The transferability of management practices across countries has received significant attention by those looking to counter the increase in international competition in the context of global business activities (see Harrison 1992; Chow et al. 1991; Chow et al. 1996). Management accounting (MA), as a central instrument of corporate management, is an important element of this endeavour. However, accounting research in many peer-reviewed journals is locally focused. Lukka and Kasanen (1996) have indicated that in 77% of the studies in renowned accounting journals, the researchers, data and journal are from the same country. Comparative management accounting (CMA) has adjusted to this intellectual climate since the beginning of the 1990s and generally involves comparing the design of relevant structures and practices in different countries and cultural areas (see Shields et al. 1991; Daniel and Reitsperger 1992; Ahrens 1996; Chow et al. 1996).

The importance of CMA within accounting research is tied to its relevance for corporate practice. Because of increased global economic integration and a changing regulatory environment (IFRS, financial market regulation, climate policies, etc.), combinations of MA techniques from different countries can generate competitive advantage (see Shields et al. 1991). In particular, multinational corporations (MNCs) that must consider the country-specific conditions to which their subsidiaries are exposed and ascertain the effectiveness of their MA practices in different national settings can benefit from insights developed through CMA, which in turn can help them to attain high efficiency levels (see Chow et al. 1999; Harrison and McKinnon 1999; Norreklit and Schoenfeld 2000). In this context, avoiding misunderstandings and misinterpretations can guarantee more effective collaboration (see Ueno and Sekaran 1992).

While the particular usefulness of CMA for corporate practice is reflected in the publications of professional associations, such as the Institute of Management Accountants (see Sharman and Vikas 2004; MacArthur 2006), scholars have also published numerous articles on CMA in...
renowned international research journals since the 1990s. Taking into account the importance of CMA for academia and corporate practice, the present paper is motivated by the need to understand the heterogeneous structure of the research field, its historical development, its current state and shortcomings. This heterogeneity affects what practices and instruments are emphasised in MA, the design of relevant research and the underlying theory. Therefore, we provide an overview of the existing CMA literature and help to cultivate a more precise understanding of the research field. In addition, we examine past and current trends and identify research deficits. Finally, our paper aims to stimulate future research on CMA based on a broader range of theoretical frameworks, different types of research designs and an increased focus on transitional and emerging economies.

The paper is structured as follows. First, we define and classify the relevant terms related to CMA. Then, we consider developments in, and the structure of, CMA research based on the central results presented in the relevant published literature. In this way, we reveal and analyse the existing research deficits together with potential solutions, after which we present the practical implications of our review and a conclusion.

**Approaches to CMA**

Although comparative studies of MA can also involve comparisons across industries, regions, business models and so on, we focus on *transnational comparisons* of MA. In this context, we examine MA structures and practices, analyse relevant differences and similarities and elaborate on the underlying causes. For this purpose, we directly compare MA in companies from two or more countries based on empirical evidence. Our approach addresses the need to identify international best practices and explain their dissemination in specific institutional and cultural environments. Through learning effects from transnational benchmarking processes and the transfer of successful techniques, CMA helps companies to identify ‘mistakes’ and areas of inefficiency in country-specific cases (see Nobes and Parker 2006). Because an efficient MA department must consider cultural, economic, regulatory and legal matters (see Waweru et al. 2004), the present paper helps to integrate these parameters into a framework of MA systems useful for business practice. This contributes to a reduction of errors and misconceptions in transnational firm acquisitions and management control systems designed for foreign subsidiaries *ex ante*. Furthermore, our findings can help to develop and institutionalise internationally oriented professional training programs for management accountants.

Although the first papers on CMA had already been published at the end of the 1980s (see Kato 1989), Bhimani’s (1996) essay collection was an important milestone for CMA as an independent research discipline (see Shields 1998). Bhimani’s (1996) work presents a portrait of MA in 11 European countries. However, the majority of these studies deal primarily with the field of cost accounting without explicitly focusing on *comparative* analysis. Nevertheless, this research has served as the foundation for various explicitly comparative studies (see Macintosh 1998; Shields 1998; Blake et al. 2003). A similar compilation of essays by Lizcano, published in the same year, covers MA in Latin America, Spain and Portugal (see Lizcano 1996).

Other papers examine individual MA techniques (see Wijewardena and Zoya 1999; Joshi 2001; Luther and Longden 2001; Cotton et al. 2003), the training of management accountants (see Ahrens and Chapman 2000; Pistoni and Zoni 2000), environmental MA (see Bartolomeo et al. 2000), MA research (see Carmona and Gutiérrez 2003), investment decisions (see Carr and Tomkins 1996; 1998) and the relationship between MA and product quality (see Daniel and Reitsperger 1992; Ittner and Larcker 1997). Furthermore, some articles have analysed the role of management accountants within the firm context (see Ahrens 1997b). Although these papers mainly employ data from western countries, the underlying research designs used are as diverse as the thematic foci. In addition to case and field studies (see Ahrens 1996; Brewer 1998; Quattrone and Hopper 2005), large- and small-scale surveys (see Harrison et al. 1994; Chow et al. 1996; Pistoni and Zoni 2000), the CMA literature also includes archival analyses (see Shields et al. 1991) and experimental investigations (see Chow et al. 1991). Of these different approaches, surveys and field studies (including interviews and observations) are the research methodologies most often employed.

