out earlier, justification pressures might increase the amount of utilised information. This leads to the assumptions that accounting information can be used to justify decisions undertaken by the board or that it can be used to convince members to vote in favour of certain proposed decisions and investments.

It is our objective to reveal the influence of these interconnected factors on the role and utilisation of accounting information in decision-making strategies and processes and to evaluate the influence on managers’ preferences on the utilisation in more detail. This review on management accounting literature and cooperatives has already shown that multiple factors are likely to influence the role and utilisation of accounting information. Our analysis of the German dairy cooperative provides further evidence that the utilisation of accounting information is influenced by multiple endogenous and exogenous contextual factors. Before providing a more detailed analysis of the organisational setting and the German dairy industry in general, the next paragraphs explain the approach and methodology that were applied in this paper.

**Method: Case Study**

The research is based on a case study of a German dairy cooperative, which was conducted in January 2008. The case study approach was adopted because of its consistency with the objectives of this study. Case studies allow considering the influence and impact of the broader contextual environment including political, legal, economic, historical, social and cultural factors (Yin 2003). Indeed, this study aims to extend existing management accounting literature that often failed to provide a rigorous holistic analysis. Furthermore, case studies are useful when relationships between factors are complex and dynamic (Stake 1995; Eisenhardt 2002; Emsley and Kidon 2007). This study of the influence of contextual factors on the role and utilisation of accounting information in decision-making strategies, processes and managers’ preferences on this utilisation matches this criterion because of the number, diversity and contradictory nature of influencing factors. Moreover case studies provide valuable insights when the impacts of factors are difficult to quantify. This criterion is certainly matched by the various influencing factors such as national policies, the specificities of the dairy industry, the cooperative structure and importantly managers’ preferences and their opinion about intuition and emotion in decision-making strategies (Stake 1995; Yin 2003).

The case study approach has been adopted to examine the current role and utilisation of accounting information in a German dairy cooperative and to provide insights on how this role and utilisation of accounting information is influenced by contextual factors such as the cooperative structure, strategic objectives, market pressures and German culture.
Data were gathered from multiple sources including semi-structured interviews with senior managers and members of the board of the dairy cooperative and its subsidiaries and an examination of financial reports such as annual reports, investment plans, budget and marketing plans. This data collection was enhanced by academic literature on decision-making strategies, practices and preferences, the influence of globalisation on convergence of accounting practices and specifically literature and press reports on the dairy industry and cooperatives. This use of multiple sources allows evaluating a broader range of issues and factors, which is consistent with our objective to provide a holistic and contextual evaluation (Webb et al. 1966; Denzin 1978; Jick 1979). This use of different sources of information, also known as data triangulation, improves the quality of research by providing more accurate and convincing findings. Indeed, it has been claimed that data triangulation allows internal checks on validity (Denzin 1978; Hoque and Hopper 1994; Yin 2003).

Nine interviewees were selected in order to gather information on decision-making strategies, processes and preferences from a broad perspective and a number of functional areas. As such, main decision makers including the chief executive officer, the directors of finance, production, sales and marketing, chief executive officers of subsidiaries as well as the honorary chairman were interviewed. Prior to the interview the participants received a copy of the interview guideline to outline the proposed interview structure and a covering letter explaining the objective of the study. The prior distribution of the interview guideline was supposed to allow the participants more time for consideration and to enable an effective use of the interview time (Ferreira and Merchant 1992).

In management accounting literature a discussion exist about whether a small number of interviews can be considered efficient. Nine interviews is consistent with other case studies in management accounting research that varied between 5 and 12 interviews (Langfield-Smith and Smith 2003; Quattrone and Hopper 2005). Moreover, the sufficiency of interviews is dependent on the amount of new information that can be retrieved with each one (Ahrens and Chapmann 2004). In this case, the nine interviewees of our study represented the major decision makers in the dairy cooperative. As such, the number of interviews is regarded as sufficient and, more importantly, providing comprehensive insights into the research question.

The topics selected for discussion included decision-making responsibilities and structures, a number of influencing factors such as the focus on financial and/or strategic objectives, usage of qualitative and quantitative data, the role of intuition, the influence of the cooperative structure as well as globalisation. Deliberately, the interviews were semi-structured to explore other factors of influence on the role and utilisation of accounting information in decision-making processes and strategies in a German dairy cooperative. The length of the interviews varied between 1 hour and 3 hours. All interviews were recorded and
transcribed to avoid inaccuracies because of poor recall (Yin 2003). The transcribed interviews were analysed with the software NVivo, a tool which is increasingly used in management accounting research to facilitate data analysis and enhance the credibility of case study research (Lillis 1999; Malina and Selto 2001; Abernethy et al. 2005).

**Background to the dairy cooperative and its environment**

The following paragraphs provide insights into the dairy industry in Germany and importantly give an overview of the decision-making structure and processes of the dairy cooperative that was studied for this paper. It is out of scope of this paper to provide a detailed overview of all changes in the German dairy industry. However, the following paragraphs provide an overview and present information that is particularly relevant in relation to decision-making strategies and processes and the role and utilisation of accounting information within these.

**The dairy industry in Germany**

In 2005, the German dairy industry was the food industry’s strongest sector with a total turnover of almost 21 billion Euros (Milchindustrie Verband 2007). Recently, its structure has been strongly influenced by increasing competition due to globalisation pressures and European integration. While the German dairy industry has traditionally been characterised by small and medium sized businesses, growing competition and subsequent rationalisation efforts have led to a remarkable concentration process with a significant number of mergers and acquisitions. The number of dairy companies decreased from more than 300 milk processing companies in the 1990s to 101 in 2006 (Milchindustrie Verband 2008). Importantly, this process is expected to continue and to transform the German dairy industry into an oligopoly (Theuvsen and Ebneth 2004). However, in comparison with foreign dairy processing companies German companies are as a rule smaller and weaker in terms of capital and turnover figures (Milchindustrie Verband 2007). Nevertheless, the concentration process has become increasingly apparent in Germany. In 2006, the two largest German dairy cooperatives, Nordmilch eG and Humana Milchunion eG processed 43.9% of total milk production and were generating 37.7% of total turnover. The largest private company, Mueller, processed another 12.1% of total milk production and generated 12.4% of total turnover. Importantly, these figures show that the dairy industry in Germany is still dominated by cooperatives (Verlag Th. Mann 2004).

Similar to other industries, European market liberalisation and internationalisation have had a profound influence on the dairy sector and companies’ strategies and objectives. While liberalisation and internationalisation are expected to provide opportunities in foreign markets, they are also increasing national and international competition. Importantly, the often saturated dairy markets in the home countries increasingly require innovative products and ingredients to generate added value and satisfactory profits. Indeed, empirical evidence
shows positive correlations between innovative behaviour and economic success (Stockmeyer 2001; Winkelmann 2004). Aside from the ongoing concentration process, these challenges have significant influences on companies’ goals and objectives and thus influence decision-making strategies and processes. However, it is unclear to what extent these changes contribute to changes in the utilisation of accounting information in decision-making strategies and processes and how these changes might influence managers’ preferences on the utilisation of accounting information.