The theoretical approaches commonly used in this context are contingency frameworks (see Jones et al. 1993; Joshi 2001; Luther and Longden 2001), in which it is assumed that efficient MA can only be guaranteed through adjustments to the specific parameters of the country, the company and the competitive environment. Accordingly, significant portion of the research conducted analyses the influence of national cultures on particular MA structures (see Chow et al. 1996; Ueno and Sekaran 1992; MacArthur 2006). This strand of CMA literature relies primarily on the culture theory work of Hofstede (1983, 1991, 2001), Trompenaars and Hampden-Turner (2000) and House et al. (2004). However, Granlund and Lukka (1998) have suggested that the influence of cultural factors is declining relative to that of other contingency variables, such as industry classification and technology. This research stream suggests that a trend is evolving toward transnational convergence in MA (see Sheridan 1995; Shields 1998). Still, so far, there have been no longitudinal studies conducted that have provided convincing empirical evidence of this development.
Many CMA studies have been presented without explicit mention of economic or social science theory (see Bailes and Assada 1991; Yakhou and Dorweiler 1995). This paucity of theoretical backing has emerged as a central weakness of the existing research and has allowed the CMA literature to remain very heterogeneous. Against this backdrop, our review represents an essential guide for future work and is intended to help develop the field of CMA.

Regional Clusters within the CMA Literature

We analyse and categorise the CMA literature based on two dimensions. First, we distinguish between CMA in the narrower sense and CMA in the broader sense. CMA in the narrower sense includes only those studies that explicitly compare MA in companies from two or more countries. CMA in the broader sense also includes papers that deal with the specifics of MA in only one country and compare them to information presented in the relevant literature.

We also explore the theoretical and methodological characteristics of CMA research activities in particular geographic regions:

- studies on Japanese MA (see Shields et al. 1991; Daniel and Reitsperger 1992; Chow et al. 1996) and MA practices in other highly developed Asian economies1 (see Harrison 1992, 1993; Chow et al. 1999)
- studies on Western Europe (see Wagenhofer 2006; Nasi and Rohde 2007)
- studies on MA in transitional and emerging economies (see Joshi 2001; Luther and Longden 2001; Waweru et al. 2004).

Regardless of the particular geographic focus, the academic literature relies heavily on points of comparison with the Anglo-American world.2 On the other hand, the practitioner-oriented literature shows a strong interest in German MA (see Sharman and Vikas 2004; Krumwiede 2005). The first two peaks in CMA research centred on Japan and the developed Asian economies in the 1990s and Europe in the 2000s. We argue that transitional and emerging economies, particularly the BRIC3 countries, will be the next popular focus of CMA studies. Figure 1 illustrates how we classify relevant CMA publications according to the defined structural criteria. The detailed analysis that follows covers CMA studies defined in the narrow sense. This approach emphasises the importance of direct comparisons in revealing the contextual applications and transferability of MA practices (see Chow et al. 1996) for both theory and corporate practice. Nevertheless, we acknowledge the relevance of CMA research in the broader sense as a valuable source of data for future studies of an explicitly comparative nature (see Shields 1998; Blake et al. 2003).

The present review covers CMA research published from 1990 to 2010. Based on the journal rankings of Bonner et al. (2006), Reinstein and Calderon (2006) and Chan et al. (2009), we identified leading accounting journals. From those, we selected three groups of journals that have facilitated the proliferation of CMA. First, we chose the leading MA journals Management Accounting Research and Journal of Management Accounting Research. In addition, we selected journals that pay special attention to international accounting research, including The International Journal of Accounting and Journal of International Accounting Research. Finally, we complemented our review with an analysis of the highest

Figure 1 Structure of research on CMA
ranked general accounting journals – for example, *Accounting, Organizations and Society*. We argue that the presence of CMA articles in these journals reflects the relevance and general acceptance of CMA in the field of accounting research.

On this basis, we decided to systematically review the following journals for the period between 1990 and 2010: *Management Accounting Research, Journal of Management Accounting Research, Accounting, Organizations and Society, The European Accounting Review, ABACUS, The Accounting Review, The International Journal of Accounting, Journal of International Accounting Research, Journal of International Accounting, Auditing and Taxation and Journal of International Financial Management and Accounting*. We limited our review to empirical studies including direct comparisons of MA practices and structures in companies from two or more countries. Comparative studies from adjacent research areas in which the main focus was organisational culture, financial accounting, taxation, and so on (see Hoogendoorn 1996; Chow et al. 2002) were excluded to guarantee the consistency of our paper. Similarly, we see the literature on international joint ventures not to be within the scope of our review because its focus is more on international aspects of MA than on comparisons of national MA structures and practices.

**Japan and highly developed Asian economies vs. Anglo-American regions**

The first systematic studies on CMA focused on comparing the Anglo-American regions with Japan and other highly developed Asian economies. These papers were mainly published in the early 1990s. In addition to examining the causes of the comparatively weaker performance of Anglo-American companies, this early stream of research attempted to elaborate on suggestions for improvement (see Morgan and Weerakoon 1989; Shields et al. 1991; Jones et al. 1993). The CMA studies on Japan addressed an evident trend in business practice: the export of Japanese management and MA models such as kaizen, lean management and lean manufacturing, quality circles, just-in-time and target costing to western countries (see Culpan and Kucukemiroglu 1993; Cheser 1998). Literature has suggested that the transfer of Japanese-style management practices was highly dependent on environmental conditions and administrative heritage (see Beechler and Yang 1994). Early CMA papers also attempted to explore the reasons for these constraints. Table 1 summarises relevant other CMA research that has been conducted on Japan and highly developed Asian economies since 1990.

CMA research indicates that the primary reason for superior performance of Japanese companies in the 1990s is not the use of different instruments but is rather their implementation of MA as a business function. Japanese companies use management control systems that are particularly adjusted to the competitive environment and the corporate culture surrounding them, which supports strategic positioning (see Daniel and Reitsperger 1992). These systems focus intensively on high product quality and productivity. Thus, Japanese executives receive more targets related to productivity and quality improvements than do US managers. In American management control systems, cost management, quality optimisation and competitive analysis have traditionally been of secondary importance due to the stronger emphasis on short-term profit. More specifically, the traditional cost accounting systems used in the US have been criticised for no longer providing the flexibility and speed required by global business processes (see Kaplan 1983; Daniel and Reitsperger 1992).

Another unique quality of Japanese MA is that it is more proactive and market-oriented. A comparative study by Wijewardena and Zoysa (1999) shows that Australian companies conducted cost control processes mainly during the production phase, whereas in Japan, areas for potential cost reduction were identified earlier, during the design and planning phases. These differing approaches are reflected in the corresponding MA techniques applied: whereas in Australia, budgeting and variance analysis are predominantly used, target costing is of higher importance in Japan. Ueno and Wu (1993) find support for the Hofstede (1983) dimension of individualism/collectivism in their comparative survey of the US and Japan. They relate the higher individualism (which influences corporate processes) to the more formal communication, greater degree of budgetary slack, greater control and shorter time horizons for evaluation that exist in the US relative to Japan. However, their survey data does not indicate any influence of Hofstede’s (1983) dimension of uncertainty avoidance on budgetary processes.

In the US, incentives for manipulating relevant control and management data have been identified as resulting from an emphasis on short-term performance goals (see Shields et al. 1991; Chow et al. 1996; Wijewardena and Zoysa 1999). The typical short-term focus leads to the frequent use of ROI-based accounting measures in Anglo-American countries (see Chow et al. 1996). As a result, managers have fewer incentives to invest in research and development because of negative short-term effects on profitability. In Japan, however, stronger reliance on ROS (return on sales) helps to avoid these problems. The studies by Bailes and Assada (1991) and Wijewardena and Zoysa (1999) identify differences between Anglo-American and Japanese companies with respect to the dynamics of MA and the use of information. Anglo-American corporations...
Table 1  Studies on CMA in the narrow sense with a focus on Japan and highly developed Asian economies

<table>
<thead>
<tr>
<th>Author/s (Year)</th>
<th>Countries Researched</th>
<th>Research Design</th>
<th>Sample*</th>
<th>Main Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bailes and Assada (1991)</td>
<td>Japan vs. United States</td>
<td>Survey</td>
<td>Students: Japan: (n = 256); US: (n = 80)</td>
<td>In the US, Return on Investment (ROI) most important division budget goal; in Japan, ROI ranked as top budget goal in less than 1% of cases</td>
</tr>
<tr>
<td>Chow et al. (1991)</td>
<td>Singapore vs. United States</td>
<td>Experiment</td>
<td>Singapore: (n = 96); US: (n = 96)</td>
<td>Effects of national culture and management controls on performance independent rather than interactive</td>
</tr>
<tr>
<td>Shields et al. (1991)</td>
<td>Japan vs. United States</td>
<td>Archival</td>
<td>Various Publications</td>
<td>Literature must devote more attention to organisational context, processes and goals of MA practices</td>
</tr>
<tr>
<td>Daniel and Reitsperger (1992)</td>
<td>Japan vs. United States</td>
<td>Survey</td>
<td>Japan: (n = 50); US: (n = 64)</td>
<td>Japanese managers focused more on goals related to production and internal failures</td>
</tr>
<tr>
<td>Harrison (1992)</td>
<td>Singapore vs. Australia</td>
<td>Survey</td>
<td>Managers: Singapore: (n = 115); Australia: (n = 94)</td>
<td>Effects of participation on relationship between budget emphasis and job-related tension or job satisfaction are similar</td>
</tr>
<tr>
<td>Harrison (1993)</td>
<td>Singapore vs. Australia</td>
<td>Survey</td>
<td>Managers: Singapore: (n = 115); Australia: (n = 94)</td>
<td>High degree of reliance on accounting performance measures and budgets in superior evaluative style associated with lower tension and higher job satisfaction in Singapore</td>
</tr>
<tr>
<td>Jones et al. (1993)</td>
<td>Japan vs. Great Britain</td>
<td>Archival</td>
<td>Several field studies of the authors</td>
<td>MA better integrated with other forms of information in decision-making in Japan</td>
</tr>
<tr>
<td>Ueno and Wu (1993)</td>
<td>Japan vs. United States</td>
<td>Survey</td>
<td>Japan: (n = 149); US: (n = 70)</td>
<td>US companies use more communication mechanisms but fewer long-term performance evaluations than their Japanese counterparts</td>
</tr>
<tr>
<td>Chow et al. (1994)</td>
<td>Japan vs. United States</td>
<td>Experiment</td>
<td>Students: Japan: (n = 39); US: (n = 54)</td>
<td>Japanese and American management control preferences dependent on national culture in complex ways</td>
</tr>
<tr>
<td>Harrison et al. (1994)</td>
<td>Australia and United States vs. Singapore and Hong Kong</td>
<td>Survey</td>
<td>Australia (US): (n = 140) (104); Singapore (Hong Kong): (n = 65) (55)</td>
<td>Cultural values of Anglo-American society encourage greater emphasis on decentralisation and quantitative control techniques</td>
</tr>
</tbody>
</table>
change their MA practices less frequently than their Japanese counterparts and use information on budget variance mainly for individual performance evaluations. In contrast, Japanese MA is more dynamic and variance analysis is used to identify problems and areas for future improvement.