Besides increasing market competition, German dairy companies also have to face increasing price pressures, which is likely to reinforce cooperatives’ short-term perspectives. Price pressures are driven by the highly concentrated retail sector, in which the top five retailers share 70% of total market turnover. This pressure is reinforced by a strong dependence on discounters, which market more than 50% of dairy products (Verlag Th. Mann 2004). These price pressures provoke particular problems for cooperatives, which have to follow the objective to increase their members’ welfare. In the case of the dairy industry, cooperatives’ members are farmers, whose welfare is increased by payments of high milk prices. Recall the previous argument that cooperatives are more likely to follow short-term goals than long-term strategic plans because of their member-owner structure. Importantly, the concentration in the retail sector is likely to reinforce cooperatives’ focus on short-term objectives to enable them to generate satisfactory short-term results. Indeed, German farmers have for a long time fought for higher milk prices to secure their basis of existence. Although a scarcity in the world market has strongly increased milk prices over the last year, farmers are still concerned and fighting for higher payments (Bonstein et al. 2007; Kohler 2007; Sueddeutsche Zeitung 2007; De Paoli 2008; Wocken et al. 2008). As farmers’ concerns and pressures are likely to reinforce the focus of cooperatives on short-term objectives, this behaviour is also likely to influence the utilisation of accounting information in decision-making strategies and processes and importantly managers’ preferences on this utilisation.

An aspect that has received considerable academic and political attention is the effect of European agricultural policies that strongly influence and distort the normal price and market mechanism of demand and supply and thus might influence decision-making strategies and processes. Since 1962 the European Union has a common agricultural policy (CAP) that follows the objective to support and promote efficient and sustainable farming and the long-term livelihood of Europe’s rural areas (European Commission 2004). While for a long time market stability was ensured through high subsidies, reimbursements and intervention prices, the latest reforms, Agenda 2000 and Mid-term Review in 2003, have tried to reduce these market support measures by inducing direct payments and income transfers. Although these
endeavours for greater market liberalisation significantly reduced trade distortions, direct support to farmers and regulations such as the quota system for milk and sugar still hinder market liberalisation and market efficiency (Bascou et al. 2004; Schrader 2004; Salamon et al. 2007). The dairy industry is strongly influenced by the quota system that allows a certain quota to each dairy farmer and penalises overproduction. With the total amount of milk being fixed, the regular market mechanisms of demand and supply do not influence the total production of milk. Although the quota system leads to distortions that might influence objectives and decision-making strategies, it is important to note that interventions have been greatly reduced. Intervention prices that used to stabilise the market and result in stable income for dairy corporations have been decreased to such an extent that market prices seem not to be widely affected any longer (Fischer Boel 2008). As such, the influence on company objectives and decision-making strategies and processes and subsequently the role and utilisation of accounting information might be limited. Nevertheless, the agricultural reforms of this century had significant impacts on dairy cooperatives that had to become more market orientated. It is likely that these changes have been accompanied by changes in the role and utilisation of accounting information in decision-making strategies and processes.

Furthermore, the dairy industry is still in a period of change that certainly influences the decision-making strategies and processes. Indeed, the concentration process and the increasing international orientation of dairy processing entities is partly seen as the result of increasing liberalisation of the dairy market and the expected abolition of the milk quota system by 2015. As such, mergers, acquisitions and joint ventures are becoming a promising strategy in a market that is characterised by agricultural reforms, increased competition and market pressures (Milchindustrie Verband 2008). Importantly, this has led and is increasingly going to lead to widely fluctuating milk prices (Bonstein et al. 2007; Kohler 2007; Sueddeutsche Zeitung 2007). As such, managers’ face increasingly complex structures in which calculations and prices are far less estimable and require greater application of professional judgement. These changes are likely to influence the role and utilisation of accounting information in decision-making strategies and processes. Importantly, we argue that the greater focus on professional judgement limits global convergence of management account practices as cultural and social factors increasingly have to be taken into account.

The dairy cooperative: Size, structure and objectives
The dairy cooperative that was studied to evaluate the role and utilisation of accounting information belongs to the top ten German dairy processing entities both, in relation to tons of milk processed and in relation to turnover. The structural changes of the dairy sector had a profound influence on the structure of the cooperative that has been actively engaged in
mergers, acquisitions and joint ventures over the last decade. While the dairy cooperative still makes most of its profit in the home market, it has an international profile with subsidiaries in southern European countries and global exports into more than 70 countries. As one senior manager commented, the objective is,

„The thing is primarily to establish oneself internationally and correspondingly to play also with the big ones (big players). And at the same time to achieve better alternative value added.“

Despite the international orientation, more than 80% of the cooperative’s turnover is still generated in the home market with about two thirds generated by own products and the remaining third by home brands (Annual Report 2006).

The high importance of home brands is typical for cooperatives and was explained in the interviews by referring to the member-owner structure of the cooperative which requires a fixed amount of milk to be processed and marketed. This fixed amount is often processed into basic milk products, which are mainly marketed at discounters. Furthermore, the cooperative follows mainly a cost leader strategy with in comparison lower emphasis on branded products (Annual report 2006). Indeed, this relatively small focus on brands is another typical feature of cooperatives in the dairy industry with the main brands belonging to private companies such as Mueller (Schramm et al. 2005).

The cooperative is organised in accordance with the German cooperative law and thus has the required committees; supervisory board, advisory board and a board that comprises executive and honorary members. Because of the size of the cooperative, the members are represented in an assembly consisting of one elected representative per 50 members. This assembly elects advisory and supervisory board with the advisory board electing honorary board members and appointing executive board members (Statutes 2005).

The structure of the dairy cooperative influences decision-making strategies and processes through its statutes and rules of procedure. The cooperative’ statutes determine the subject matters for which the representative assembly has to pass resolutions and importantly the statutes set the duties and responsibilities of the board as well as supervisory and advisory board. The duties and responsibilities of board and supervisory board are further defined in the rules of procedure, which also includes a paragraph on boards’ duties in relation to accounting and controlling. Finally, job descriptions and employment contracts determine responsibilities and the extent of authority over operations and decisions on the employee level (Rules of procedure 2005; Statutes 2005).
Important aspect in relation to decision-making strategies and processes and managers’ preferences is the chosen strategy of the dairy cooperative. In this case, the focus is on strategic growth with a strategic mix of cost leadership, product diversification and greater milk refinement procedures to increase stability and soundness of the company and to enable the payment of above average milk prices to members. This strategic focus includes targeted market orientation with an appropriate mix of private and home brands (Annual Report 2006).