In Japanese companies, all employees usually have a basic understanding of the most important MA practices, which positively influences their acceptance and integration into business processes. The excessive focus on traditional MA techniques in the UK leads to the imprecise allocation of fixed costs and the inaccurate evaluation of intangible assets and investment opportunities (see Jones et al. 1993). Thus, MA information has historically provided little added value for decision making.

In contrast to their Anglo-American colleagues, Japanese management accountants are more involved in decision-making. Because of the less specialised approach used in this context, a management accountant generally transitions through various positions in a company, which allows him or her to attain the necessary competencies for participation. For instance, the majority of Japanese management accountants normally hold various generalist positions and line functions and this allows them to acquire technical and social skills before they reach the MA department. However, Anglo-American management accountants are more familiar with standard MA instruments based on their academic training and often have completed specialised training programs that award professional accreditations, such as Certified Management Accountant, Certified Public Accountant or Chartered Financial Analyst (see Wijewardena and Zoysa 1999).

A smaller strand of CMA literature focuses on other highly developed Asian economies. Several of these studies analyse the influence of ownership nationality on MA practices by comparing local and foreign-affiliated companies (see O’Connor 1995; Chow et al. 1999). This approach underlines the increasing importance of highly developed Asian economies for foreign investors in the 1990s and the interest in the efficiency of local MA practices. Whereas Chow et al. (1999) use Hofstede’s (1983) cultural dimensions to explain differences between management control in Japanese, Taiwanese and US-owned electronic companies in Taiwan, O’Connor (1995) analyses budgeting in local and foreign manufacturing firms in Singapore. Both studies identify organisational culture as an important determinant of the design of MA processes.

Harrison’s (1992, 1993) studies consider MA practices in Australia and Singapore, which serve as proxies for societies with high individualism and low power distance, and those with low individualism and high power
distance, respectively. Harrison finds support for his hypothesis: national culture influences the relationship between reliance on accounting performance measures and work-related attitudes of subordinates. Thus, MNCs must adapt their MA techniques to national cultures to guarantee their effectiveness (see Harrison 1993). Through an experimental investigation, Chow et al. (1991) substantiate the effects of cultural individualism and management control systems on manufacturing performance in the US and Singapore.

An analysis of CMA papers on Japan demonstrates that local MA does not constitute an isolated function within firms; instead, it influences various facets of operations. The emphasis on long-term cost management and product pricing represents an important cornerstone of the success of Japanese companies in global competition (this was especially true in the late 20th century). A stronger focus on long-term planning is also visible in other highly developed Asian economies (see Harrison et al. 1994).

CMA research has shown that the challenges of global business activities cannot be resolved through the use of MA based on Fordist mass production (as was still used in many Anglo-American companies in the late 20th century). These studies have had a considerable influence on the spread of relevant knowledge in research and teaching. Thus, CMA has contributed significantly to the adoption of Japanese MA practices in other countries and has improved competitiveness. Techniques such as target costing are standard instruments in most industrialised countries today, indicating the relevance of CMA research for corporate practice.

Western Europe and the Anglo-American region

Since the end of the 1990s, the interest in Japanese MA techniques has lessened as the problems plaguing the Japanese economy have increased. Correspondingly, CMA research has increasingly addressed Western European countries. In this context, Bhimani’s essay collection (1996) was considered essential and renowned authors were encouraged to comment on it in Management Accounting Research (see Birkett 1998; Macintosh 1998; Shields 1998).

Table 2 presents an overview of European CMA papers that examine the role of management accountants, transnational convergence and cultural influence. Whereas CMA studies on Japan are based on functional perceptions of MA, European papers often assume an institutional perspective.

In his analysis of German and British breweries, Ahrens (1997a, 1997b) established that management accountants in Germany are much more involved in firm operations than are their British colleagues. Whereas British management accountants are characterised as more proactive and as relating accounting to operational knowledge, the Germans mainly report the financial consequences of business decisions and combine accounting with administrative or strategic knowledge. In German companies, MA is strongly influenced by abstract theoretical approaches and models due to the special focus of German university education on production and cost theory (see Wagenhofer 2006).

Fleischman and Tyson (1998) and Fleischman et al. (2008) compare the development of British and US cost accounting. They do not confirm the often-voiced assumption that British cost accounting since the end of World War II has fallen behind its American counterpart. This false impression can be traced back to the data used in relevant studies: only a few highly developed and non-representative American sectors have been investigated.

Cross-national differences in MA structure are often correlated with national culture. The design of marginal cost accounting serves as a popular example. Stronger uncertainty avoidance in Germany leads to highly detailed and accurate cost reporting. In the US, MA yields more aggregated cost data because a lower level of detail is frequently accepted. In a comparison between continental European and British companies, Sheridan (1995) finds a more pronounced separation between management and financial accounting among the former. This separation facilitates a higher degree of future orientation within continental MA and also indicates a focus on the interests of different stakeholder groups rather than on shareholder value.

An essential strand of the literature covers the transnational convergence of MA in Western European countries. Granlund and Lukka (1998) trace this isomorphism back to several factors: economic pressure, coercion, normative pressure and mimetic processes. In particular, Shields (1998) observes increasing convergence in terms of the terminology and techniques used. Sheridan (1995) also notes a trend toward transnational convergence and reports that continental European companies are beginning to employ Anglo-American MA practices to adjust to competition and cost pressures. MNCs are an important driver of convergence. In the context of international acquisitions, such firms may adopt processes and systems from foreign countries if they prove to be more effective than their own (see Sheridan 1995). In these cases, cost-benefit analyses must be carefully used to accurately determine economic profitability. Although convergence has been observed in scientific studies of European MA, these studies are primarily superficial. Empirical evidence regarding the direction and the intensity of isomorphic tendencies is largely missing.

Wardell and Weisenfeld (1991) analyse how management styles and labour activism influence accounting practices in the US and GB. Explaining differences in workplace control as based on differences in worker
### Table 2  Studies on CMA in the narrow sense with a focus on Western Europe

<table>
<thead>
<tr>
<th>Author/s (Year)</th>
<th>Countries Researched</th>
<th>Research Design</th>
<th>Sample*</th>
<th>Main Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wardell and Weisenfeld (1991)</td>
<td>Great Britain vs. United States</td>
<td>Archival</td>
<td>Various publications</td>
<td>Differences in MA practices caused by management styles and patterns of labour activism</td>
</tr>
<tr>
<td>Sheridan (1995)</td>
<td>Continental Europe vs. Great Britain</td>
<td>Archival, Narrative</td>
<td>CIMA Survey and case studies: n not indicated</td>
<td>Converging European approaches to MA triggered by MNCs</td>
</tr>
<tr>
<td>Ahrens (1996)</td>
<td>Germany vs. Great Britain</td>
<td>Field research</td>
<td>Firms interviewed/ observed: Germany: n = 13, GB: n = 8</td>
<td>GB: Accounting information used to judge proposals for operational action German MA information: Conceptualised functional expertise in MA that remains more distant from operations</td>
</tr>
<tr>
<td>Carr and Tomkins (1996)</td>
<td>Great Britain vs. Germany</td>
<td>Field research</td>
<td>GB: n = 24; Germany: n = 25</td>
<td>Successful companies: More attention to competitive advantage, value chain considerations and cost drivers</td>
</tr>
<tr>
<td>Ahrens (1997a)</td>
<td>Germany vs. Great Britain</td>
<td>Field research</td>
<td>Germany: n = 1; GB: n = 2</td>
<td>Germany: Formalised accounting used to rationalise completed operational proposals GB: Management accountants assume a more proactive role</td>
</tr>
<tr>
<td>Ahrens (1997b)</td>
<td>Germany vs. Great Britain</td>
<td>Field research</td>
<td>Firms interviewed/ observed: Germany: n = 11; GB: n = 7</td>
<td>Germany: Theory-driven MA models used to calculate financial performance GB: MA involvement in strategy formulation and business decisions</td>
</tr>
<tr>
<td>Fleischman and Tyson (1998)</td>
<td>United States vs. Great Britain</td>
<td>Archival</td>
<td>Primary and secondary sources</td>
<td>Decision-making and long-run cost targets more important than operational control in future standard costing approaches</td>
</tr>
<tr>
<td>Guilding et al. (1998)</td>
<td>Great Britain vs. New Zealand</td>
<td>Survey</td>
<td>GB: n = 260; New Zealand: n = 81</td>
<td>High degree of consistency between New Zealand and GB in terms of budgeting and standard costing</td>
</tr>
</tbody>
</table>

*Continued*
Table 2 (Continued)

<table>
<thead>
<tr>
<th>Author/s (Year)</th>
<th>Countries Researched</th>
<th>Research Design</th>
<th>Sample</th>
<th>Main Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahrens and Chapman (2000)</td>
<td>Germany vs. Great Britain</td>
<td>Field research</td>
<td>Germany: n = 17; GB: n = 12</td>
<td>Occupational identity of management accountants strongly influenced by academic education (corporate experience) in Germany (GB)</td>
</tr>
<tr>
<td>Bartolomeo et al. (2000)</td>
<td>Germany vs. Italy vs. Netherlands vs. Great Britain</td>
<td>Field research</td>
<td>Interviews: n = 48; Case studies: n = 15</td>
<td>Environmental MA:</td>
</tr>
<tr>
<td>Guilding et al. (2000)</td>
<td>Great Britain vs. United States vs. New Zealand</td>
<td>Survey</td>
<td>GB: n = 59; US: n = 120; New Zealand: n = 111</td>
<td>Similar diffusion of strategic MA practices in all three countries</td>
</tr>
<tr>
<td>Pistoni and Zoni (2000)</td>
<td>16 European Countries</td>
<td>Survey</td>
<td>39 undergraduate education institutions</td>
<td>Similar pool of topics taught in undergraduate MA education across Europe</td>
</tr>
<tr>
<td>Scheytt et al. (2003)</td>
<td>Austria vs. France vs. Germany vs. Great Britain</td>
<td>Narrative</td>
<td>Austria: n = 21; France: n = 28; Germany: n = 12; GB: n = 15</td>
<td>Control influenced and strongly embedded in cultural context</td>
</tr>
<tr>
<td>Van der Stede (2003)</td>
<td>12 Countries</td>
<td>Survey</td>
<td>Business units: Belgium: n = 115; outside Belgium: n = 38</td>
<td>Management control and incentive systems uniformly implemented in MNCs rather than reflecting local business-unit conditions</td>
</tr>
<tr>
<td>Calleja et al. (2006)</td>
<td>United States vs. Great Britain vs. France vs. Germany</td>
<td>Archival</td>
<td>Firm years: US = 13662; GB = 8659; France = 2968; Germany = 1694</td>
<td>Level of cost stickiness higher in code-law regimes (France, Germany) than in common-law regimes (US, GB) with stronger market pressure</td>
</tr>
<tr>
<td>Fleischman et al. (2008)</td>
<td>United States vs. Great Britain</td>
<td>Archival</td>
<td>Various publications</td>
<td>Time lags in corporate practice with respect to implementation of standard costing and related MA tools</td>
</tr>
<tr>
<td>Jansen et al. (2009)</td>
<td>United States vs. Netherlands</td>
<td>Archival, Survey</td>
<td>Managers: US: n = 1302; Netherlands: n = 351</td>
<td>Dutch firms less likely to provide their managers with incentive compensation than their US counterparts</td>
</tr>
</tbody>
</table>

\*n refers to the number of companies included in the sample unless otherwise indicated.

demand for industrial democracy, the authors establish that British workers are more emphatic about the need for workplace democracy than their US colleagues. Because MA practices used to evaluate employee performance face greater resistance in Great Britain, indirect and informal controls are more popular (see Wardell and Weisenfeld 1991).