The interviews revealed that these strategic objectives have induced a strong strategic restructuring and reorientation process to increase productivity, reduce costs and foster growth in promising future segments. This restructuring and reorientation endeavours have been driven by and implemented with the help of external consultants and internal project teams that have identified and suggested potentials and future actions. As a consequence, joint ventures, future cooperations as well as sales of subsidiaries have been discussed and partly implemented. Importantly, the strategic restructuring and reorganisation is accompanied by a consolidation phase, which has a significant influence on investment decisions that are intended to not exceed depreciation expenses. Nevertheless, management remarked that investment plans are flexible to the extent that upcoming opportunities, which are perceived to provide important strategic advantages, are taken into account independent of the general rule that investments should not exceed depreciation expenses.

Overall, the dairy cooperative and its strategies and objectives are strongly influenced by both the changes in the dairy sector with greater liberalisation, competition and price variations and the cooperative structure. The current reorganisation and restructuring strategies are direct consequences and are intended to secure the future stability and growth of the cooperative. Importantly, these changes in the environment and structure of the cooperative are likely to influence the role and utilisation of accounting information in decision-making strategies and processes and importantly managers’ preferences on this utilisation.

**The role and utilisation of accounting information in decision-making strategies and processes and mangers’ preferences**

Neo-institutional theory argues that the use of accounting information is shaped by environmental factors with similar environmental factors leading to similar applications of accounting information (Meyer and Rowan 1977b; DiMaggio and Powell 1983). However, our study emphasises that these environmental factors need to be evaluated in relation to other endogenous factors such as the cooperative structure and managers’ preferences. The interviews revealed the importance of maintaining a holistic point of view and more
importantly, they showed the need for a greater consideration of endogenous factors as isomorphism is limited despite increasing integration processes in the dairy industry. Evidence is provided that the role and utilisation of accounting information is the result of a complex structure of complementary and contradictory factors that reveal the uniqueness of the application and interpretation of management accounting approaches. The following paragraphs address the most significant factors of influence and show the multiple logics that exist in relation to the role and utilisation of accounting information in decision-making strategies and processes and managers’ preferences.

**Short-term vs. long-term perspective - The cooperative dilemma**

Corresponding to the present literature on cooperatives, all interviewees referred to the cooperative structure as an important influential factor on the decision-making strategies and processes and subsequently on the role and utilisation of accounting information.

Most importantly, statements referred to management’s responsibility towards members and member’s welfare with a strategic focus on high milk prices and stability to secure farmers’ incomes. Indeed, the cooperative’s members are strongly concerned about milk prices (Kohler 2007; Sueddeutsche Zeitung 2007; De Paoli 2008; Fischer Boel 2008; Milchindustrie Verband 2008; Wocken et al. 2008). As such, they are also concerned about the influence of strategic decisions and investments with a strong preference for positive short-term results instead of strategic objectives that might provide long-term benefits.

“(...) our famers keep an eye on that, how much increases the milk price? The big well-known question. And they want to have it rather today than tomorrow, to get something from it, a share of the results for the milk price. And that of course is the entrepreneurial decision, how much do we take out to increase the milk price and how much do we take to allow us further strategic operations.”

“It is surely the case that cooperatives tend to do only things that generate immediate profit; when the farmer can quickly see that the cooperative is working well. It is getting more and more difficult for a cooperative to engage in activities that make good long-term and structural sense if it wants to have short-term success (...). Against the background that we are a cooperative, we maybe invest with too much focus on short-term perspectives and not strategically enough. Because strategic investments do not generate immediate profit; that is why one leaves it.”

This focus on short-term perspectives influences the utilisation of accounting information with managers’ expressing that investments which provide higher Return on Investments (ROI) in a short-term period are more likely to be accepted by members. However, the cooperative does not have any formalized objectives in relation to ROI or amortization figures. Indeed, the cooperative has not yet prescribed the use of specific management accounting approaches. Nevertheless, ROI and amortisation calculations are common and expected for a number of investments.
Furthermore, the cooperative is often caught between members’ preference for short-term benefits and managements’ awareness of the importance of long-term strategic planning. All interviewees emphasized this contrast between management’s focus on the importance of strategic long-term objectives to ensure future stability, success and growth and members’ preference for short term achievements.

“I always have the impression that the board says, we think long-term, so the CEO basically thinks long-term and relatively stable and conservative. Quite right. And he says, don’t get confused by any short-term increases of return or milk prices, from a long-term perspective we are well and better situated with our product and production structure. On the other hand, the farmers’ representatives do think more in yearly terms. The prices go up, so should we. So, that really is always a fight, I say.”

Importantly, this conflict between members and managers influences the role and utilisation of accounting information in decision-making strategies and processes. While the cooperatives’ members focus is on high milk prices, the board sees its duty and responsibility in balancing members’ objectives with its own focus on securing stability and future growth. As such, it was expressed that the board has to foster an understanding that accounting information such as high ROIs and brief amortization periods are not the only measures of concern.

Overall, the findings provide mixed support in relation to short-term and long-term orientation. As pointed out previously, the cooperative’s management has the main objective to secure strategic long-term development while the members seem to prefer short-term profits. Nevertheless, the management seems to be successful in establishing and justifying long-term strategic objectives. As such, the results show similarities to Carr et al.’s (1994) and Carr’s (2006) studies in relation to strategic long-term orientation. And more importantly, the interviews suggest that a certain focus on short-term objectives is not necessarily driven by global convergence but is rather the result of the specific cooperative structure. Importantly, these differences in utilisation and interpretation of accounting data between members and managers indicate heterogeneity instead of homogeneity even within the cooperative. This contradicts claims for increasing similarities in the application and interpretation of accounting information.

Despite these conflicts between members and managers, the latter’s emphasis on the strategic long-term development of the cooperative has a strong influence on the role and utilisation of accounting information in decision-making strategies and processes. Importantly, the interviewees noted that a strategic focus can not be truly transferred into accounting information and evaluations based on accounting information. As such, they base decisions on various informational segments that include classical evaluations such as the calculation of ROI, but also other relevant qualitative and quantitative information. Importantly, these
findings are similar to Carr et al.’s (1994) results that emphasised the incremental basis of decision-making processes that follows the objective to preserve flexibility and reduce risk.

Importantly, the size and scope of a decision influence the extent to which both accounting information and other qualitative information is used. It was said that new strategic investments that are not part of the current business scope are usually evaluated under consideration of multiple political and strategic factors such as the competitive situation. Smaller investment decisions were regarded as requiring less rigorous evaluations. However, these limited evaluations were not perceived to be insufficient. In contrast, one manager commented that decisions are evaluated to a sufficient degree,

„but without killing oneself formalistically by calculating, but then you say, ok, the information is clear, I know what it is about, I can decide that with sufficient certainty, that is then relatively quick."

Finally, the interviews indicated that the development of the industry and cooperatives in particular has to be taken into account. The structural concentration process in the dairy industry was noted to have had an influence on decision-making in relation to the amount of information required. Indeed, it was remarked that the strategic fit might have sometimes been more important than any economic calculations. As one manager noted,

“(…) if these (decisions in the concentration process) are economically correctly formally calculated, there was simply a strategic fit with the region of the dairy farmers, of the product range, of the production volume or can we take it over or do we close it. That is actually very complex. Of course, the single decisions are formally processed, accordingly presented and legally analysed, but the degree of this depends on the case.”