Whereas Japan clearly acted as an exporter of MA practices in the 1990s, Europe’s role remains ambiguous. Certain US MA practices were imported, including activity-based costing, whereas other techniques were exported to non-European countries. In the practitioner literature, the export of German cost accounting practices to the US has been debated for several years (see Sharman 2003; Sharman and Vikas 2004; Friedl et al. 2005; Krumwiede 2005). However, though it is obviously of practical relevance, this debate has neither been taken up adequately by scholars nor been extended...
to more holistic approaches to MA. Consequently, a lack of empirical data hinders in-depth discussion in this area.

At present, the national MA structures used in Europe differ significantly. For example, management accountant training and the involvement of accounting in corporate decision-making varies widely. These differences must be carefully examined to properly understand cross-country transferability and learning effects. We identify indicators of long-term transnational convergence in MA and the role of management accountants within companies. So far, this trend towards convergence has only been observed for terminology and applied instruments. The research stream on convergence and isomorphism in MA is largely constrained by a lack of meaningful empirical data. In particular, the question of the direction of convergence – who is converging toward whom – remains to be addressed.

**Transitional and emerging economies**

Since the 1990s, the CMA literature has also analysed transitional and emerging economies (see Table 3). This stream of literature to some extent replicates existing studies of transitional and emerging economies (see, for example, Joshi 2001; Birnberg et al. 2008). The interest in these countries has been induced by two principal developments. First, the growing economic importance of emerging global players such as China, India and Brazil has had an impact. Second, the economic, political and social changes in transitional and emerging countries have triggered changes in MA and encouraged the transfer and use of new practices (see Guilding et al. 1998; Luther and Longden 2001).

As in studies on Japan, highly developed Asian countries and Western Europe, national culture also serves as a starting point in CMA research on transitional and emerging economies. For instance, Joshi (2001) observes that Indian manufacturing companies tend to use more traditional MA practices than do those in Australia and that they also adopt contemporary techniques more slowly. More conservative management teams and social reluctance to accept changes in cultural values and practices result in adherence to established practices. Since Indian companies expect fewer benefits from contemporary management and cost accounting, modern cost management practices such as target costing are rarely used.

Whereas most CMA research has analysed the differences between national MA structures and practices, several studies reveal similarities between companies in emerging and western countries. For instance, examining the US and China, Birnberg et al. (2008) find similar demands for formal control systems and accountability information to be necessary to ensure fair reporting. In both countries, approximately 50% of participants are willing to sacrifice wealth for more expensive control systems with higher levels of accountability in an experimental setting.

A small strand of literature examines participative budgeting in Mexico. Although budget participation tends to be positively related to performance (see Lech-López et al. 2007), Frucot and Shearon (1991) indicate that it is riskier to introduce this practice in foreign-owned Mexican subsidiaries. Accordingly, they suggest consultations with local managers as a means of determining appropriate ways to introduce new management techniques within firm subsidiaries and improve their acceptance. Likewise, Douglas et al. (2007) show that substantial budgetary participation gives Egyptian managers working in US companies a higher incentive to create slack than their counterparts in local firms.

In various transitional and emerging countries, a lack of well-trained professionals and the limited importance of local companies on the global market are currently still key inhibitors of advances in MA. Against this backdrop, the low circulation of modern techniques is not very surprising. Although we find that the number of CMA studies on transitional and emerging countries is still low compared to the number focusing on industrialised regions, the diffusion of modern practices in emerging markets is already visible. This trend shows the role of these countries as importers of foreign MA techniques, which has not been analysed in depth within the current CMA literature. However, the number of calls for papers and special issues devoted to accounting in transitional and emerging economies (for example, European Accounting Review) indicates a growing academic interest in these regions.

**Critical Analysis of CMA Research, Constraints and Possible Solutions**

Our review reveals the increased academic interest in CMA research that has been visible since the beginning of the 1990s. At this time, a number of authors are beginning to explore the differences between national MA roles and practices (see Ueno and Sekaran 1992; Jones et al. 1993; Wijewardena and Zoysa 1999). In comparison, only a few studies have examined the drivers and the extent of international harmonisation and convergence on MA (see Carr 2005). However, researchers previously highlighted the need to study convergence when the CMA debate approached its first peak (see Grandlund and Lukka 1998).

We argue that theory-driven obstacles represent a significant barrier to CMA studies targeting highly ranked accounting journals. The issue is mostly the limited range of theory that has been used in these studies and the strong focus on differences, which have
### Table 3  Studies on CMA in the narrow sense with a focus on transitional and emerging economies

<table>
<thead>
<tr>
<th>Author/s (Year)</th>
<th>Countries Researched</th>
<th>Research Design</th>
<th>Sample*</th>
<th>Main Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collins et al. (1997)</td>
<td>Seven Latin American countries</td>
<td>Survey, Interviews</td>
<td>Central America: n = 76; South America: n = 52</td>
<td>Companies with prospector strategies derive greatest benefits from the use of budgets in times of crisis.</td>
</tr>
<tr>
<td>Joshi (2001)</td>
<td>India vs. Australia</td>
<td>Survey</td>
<td>India: n = 60; Australia: n = 78</td>
<td>Greater acceptance of traditional cost accounting techniques and more conservative attitude of management in India.</td>
</tr>
<tr>
<td>Luther and Longden (2001)</td>
<td>South Africa vs. Great Britain</td>
<td>Survey</td>
<td>South Africa: n = 139; GB: n = 77</td>
<td>Environmental uncertainty makes management information systems more valuable in South Africa.</td>
</tr>
<tr>
<td>Douglas et al. (2007)</td>
<td>Egypt vs. United States</td>
<td>Survey</td>
<td>Egypt: n = 31; US: n = 28</td>
<td>Egyptian managers working for US firms: more budgetary participation, more incentives to create slack, less idealistic than their counterparts in Egyptian firms.</td>
</tr>
</tbody>
</table>

* *n* refers to the number of companies included in the sample unless otherwise indicated.
already been identified as declining on the country level over time (see Shields 1998). The current CMA literature has not managed to identify sufficient attractive options for further research to maintain academic interest at a level that reflects the relevance of comparative studies to business practice in times of globalisation. Most CMA studies are descriptive and there is little research linking the design of MA systems and the use of certain practices to company performance. A substantial part of the literature completely avoids references to economic or social theories. Other studies that employ a theoretical framework rely on contingency theory but only consider ‘national culture’, neglecting other contingency variables. Although the national culture dimensions emphasised by Hofstede (1983) have been widely criticised (see Harrison and McKinnon 1999; Hartmann 2000; Baskerville 2003; Chenhall 2003) and provide only limited explanatory insight in the CMA context (see Chow et al. 1994), they still represent a standard approach for empirical research in this area (see Joshi 2001; MacArthur 2006). Thus, further studies of CMA should not only employ an extended contingency framework that includes other relevant variables, such as industry sector, company size, technology, regulatory environment, etc., but should also employ other social science theories.

Institutional Theory can be expected to generate interesting results, particularly within the framework of the widely-discussed convergence trend (see Granlund and Lukka 1998; Bhimani 1999). For instance, the design and adjustment of MA processes based on international standards may help companies to gain social legitimacy (see Ansari and Bell 1990; Bhimani 1999). From an Institutional Theory perspective, companies have an incentive to mutually transfer institutionalised MA practices due to their acceptance by other companies or in other countries (see Meyer and Scott 1992; Donaldson 1995; Bhimani 1999). Accordingly, MA techniques are introduced and adopted not because of their economic necessity but rather as a consequence of coercive, mimetic or normative pressures (see DiMaggio and Powell 1983; Berry et al. 1985). MA research since the 1980s has relied increasingly on sociological explanations (see Barrachina et al. 2004) and a closer examination of the Institutional Theory framework within CMA would provide a promising foundation for future studies. In this context, principal-agent frameworks could be helpful because they might assist researchers in gaining more insight into country-specific styles and aims of MA, helping to clarify how incentive structures are linked to different institutional conditions. In restricting itself to its current frameworks, the CMA literature can neither explore the influence of MNCs on local companies in introducing tools and role models nor examine the influence of the increasing professionalisation of accounting (see Siegel et al. 1997).

In addition to the shortcomings of the theory used, methodological inconsistencies play a major role in CMA studies. We argue that difficulties related to data access constitute a second major obstacle for CMA research that can be described as methodology-driven. While Zimmerman (2001) considers a lack of publicly available data and restrictions on access to internal information of firms to be a challenge for empirical MA research more generally, this especially holds true for cross-country comparisons. Methodological inconsistencies in CMA research may stem from the use of inadequate samples composed of only a small number of companies and research designs that do not control for industry sector or company size. Matched sample studies are the exception (see Harrison 1992; Chow et al. 1996; Ahrens 1997b). Therefore, in most papers, the de facto comparability of the data is uncertain. Many existing studies no longer claim to be anecdotal but remain exploratory. This constraint has created a persistent need for further research on CMA.

A third obstacle that inhibits CMA research is the mutual reinforcement of theoretical and methodological shortcomings. Collecting empirical evidence of convergence is more difficult than detecting differences between certain countries because convergence is a dynamic process. To prove that isomorphism exists on the country level, studies should either cover a wide range of industries or at least adequately represent one industry from each country and they may require much larger samples. In contrast, differences between cultural perceptions regarding accounting-related issues can be tested on an individual employee level, as Merchant et al. (1995) show in their 2×2 matched-sample field study of US and Taiwanese companies. Finding convincing evidence for isomorphism in the cross-country convergence of MA structures and practices requires costly and time-consuming longitudinal studies like those of Anderson and Lanen (1999) or cross-country research panels. Our review indicates that researchers have avoided making these efforts and first explored those CMA themes that were easier to address in terms of both the theory and the methodology required. However, important considerations, such as the potential negative effects of imitation on performance (see Barreto and Baden-Fuller 2006) have not been integrated into the CMA context. Preferences for certain research designs (for example, small-scale/qualitative vs. large-scale/statistical) can be understood as a function of restrictions on data access and resource constraints in international settings. Likewise, the persisting paucity of CMA-related theory probably stems from the general opacity of the theoretical approaches guiding comparative management research (see, for example, Redding 1994). The focus on descriptions of corporate practice rather than causal relationships has created
an additional incentive to omit theoretical framing, especially in early CMA studies.