Overall, management seems to focus to a greater extent on strategic objectives and limits the utilisation of accounting information in cases when it is perceived as unnecessary. Moreover, too detailed and rigorous calculations seem to be perceived as unnecessary. Indeed, managers gave the impression that the extent of accounting information needed to undertake decisions differs on the situation and needs to be regarded in relation to the perceived benefit of its utilisation. Finally, managers’ personal preferences were also mentioned as some described themselves as being focused on financial figures and would thus use accounting information to a greater extent than others. Nevertheless, managements’ long-term strategic objectives are influenced by the existing conflict with members’ who are more likely to have a short-term focus. Indeed, the next paragraphs provide a more detailed evaluation of the influence of the member-management relationship on the utilisation of accounting information.

*Members’ welfare and responsibility – The pressure of justification*
Closely related to the previously explained management-member conflicts is the influence of responsibility towards members. The issue of responsibility was indicated to induce a greater management focus on soundness and sureness in decision-making processes. The cooperative structure is characterised by equal rights and strong management responsibility towards members’ welfare. As such, cooperatives are inclined to be more cautious and more importantly the board is inclined to justify strategies, objectives and decisions to a greater extent than other legal forms such as stock operations. The pressure of justification is apparent in the requirements that demand members’ approval for certain larger decisions (Statutes 2005). As such, decisions such as joint ventures or greater investments need to be approved by the general assembly, which forces managers to justify their decisions to a large audience. As indicated in the academic literature (Huber and Seiser 2001), justification pressures are likely to extend the amount of utilised information to justify strategies, processes and distinct proposals. Indeed, managers’ comments give an indication on the influence of the cooperatives structure on decision-making and the utilisation of information.

“In a cooperative the farmers’ representatives actually represent all members, that means you have a large audience, who you have to show your decisions to (...), we have a need to explain this to all farmers in the meetings of the general assembly. Thus that is deeper informational content than a sole trader or even in a company in which there is no such large difference between members and management.”

“This is certainly related to the structure, large committees, board, supervisory board and sometimes advisory board that you have to convince a relatively large group of people (...). Not alone but partly that is explained by the legal structure that decision processes are more complicated and that caution is held high.”

The emphasis on extensive information is furthermore reinforced by the compulsory audit of cooperatives, which includes auditing of board decisions to enforce the protection of member interests (Genossenschaftsgesetz §§53, 54 & 55). Within this structure, decisions need to be considered carefully as failures and unintended developments might have significant negative consequences with the potential to affect personnel matters. The following statement of one board member clearly shows how the compulsory audit limits the willingness to reduce risks and thus focuses cautious behaviour.

“(…) that is of course a totally different situation, when the auditing association comes in and audits everything and shows this auditing report to the members’ representatives and all members, then of course the willingness to take risks decreases”.

This risk avoiding behaviour is reinforced by specific cultural aspects of the farming community, which is perceived as being more traditional and maybe more unforgiving than other communities. As one board member remarks:
“Our company had some bad luck with investments and as it is in agriculture, in traditional cooperatives, it will be talked about for the next 20 years. From the amount, it was nothing worth mentioning, maybe lost 1 or 2 million, but it was discussed for how long, in meetings of the representative assembly in which we had to be accountable (…), that certainly influences the next investment decisions.”

According to these statements the cooperative structure induces risk avoiding behaviour and supports a greater emphasis on extensive information in decision-making processes. The interviews clearly show that accounting information is important and is utilised in calculations such as ROI, amortization and contribution margins across different departments and subsidiaries. Comments such as the following were representative of the interview responses:

“Financial measures are immensely important.”

“The exciting thing about cooperatives is that you always calculate afterwards, what is the commercialisation. And that is done really exactly, product by product, which commercialisation I can achieve. That is virtually contribution margin; that is a criterion that is used. That is not a question at all. Without this calculation, as I know this house here, virtually nothing goes on.”

“(Profitability is calculated) in relation to depreciation, to market value and whatever else, calculatory depreciation is calculated (…). Or with some things you also use Discounted Cash-Flow Methods or earning power for acquisitions.”

These statements clearly indicate that accounting information is highly valued with a high importance assigned to financial calculations and thorough analysis. However, the structure of these evaluations strongly depends on the specific decision and related criteria. For example, product and distribution decisions are often focused on contribution margins. Indeed, calculations of contribution margins are part of the product briefing, a systematic approach towards evaluation of new or re-launched products. In contrast, evaluations of investment decisions seem not to follow any formal structure with the analysis and evaluation of accounting information differing from case to case.

Importantly, the high value that is placed on financial figures and accounting numbers is not entirely apparent in practical applications, which show a limited level of sophistication. Indeed, there was no evidence of very sophisticated analysis techniques and DCF methods as indicated in the literature (Pike 1983; Zopounidis and Doumpos 2002). Investment decisions are made in accordance with the investment plan that requires the calculation of costs and an estimation of depreciation and follows clear investment priorities. The CEO prescribes these priorities, which are set in accordance with the current situation of the cooperative and long-term objectives. Because of the restructuring and reorganisation phase, the four priorities in order of decreasing importance are: value creating activities, rationalisation, re- and new investments and extension investments. While it is expected that each of the
proposed investments is backed by economic analysis and economic calculations, the sophistication of methods used is often limited such as comparing costs, capital costs and depreciation with return. However, the interviewees differed slightly in their discussion on the extent of sophisticated methods that are currently used. On the one hand it was pointed out that no formalised decision-making strategy exists that would require any specific expected internal interest rate or stipulate explicit ROI expectations.

“And say then, I need a certain ROI for this investment or a particular risk premium or specific things, that you could imagine, that are done (by others), that is less done here.”

On the other hand it was stated that formal processes have been introduced already and that these do require certain standard procedures. Importantly, these procedures include various evaluation tools such as DCF methods or Earning value methods. These differences might be explained by the current endeavours to set up a common structure and standardised methods for all departments and subsidiaries that require a specific utilisation of accounting information in investment decisions.

Moreover, the differing statements are likely to be the result of different perspectives with a differentiation made between in-house evaluations and evaluations provided by external consultants. Indeed, larger investment decisions and in particular acquisitions of companies or new strategic investments do not rely exclusively on internal calculations from the accounting, finance and controlling departments. Indeed, such decisions are often accompanied by external consultants who provide a detailed and highly sophisticated analysis including all conventional measurement approaches to enable sound decision-making. Importantly, the choice to put external consultants in charge of gathering and analysing information to support decision-making processes is the result of two main factors, the cooperative structure and the limited in house experience.

The members of the board emphasised that great pressures exists to make sure that the right decisions are made because of board’s responsibility towards members’ welfare and indeed their function to represent members’ interest.

“If it is an important decision, I am thinking of large investment decisions of general nature, then we usually include an external consultant (in the decision-making process). There are specialised small consultants, specific ones, to get a parallel calculation, to secure again the own decision (…).”