In addition to analyses of national culture and convergence, intra-corporate comparative studies, such as that of Van der Stede (2003), theory-driven field studies and detailed case studies may be used to research how MA networks work in a cross-country context. A combination of actor-network theory and field study designs (see, for example, Ahrens and Chapman 2007) may emerge as a fruitful approach to gain insight into the international dynamics of MA. Whereas CMA itself is a relatively young research discipline, comparative studies of general management and financial accounting have been published since the 1960s (see Davidson and Kohlmeier 1966; Hatfield 1966) and may provide valuable guidance regarding additional research themes that are relevant to CMA.

The Anglo-American world often serves as a general reference model for comparisons in the CMA literature. Whereas the western world has been a major importer of Japanese management styles and tools, Japanese companies are less likely to adopt Anglo-Saxon financial management techniques than are their European counterparts (see Carr 2005). There is a clear need for further research (both cross-sectional and longitudinal) to extend Carr’s (2005) evidence on this subject, which is based on data for vehicle component manufacturers. Furthermore, given that the Anglo-American sphere serves as a general point of reference, the differences between MA practices in countries such as the US, Great Britain and Australia have not received much attention. Likewise, large parts of Asia, Latin America and Eastern Europe have not yet been studied. The BRIC countries in particular could serve as interesting points of reference for detailed comparisons of MA in their regions. In this context, papers might explore whether the BRIC countries serve as catalysts for the regional adoption and adaptation of MA practices or if direct global influence plays a more important role. We theorise that in transitional and emerging economies, MA is significantly less institutionalised than in western countries. Therefore, it may occur in concealed forms or be labelled differently, which in turn makes it more difficult to study. Indeed, an additional challenge for CMA is the existence of different culture-specific perceptions of identical phenomena. There is a risk of misinterpretations and misunderstandings on terminology, styles, purposes and applications of MA (see Jones et al. 1993) that may decrease the comparability of the data. Only if researchers have an in-depth knowledge of the relevant country-specific conditions can this risk be minimised. However, these obstacles provide an opportunity for increased international research cooperation.

The importance of CMA research is underlined by its high practical relevance, particularly for MNCs. Studies have shown that MA techniques differ in their effectiveness from country to country. Consequently, MNCs must adapt their MA practices to the cultural requirements of the countries in which they are conducting business (see Harrison 1993). CMA research helps managers at MNCs to understand national variations on MA (see Harrison et al. 1994) and to identify deficits in common practice (for example, in environmental MA or in the use of intellectual capital). Through the detection of shortcomings and the presentation of international best practices, CMA can provide guidance for firms and academics. This allows them to become more active in these fields and to meet current and future challenges in MA (see Bartolomeo et al. 2000; Chaminade and Roberts 2003). The use of generally recognised MA instruments and processes may help companies to increase their efficiency but will also increasingly become a requirement for firms seeking to gain legitimacy (see DiMaggio and Powell 1983). These strategic considerations in turn will influence decisions regarding capital allocation, market access and the recruitment of qualified professionals (see Greenwood et al. 2002). In this context, it would be interesting to analyse in greater detail whether and under what circumstances MA practices are not beneficial for companies operating in certain countries. This knowledge will be an essential factor for companies looking to protect themselves from committing errors when the pressure to adapt exceeds rational reasoning. We suggest that corporate practice provides a rich source of knowledge for future empirical research in CMA and that future studies should employ relevant theoretical frameworks and methodologies to explore this knowledge. This, in turn, will allow researchers to draw precise conclusions and interpret their implications more consistently and thus to generate useful insights for academics, practitioners and investors.

Conclusion

This paper provides an overview of the research on CMA that has been conducted during the past two decades, classifies the resulting heterogeneous body of literature and helps researchers to identify CMA as a distinct research stream within the greater field of MA. We have revealed a number of theoretical and methodological shortcomings of the CMA literature and provided insights that should be valuable for further research. Future studies should cultivate a more systematic and theory-based analysis of CMA and should also generate adequate empirical data (see Granlund and Lukka 1998; Wijewardena and Zoysa 1999). Although the present review identified a number of transnational differences between MA structures, increasing convergence can be observed with regard to techniques and terminology,
at least at the European level (see Shields 1998). In contrast, substantial differences between the roles of management accountants and their competencies within companies still prevail. The reasons for the disparities identified are as multi-faced as the CMA literature itself and range from cultural influences to taxation and education systems, macroeconomic frameworks, country-specific stakeholder relations and economic activities. Studies on convergence and isomorphism must confront this complex context and must also be based on longitudinal empirical data, which makes them costly and tedious. This is why CMA studies have focused on the differences between national MA practices instead of their increasing similarities. Accordingly, the present paper has shown that in times of increasing global interdependence, the academic discussion of MA and related corporate practice depends both on knowledge and insights produced by explicitly comparative studies.

Christoph Endenich, Michael Brandau and Andreas Hoffjan are at TU Dortmund University, Germany. The authors are grateful for the comments of two anonymous referees on earlier versions of this paper and to Ms Helen Albers for her comprehensive editorial support.

Notes

1 These countries (Hong Kong, Singapore, South Korea and Taiwan) are also known as the ‘Asian Tigers’.
2 Australia, Great Britain, Canada, New Zealand and the US.
3 Brazil, Russia, India and China.
4 We use Western Europe as a comprehensive term for industrialised European countries including Scandinavia, Southern European countries and Great Britain but excluding the Eastern European transitional economies.

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