Moreover, the cooperative structure with executive and honorary board members and democratic procedures reinforces the need for greater certainty and soundness in decision-making because of the dissimilar levels of information but equal decision responsibility. As such, external evaluations offer an opportunity to offset actual and perceived pressures that
exist because of members’ expectations and managements’ responsibilities. Furthermore, the integration of external consultations helps to balance the difference in insights and access to information between executive and honorary board members. As such, external evaluations reduce the pressure on honorary members to make their judgements based solemnly on executive board members’ subjective perceptions and evaluations. The inclusion of external evaluations was seen as an attempt for greater soundness in decision-making by extending evaluation processes and thus dividing responsibilities as indicated in the following statement:

“(…) and also for the colleagues that you have to see as well, to give the entire board some accountability. You have to take the decision-making process into account; that we have a honorary board and an executive board, the executive has the information, the proposals and the honorary one carries the decision as well. So, and then you have the question, can I really expect of the other board members to continuously make decisions on the data basis of colleagues?”

Overall, the case study provides evidence that the cooperative structure and justification pressures influence the role and utilisation of accounting information by increasing the amount of utilised accounting information. However, the sophistication and number of applied evaluation tools is not necessarily influenced. Furthermore, accounting information is an important factor in managements’ approaches with the objective to convince the members that managements’ decision-making is sound. However, the particular utilisation and evaluation of accounting information remains highly dependent on the size and scope of the decision to be made. This has also been revealed in the clear distinction between regular in-house calculations and more detailed and analytical procedures in specific cases of particular importance. However, the statements provided evidence that strategies, long-term orientation and greater focus on participation are of great importance. Furthermore, decisions are based to a greater extent on both quantitative and qualitative data, which are evaluated in their broader contexts.

While the focus on a great extent of utilised accounting information by applying relatively simple evaluation methods might seem surprising, the findings have to be evaluated with their context. Indeed, the interviews revealed that other factors are likely to influence and limit the utilisation of accounting information. These factors include but are not limited to the theoretical limitations of evaluation methods, the educational background of managers and farmers, cultural preferences and market pressures.

**Managers and farmers – Professional educational and informational expectations**

The educational background of decision makers has to be considered as a factor that influences the utilisation of accounting information, in particular in relation to the sophistication of evaluation approaches. As a result of the cooperative setting, decision-
making strategies and processes involve a great number of people. This large group of
decision makers is characterised by varying educational and social backgrounds as well as
varying personal preferences. Assumptions are likely that differences are most distinct
between farmers (that is members) and management because of the dissimilarities in their
respective professional education and their professional objectives. However, disparities do
not only arise between these distinct groups in the decision-making process, but are
apparent within the respective groups to a similar extent. Indeed, professional education,
work experience, age group and personal preferences seem to be highly relevant factors in
the utilisation of accounting information in decision-making strategies and processes.

The differences between the distinct decision-making groups was highlighted in the context
of the number of people that have to be convinced of decisions proposed by the board or
management in general:

“(…) that one has to convince a relatively large group of people, who are not necessarily
experts, one has to say that, that they are qualified farmers but in relation to business
matters they do not always make decisions”

“(…) you have a large audience, who you have to show your decisions to. But the
decision is processed that all understand and that the farmers’ representatives can justify
it externally”

Previously, we presented evidence that the pressure to justify decisions to farmers increases
the amount of utilisation of accounting information, but does not seem to foster a specifically
high sophistication of utilised management accounting approaches. Indeed, interviewees
remarked that one can not expect farmers to comprehend all methods and technical details
and importantly that they do not need to as only general expertise is needed to follow and
understand decision-making processes. Moreover, the interviewees pointed out that the
farmers are mainly interested in the milk price and the influence of decisions on future milk
prices. As such, the majority of farmers might not focus on the entire evaluation of major
decisions. The managers noted that it often comes down to one simple figure and question;
that is the number of cents that the milk price will increase because of a certain investment
and/or decision. As such, the justification pressures that arise from the cooperative structure
do not seem to result in higher expectations in relation to the number and sophistication of
utilised management accounting practices.

When more sophisticated evaluation approaches had been used, the information often
remained in the hands of the management and was not generally used to convince members
of certain decisions. An example is the previously discussed investment plan that is set up in
accordance with the cooperative priorities and shows the information that is considered to be
most important. The only partial display of project evaluations was, however, not considered inadequate, but as following the objective to provide essential information in an understandable manner to the farming community. Indeed, accounting information is mainly used to justify decision-making to the members. However, this does not set specific standards in relation to the utilisation of management accounting approaches. In contrast, managements' requirements and personal preferences seem to have a greater influence on the sophistication and number of applied approaches.

The interviews indicate that the choice of management accounting approaches is also dependent on managers’ preferences and their educational background. For example, all plant managers propose or require certain investments in the investment plan and are required to classify these in accordance with the company’s four investments priorities. However, besides this classification there are no formalised evaluation requirements yet. As such, calculations and evaluations are the choice of the specific manager. The influence of personal characteristics and educational background on this choice is evident in the following statement that relates to the arguments provided for investments:

„Some work according to forefathers’ custom, are small and modest and say, it should be our turn again but without any economic evaluation and the others, the more modern plant managers back theirs by an economic evaluation. That is not consistent within the group yet, but we are working on it (…). But the more modern, the younger, more technical plant managers they back everything up, because then they do have the certainty that their chances are the greatest”

Importantly, this limited application of evaluation methods by senior managers is possibly influenced by the company structure and organisation. Indeed, employees of this cooperative have often been employed from an early age, when the dairy cooperative was still a smaller player and economic evaluations might have been less important because of smaller, less competitive and more secured markets. The highly subsidized dairy market with price interventions might have limited the necessity of sophisticated in-depth evaluations because of stable guaranteed prices.

Furthermore, the traditional recruiting structure of the cooperative has to be taken into account. A number of senior managers are coming from a technical educational background and gained the required business knowledge on the job rather than in a formal education process. However, this process is changing as indicated in the following statement.

„The carrier as it was possible in former times, that one starts a job in the cooperative, I say here, in rubber boots, and then becomes the boss later. That is not possible anymore. The perviousness is not like this anymore and the requirements are higher right from the beginning.”
The more modern and younger managers often received a formal education in business administration, which might foster the utilisation of differing evaluation methods. Moreover, the growing business with quickly upcoming business opportunities might increase the importance of in-depth evaluations. This is particularly relevant in times of consolidation with scarce investment resources.

Besides the influence of personal characteristics, the first statement emphasises two other important aspects. First, the cooperative is changing towards a greater emphasis on common evaluation processes over all departments, plants and subsidiaries. Secondly, the chances for certain investment increases with the utilisation of economic evaluation methods. In particular this second aspect reveals again that increasing importance is given to the utilisation of management accounting approaches. However, this importance might be limited by other factors such as market pressures and requirements that might render certain calculations and evaluations unnecessary. We will discuss these limitations later in this paper.

The last paragraphs have shown that personal characteristics strongly influence the degree to which accounting information is utilised in decision-making processes. Importantly, these characteristics are influenced by German culture as the cooperative is based in Germany and all interviewees as well as the wide majority of members have been socialized in Germany. As such, the following paragraphs focus on the influence of the German culture on the role and utilisation of accounting information in decision-making strategies and processes.

**German culture and virtues**

The interviews provide insights that the German culture influences the role and utilisation of accounting information in decision-making strategies and processes and managers’ preferences on this utilisation. The characteristics that were emphasised by the majority of interviewees were largely congruent to the characteristics provided by academic literature. In particular, accuracy and thoroughness as well as punctuality and quickness were noted as being German characteristics (Carr et al. 1994; Djurssa 1994; Lubatkin and Floyd 1997). These impressions were often based on experiences and comparisons with other countries as evident in the following statements:

“So generally, when one compares Germany with Italy, Spain, Portugal, then I have the impression, then it is the case that the Germans are still the most accurate, the fastest, the most thorough in relation to all the economic processes as well.”

“That is admired by a lot of our customers or also not admired. Yes, we are particularly outstanding. We are punctual, accurate. (...) When you look at people in the group (...), sales people from England for example, who only come once a month (...). They have a totally different understanding of accuracy, punctuality, fulfilment of duties or similar things, which one claims as German virtues.”
Indeed, these statements suggest a strong focus on accuracy and thoroughness in the role and utilisation of accounting information in decision-making strategies and processes. Importantly, these virtues were perceived as beneficial and positive and told with a certain pride. However, the interviewees also referred to situations when the perceived beneficial cultural characteristics can have negative effects for the cooperative. These negative effects refer to being too focused on accuracy to the case of being pedantic and to having difficulties with changing the direction of decisions that have already been made. Indeed, the managers pointed out that only a fine line exists between being reasonably accurate and pedantic as well as between being focused on accuracy and accuracy as the power of determination. The following example of one senior manager critically reflects on this,

“The Germans are very accurate, that is when they plan something, they plan it with relative much determination and that can also be a planning process for three years, I am deliberately exaggerating here (…). Other nationalities just go there and plan for half a year and then they start. And then they realize, in the middle of it: that was wrong, we have to turn around. They will turn around by 180 degrees if they must. A German does not do that, because then (after the planning process) he has each screw through. And if he should have done something wrong, then it is immensely hard to turn around by 180 degrees. I think the German way of working is surely a good one, but much too intensive.”

As such, the interviews indicate that the cooperative faces sometimes conflicts of objectives with a strong focus on accuracy and determination that might not be beneficial in all situations. Another manager emphasised that a typical German problem is the conflict between accuracy and too complicated processes. However, it is important to note that these remarks were not directly linked to the dairy cooperative, but were noted as more general German characteristics. As such, the comments might indicate a greater danger of “paralysis by analysis” (Langley 1995) in the German culture. However, this danger seems to be either limited or not admitted in this dairy cooperative.

Although the danger of too complicated decision-making processes due to complex analysis of accounting information might be limited in the dairy cooperative, the statements did reveal an influence of the ‘typical’ German characteristics on the utilisation of accounting information. The interviewees remarked that German analyses are often more accurate in their evaluations than ones that were prepared by one of their other European subsidiaries. Indeed, these results provide further evidence for the uniqueness of cultures, societies and also companies (Carr et al. 1994; Carr and Tomkins 1998; Chow et al. 1999; Carr and Garcia 2003; Klarsfeld and Mabey 2004; Carr 2005). Importantly, this perspective has been neglected in recent academic literature with a focus on global and European convergence and similarities (Goffee and Jones 1995).
Moreover, German cultural characteristics also influence managers’ preferences, which was emphasised by different managers who emphasized their personal focus on extensive information and control in decision-making processes and in relation to the utilisation of accounting information. Nevertheless, this focus has not resulted in a high sophistication of methods and evaluations as discussed earlier in this paper. As such, the German culture is influencing the role and utilisation of accounting information in decision-making processes, but the focus on accuracy does not seem to induce more sophisticated management accounting approaches. Importantly, this is also the result of managers’ preference for a long-term strategic approach, in which a great extent of qualitative information has to be considered. However, this qualitative information is not always considered by focussing on sophisticated management accounting approaches with scenario analyses, but is often either integrated in the standard ROI and amortization calculation or it is provided separately.

A related important cultural characteristic is the strong focus on security and compliance with promises and commitments. Indeed, statements referred to the German culture as one in which promises and commitments are taken literally. In relation to accounting information it was pointed out that calculations are likely to be taken as someone’s word without any margins for deviation. As such, not only the role and utilisation of accounting information might differ from other cultural groups, but importantly, the interpretation of accounting information differs as well. Indeed, this reveals that even if there would be evidence for a homogenization of management accounting approaches, it would be likely that this only refers to the technical level and does not include the interpretational level. In accordance with Lounsbury’s (2007) proposal, these remarks indicate the necessity to study broader cultural frameworks. However, this study has so far only found little evidence that would suggest homogenisation on the technical level.

The strong focus on cultural characteristics such as accuracy and thoroughness could lead to the assumption that factors such as intuition are not of great importance in this dairy cooperative. However, the study provides evidence that this is not necessarily the case as discussed in the following section.

**German accuracy and thoroughness vs. the role of intuition**

Corresponding to the academic literature (Barnard 1938; Mintzberg 1976; Simon 1987; Hall et al. 2007), intuition was expressed to play role in the decision-making strategies and processes of the dairy cooperative by most of the interviewees. Generally, intuition was related to market experience and market knowledge, which the interviewees valued as essential components in decision-making processes and strategies. However, the opinions differed about the extent that intuitive feelings influence decision-making and the role and utilisation of accounting information. While one interviewee argued that intuition is more
relevant for companies that are more actively engaged in the world’s spot markets, others argued that intuitive feelings are a crucial part of decision-making in this cooperative. Indeed, one interviewee remarked

“I think you could calculate what you wanted or say what fits on a conceptual level or if there is big profit, but if they (the CEOs) do not want it… so, it (intuition) is still crucial.”

However, it was also pointed out that the role of intuitive decision-making might be decreasing because of an increasing focus on analytical methods. The reorganisation and restructuring of the cooperative has introduced major modifications with the introduction of regular reports and accounts. As such, the role of intuition might have diminished over the last years in with a stronger focus on internal reports and externally accountable information.

Furthermore, the role of intuition might be limited because of the strong focus on accurate and thorough calculations. Indeed, one interviewee referred to differing cultural characteristics that influence the reliance on intuition and subsequently the utilisation of accounting information. While the German characteristics are seen to limit the use of intuitive feelings, it was pointed out that intuition and emotions are of substantial importance in other cultures. In regard to the role of intuition in other cultures, intuition was described as a substitute for the utilisation of accounting information while this logic was not applied to the German cultural area.

Indeed, intuition was not perceived to be a substitute, but its role was described as initiating the utilisation of accounting information. The cooperative’s focus seems of importance in this context as one interviewee says:

“In my position, I can only follow intuition in a limited manner and in fact until the point when I start to damage the company or when the risk is higher. And then you can just go and say, try to substantiate your intuitive feelings with facts and data and then to bring them in correspondingly”

However, intuition remained a sketchy phenomenon with different opinions in relation to its influence on decision-making and the utilisation of accounting information. This are also likely to be the result of differing personal preferences as other interviewees remarked that intuition is not an important part of their decision-making processes. These comments and remarks emphasised both cross-cultural and personal differences towards the integration of intuitive feelings in decision-making processes and its influence on the role and utilisation of accounting information. Importantly, these differences and the influence of intuition on the utilisation of accounting information provide evidence that the assumption of global convergence of management accounting practices needs to be reconsidered. The role, utilisation and interpretation of accounting information is dependent on and influenced by
complex features and multiple logics. Importantly, these should also be examined in their wider exogenous context. The following paragraphs take these exogenous factors into account by evaluating the influence of globalisation and increasing market pressures.

**Globalisation – Structural changes in the dairy industry**

All interviewees stated that globalisation has strongly influenced the dairy industry and importantly that it has induced strong structural changes over the last two decades. The two following comments are illustrative of the answers provided

“"A completely different world. 1974 and present 2008, that are two completely different worlds".”

“So, you can not compare the German dairy industry twenty years ago with today, not at all.”

When considering the influence of globalisation, it is important to note that the move towards global integration has been induced and accompanied by changes in the political arena with decreasing protectionism and support for national and European agricultural industries (Bascou et al. 2004; Schrader 2004; Salamon et al. 2007). The interviewees noted that the longstanding protectionist behaviour of nations such as Germany had reduced the importance of the market and competition.

“"It was at the beginning of the 60s, I think, there were still virtually protected areas, where a dairy company virtually had a monopoly to sell milk in a certain area. Thus, markets have opened to a high degree. That came with that the EU reduced its subsidies for this field more and more and has cancelled these meanwhile completely, so the importance of the market and internationalisation increases.”

Importantly, this protected structure was argued to have limited the necessity of analytical decision-making strategies and processes, because decisions were of a different nature and often focused on reinvestment or extension investments.

In contrast, globalisation and structural changes have increased national and international competition, have led to stronger market pressures, but have also opened new investment inspirations and opportunities. These changes in the dairy industry have contradictory influences on the role and utilisation of accounting information in decision-making processes and strategies and managers’ preferences on this utilisation. While the interviewees remarked that globalisation has increased the utilisation of accounting information to enable a better evaluation of the complexities in the market place, the stronger competitive pressures in the market with retailers and customers requiring certain investments have limited the usefulness of management accounting evaluations.
The interviewees commented on the increasing utilisation of management accounting approaches to enable decision-making in a complex environment by providing various examples. Specifically, the increasing flexibility, speed and competition in the market place were perceived as increasing the short-term focus in decision-making strategies’ and processes. These results correspond to the existing management accounting literature that also refers to a greater focus on short-term objectives (Carr 2005, 2006). Importantly, this greater focus on short-term objectives has a direct influence on the role and utilisation of accounting information. Indeed, the managers noted that requirements in relation ROI and amortization reflect these short-term objectives. As one board member explained,

“(...) Amortization between 3 and 5 years, which is a strategic goal for us that should be achieved. Thus, investments that relate to periods of 4 or 5 years, then we find it difficult to grant these.”

Importantly, this focus on shorter time periods has been related to the increasing complexity and flexibility of market structures that restrict long-term predictability. Indeed, long amortization periods and lower ROI reduce the likelihood of investments. In particular, this is the case if investments are fixed to specific products and markets and have only a limited potential to be accommodated to changing conditions. For instance, one senior manager noted:

“When you look at the changed markets, then you always have to ask yourself, can I and will I still use or have these production processes, these products or these customers in the future. Over a period of 2 to 3 years that is not a problem at all. However, if you look beyond a period of 4 or 5 years, then you could say, well, I have produced the product for 20 years, the mathematical probability says that I will do that another 20 years or at least 10. However, globalisation suggests in some instances that that is not the case.”

The limited ability to assess markets also introduces a greater reliance on systematic management accounting approaches. Specifically, it was remarked that the varying prices fosters the development of scenario analysis to enable a better cost evaluation and calculation of raw materials.

Furthermore, the increasingly global financing requirements of banks drive the utilisation of accounting information as loans are increasingly bound to the provision and evaluation of detailed information and in particular accounting information. Importantly, not all of these requirements were perceived as being necessary or beneficial. Indeed, one of the senior managers noted.

“That is such a field of tension, the bank’s information requirements and what we think makes good economic sense and that they (the banks) understand what we do, that is sometimes difficult.”
As such, not necessarily managers’ preferences and the cooperative’s requirements but the external environment decides to which extent accounting information is utilised or at least prepared in decision-making.

While the above mentioned factors might extend the utilisation of accounting information, external factors can also oppose and hinder a greater utilisation of accounting information in decision-making strategies and processes. Indeed, the CEO’s remark “nowadays, investments are first of all driven by the market” calls attention to both possibilities. The statements provide evidence that the importance of market factors in the market driven dairy industry can increase the utilisation and importance of accounting information in decision-making strategies and processes to enable reliable decision-making. However, a number of examples underlined that market forces can render the utilisation of accounting information in decision-making strategies and processes unnecessary. It was repeatedly pointed out that market forces can determine actions, which reduces the necessity for any evaluation as the market makes the decision for the cooperative.

“When the market, for example, requires a specific investment, the whole analysis by way of calculation does not help us much, then the question is, that we say, yes there you are, but can we do that, what we have to invest.”

Although the necessity of evaluations is often limited as a result of external forces, it can also be the result of internal pressures or requirements. One senior manager commented.

“Und when you say then, actually I do not have to evaluate 60% of decisions because I need these to keep the business up and running, because an aggregate does not work anymore, because I have to do something, because a customer demands it or the line of business must have this now, then the necessity of such decisions strongly decreases (…)”

Importantly, these comments corresponded to earlier remarks that the German focus on accurate information is not complicating decisions in this dairy cooperative, as the utilisation of accounting information conforms to the specific requirements which might induce calculations, but might render them unnecessary. Again, the interviewees emphasise that the utilisation of accounting information in decision-making is highly dependent on a complex set of influential factors that are, moreover, characterised by the existence of multiple logics.

Overall, it is important to note that the forces of globalisation can extend but also limit the utilisation of accounting information in decision-making strategies and processes. These forces shape the extent to which accounting information is utilised and they also shape the techniques that are applied. This is apparent in relation to financing requirements and importantly also in the more detailed evaluations that are provided by external consultants. The decision to integrate or rely on external consultation is not least because globalisation
has changed the operations of the dairy cooperative. Indeed, decisions of greater importance such as mergers and acquisitions are partly the result of the forces of global integration. Importantly, this multiple relationships between globalisation, a changing environment and the need for external consultants exemplarily emphasize the complexity that characterises the role and utilisation of accounting information in decision-making processes.

**Summary, discussion and conclusion**

This paper has provided in depth insights into the role and utilisation of accounting information in decision-making strategies and processes and managers preferences on this utilisation in a German dairy cooperative. The study has provided evidence of a greater focus on understanding important contextual influences than a dependency on narrowly defined technical aspects of accounting information. Strategies, long-term orientation and greater focus on participation are of importance with quantitative and qualitative data being evaluated in the broader context. Indeed, applying an institutional theory approach that takes into account the importance of the economic, social, legal, political and cultural environment, this case study provides evidence that contextual factors and manager’s preferences strongly influence the utilisation and interpretation of accounting information in decision-making strategies and processes. Importantly, we provide evidence that these contextual factors and mangers' preferences contradict the assumption that the utilisation of accounting information in management accounting practices is converging. As such, this study contributes to the debate concerning convergence of international management accounting research and acknowledges the importance of national, cultural, social, economic and legal differences in international management accounting approaches and practices (Carr et al. 1994; Ittner and Larcker 1997; Granlund and Lukka 1998a, 1998b; Shields 1998; Edwards et al. 2002; Klarsfeld and Mabey 2004; Carr 2006; Liu and Pan 2007).

The evaluation of the role and utilisation of accounting information in decision-making strategies and processes and managers’ preferences on this utilisation has been based on a rigorous analysis on the effect of various contextual factors such as managers’ preferences, justification pressures, financial and strategic objectives and the importance of intuition in decision-making. The influences of these factors are evaluated by taking into account the broader contextual and cultural environment such as the specificities of the dairy industry and cooperative structure as well as German cultural preferences. Indeed, we provide evidence that the role and utilisation of accounting information in decision-making strategies and processes is the result of a complex interplay between specific endogenous and exogenous factors, pressures and influences that have direct and indirect influences on the role and utilisation of accounting information. For example, the case study provides evidence that managers’ preferences influence the role and utilisation of accounting information.
However, managers’ preferences are themselves the result of various contextual influences. As such, multilayered and complex relationships exist between contextual factors and the role and utilisation of accounting information. Importantly, this case study provides further evidence that the focus on isomorphism in neo-institutional theory is largely the result of neglecting these complex relationships and multiple logics.

Specifically, the interviews and company documents provided evidence that the cooperative is likely to be caught between members’ preference for short-term benefits and managements’ awareness of the importance of long-term strategic planning. While members’ focus on short-term perspectives influences the utilisation of accounting information, the cooperative does not yet have any formalized evaluation approaches or objectives in relation to ROI or amortization figures. The cooperative has not yet prescribed the use of specific management accounting approaches for investments. While ROI and amortisation calculations are common and often expected, the general extent of using accounting information varies with the size and scope of definitions. Furthermore, the statements revealed that the cooperative basically follows long-term strategic objectives despite members’ focus on short-term goals. Indeed, the long-term focus seems to be rather limited by short-term pressures that arise because of globalisation and increasing market pressures. Nevertheless, the main strategic objective that shapes the utilisation of accounting information is still long-term orientated.

Furthermore, the cooperative structure with the member-owner principle, the statutory focus on member welfare and the legal audit requirements create justification pressures for managers and induce risk avoiding behaviour. While these tendencies result in a strong emphasis on the utilisation of accounting information, the practical application remains limited in particular in relation to sophisticated management accounting approaches. While sophisticated calculations might not be used internally, the justification pressures and risk avoiding behaviours have fostered the involvement of external consultants for larger investments to increase soundness of decision-making. While there is evidence that the role and utilisation of accounting information varies with the size and scope of decisions, all interviewees pointed out that accounting information is of high relevance to the cooperative. Importantly, this refers to a broad understanding of accounting information that integrates quantitative and qualitative aspects.

In relation to German culture, accuracy and thoroughness were often regarded as ‘typical’ German characteristic that influence the role and utilisation of accounting information in decision-making strategies and processes. While these virtues were generally seen as having a positive influence, it was also pointed out that there are chances that German managers might be too pedantic and are looking too intensively for data or information. In
relation to the role and utilisation of accounting information, two important points were raised. The German focus on accuracy was perceived to enable more reliable and sound evaluations. Furthermore, it was remarked that calculations are likely to be taken as someone's word without any margins for deviation, which might indicate that the interpretation of accounting data differs in different cultures. Indeed, these remarks clearly showed the importance and necessity to study broader cultural frameworks.

Intuition remained a sketchy phenomenon with different opinions in relation to its influence on decision-making and the utilisation of accounting information. However, cross-cultural and personal differences were found in relation to the integration of intuition in decision-making processes and its influence on the role and utilisation of accounting information. Importantly, the interviews suggested that the managers in the dairy cooperative are more likely to back up their intuitive feelings than to use intuition as a substitute for the utilisation of accounting information. Importantly, it was also suggested that this tendency is different in other countries that are more likely to substitute analysis for intuition. These differences and the influence of intuition on the utilisation of accounting information provide evidence that the assumption of global convergence of management accounting practices needs to be reconsidered because of the influence of strong cultural and personal differences. Statements about the influence of the forces of globalisation revealed a contradictory situation, in which globalisation can extend, but also limit the utilisation of accounting information in decision-making processes. While increasing competition and internationalisation leads to a greater utilisation of accounting information for cases such as mergers and acquisitions, increasing market pressures can limit the utilisation of accounting information when markets or retailers have requirements that need to be fulfilled to remain in the business.

Importantly, the evaluation of this case strongly reveals that the role and utilisation of accounting information in decision-making strategies and processes and managers preferences on this utilisation are highly specific. We have provided evidence of how the board of directors and senior managers use accounting information as part of their decision-making strategies and importantly how this use of accounting information is influenced by Germany’s unique political, cultural, economic, social, legal and historical environment. As such, this study does not find convincing evidence that the role and utilisation of accounting information in decision-making processes is globally converging because of isomorphic pressures. While external pressures certainly influence the role and utilisation of accounting information, they are only part of a more complex structure that also comprises internal factors and managers’ preferences. Indeed, in this case the complexity of factors rather
indicates difference than convergence on the industrial, structural, national and international level.

In light of the ongoing globalisation process, the awareness of differences in the decision-making processes contributes to a better understanding of the role of management accounting in the globalising world in particular, as there is no indication that these differences are likely to diminish. In contrast, a manager’s judgement is likely to become more important, which contradicts future convergence as even similar technical applications might not lead to similar interpretations. Indeed, the importance of a manager’s professional judgement in the utilisation of accounting information could be an interesting area for future research to provide a deeper understanding of current issues.

Importantly, this study provides further evidence of the necessity to overcome the somewhat pervasive focus on isomorphism and to re-evaluate neo-institutional theory to consider the depth, richness and complexity of influences that have already been pointed out in the academic literature (Lounsbury 2007). Indeed, a better understanding of the broader cultural frameworks and actors within these cultural frameworks is necessary to understand the consequences of global integration in internal management accounting.
References


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