Relevance Lost: Are Johnson & Kaplan's claims valid outside the U.S.?

A systematic literature review of over three decades

MASTER THESIS

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Summary Sheet

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Five key words:	Relevance Lost; Accounting; Debate; Validity; Review
Purpose:	This paper aims to give evidence on the external validity of Johnson and Kaplan's claims of management accounting having become subservient to financial accounting.
Methodology:	Systematic Literature Review
Theoretical perspectives:	Firstly, Johnson and Kaplan's claim that financial accounting dominates management accounting. To interpret the findings to find validity in the claim, our theoretical perspectives contain the historical contexts of both accounting fields and sources of differences between geographical areas.
Empirical foundation:	32 academic papers from different countries which contain information about the 'Relevance Lost' debate and/or the adoption rate of recently developed management accounting practices.
Conclusions:	A mixed pattern of confirmation of validity has been identified. Nearly half of the countries agreed with Johnson and Kaplan (1987), while the other half did not. The most important identified contingent factors determining the validity of the claim are on average a high power distance in the country's organizational structure, a strongly regulated stock market and the degree of globalization and digitalization of the respective country.

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1 Introduction

Financial figures are essential in a company's decision-making. So, in a world where all things connected to succeeding rely on these figures, companies need to have a sophisticated management accounting enriched by a well-functioning financial accounting and reporting in place to achieve their economic goals. The latter provides historical data to facilitate information required for planning, controlling, budgeting, and decision-making. Thus, financial accounting information is the basis for managerial accounting. So, in some way, both the accounting practices are subject to decision-making. The financial accounting system provides owners and investors with authentic and comparable information on the company's value creation (Nilsson, 2016). Management accounting, on the other hand, point out relevant information to assist in the company's strategic and operational decisions. Hence, it ensures the useful and timely formulation and implementation of its policies and strategies (Nilsson, 2016).

Consequently, the financial accounting system affects the design and the use of management accounting, and thus management accounting loses its relevance in decision-making on company level (Johnson & Kaplan, 1987). On that account, the different roles of these accounting systems have mold management accounting as a subservient to the demands of financial accounting. Johnson and Kaplan (1987) argued that unjustified relevance to financial accounting has led to deficiencies in internal management reporting. This paper seeks to address the validity of Johnson and Kaplan's (1987) claims outside the United States over the last three decades. It is highlighting financial accounting domination over management accounting in the past vis-à-vis present scenario and its impact in the future subject to various cultural differences in practice.

1.1 Background

"Today's management accounting systems provide a misleading target for managerial attention and fail to provide the relevant set of measures that appropriately reflect the technology, the products, the processes and the competitive environment in which the organization operates." (Johnson & Kaplan, 1987, p. 3). Management accounting systems in an organization must be implemented with a focus on attaining three major objectives. Firstly, to provide timely and accurate information for cost control and productivity improvement. Secondly, to provide accurate and defined product costs for improved decision-making regarding product pricing. The final objective is to provide information that helps organizations in motivating and evaluating their managers. Johnson and Kaplan (1987) were aware that the current management accounting system was inadequate to fulfill these objectives of the current business environment. Therefore, Johnson and Kaplan shared the opinion that the management accounting information and techniques used by managers after World War II for decision-making processes were divergent from the competitive environment and rapid technological changes (Johnson, 1994). It should be noted that such 'Relevance Lost' claim of management accounting by Johnson and Kaplan emphasized post-war American business failure to adapt management accounting information into control operations (Johnson, 1994).

According to Johnson and Kaplan (1987), management accounting exists to support financial accounting activities of the companies that were considering in-depth and efficient supervision of their management and hierocracy. Furthermore, management accounting measures influenced and estimated the efficiency and effectiveness of internal processes rather than the company's overall financial position. Hopper et al. (1992) also argue that the demands of financial accounting continually dominate the management accounting practices due to which management accounting has lost its relevance. The demand for financial statement information required by investors, lenders, and other creditors for the company's value creation in the market is higher than managerial information required for the company's strategy formulation and implementation. They, as well, share the opinion that companies only want to operate with one accounting system with an excessive focus of financial accounting even though it results in a lack of internal reporting, making it difficult for companies to cope with the gap. (Hopper et al., 1992). Alternately, they propose to use an accounting system which is designed to meet financial accounting requirements, and hence leads to the domination of financial accounting demands over management accounting requirements.

As Johnson and Kaplan's (1987) work focuses on the U.S. only, researchers worldwide participated in the 'Relevance Lost' debate. Most studies result in a response from the 1990s; however, there have not only been changes over time but also national differences in the countries' management accounting practices. Therefore, the companies' approach to adapt and hence exercise management accounting practices determine the power role of financial accounting and thus differ from country to country. For example, developing countries, as compared to developed countries, show notable differences in their respective annual growth rate due to inconsistencies in practicing management accounting (Joshi, 2001). Various reasons, such as a difference in cultural values, power distance, and dynamism, can contribute towards such distinct approaches between the countries (Joshi, 2001). The dominant role of financial accounting largely depends on how companies adapt management accounting practices in their respective cultures. The author further argued that the adoption rate of newly developed management accounting techniques as compared to the adoption rate of traditional management accounting techniques differ country wise depending on cultural practices and economic stability. “Cultural relativism affirms that one culture has no absolute criteria for judging another culture's activities as "low" or "noble." However, every culture can and should apply such judgment to its activities, because its members are actors as well as observers” (Hofstede, Hofstede & Minkov, 2010, p. 25). As actors and observers, the members shape cultural practices and this lead, according to the authors, to national differences in accounting practices existing due to cultural distinctions.

Cultures are diverse, and the successful practice in one culture does not necessarily have the same effect in another culture due to such underlying differences. The authors further argued that managers are part of national societies, i.e., national culture. Therefore, managers' behaviors and actions differ in different cultural settings (Hofstede, Hofstede & Minkov, 2010). The significance of the industry culture dimension depending on the work type and the target market for an organization is observable. Organizations can be process-oriented and result-oriented (Hofstede, Hofstede & Minkov, 2010). Therefore, differences in the development and implementation of management accounting systems in different organizations could notably impact the dominance of financial accounting systems. Consecutively, considering economic stability and national culture as a basis of difference, one is able to analyze the differences in management accounting practices between developed and developing countries.

To summarize, Johnson and Kaplan (1987) argued that traditional management accounting practices are futile to today's business requirements. Traditional techniques fail to provide useful, timely, and relevant information to current business managers for planning, controlling, and decision-making. Consequently, the extent to which traditional and new management accounting techniques require financial information for decision-making causes significant impacts on management accounting's submissive role. Johnson and Kaplan's (1987) claim of financial accounting dominating management accounting is validated in the American business setting. However, the validity of this claim outside the U.S. is open and questionable. The adoption rate of newly designed and developed managerial accounting techniques in different scenarios and different business settings influence the declining relevance of management accounting in respective countries. Accordingly, this paper argues the extent to which traditional vs. contemporary management accounting practices are adapted and exercised by companies in different countries in collaboration with their financial accounting system depending on their cultural and national practices. Due to a lack of consistency based on regional distribution, country-wise analysis outside the U.S. is conducted to determine the validity of Johnson and Kaplan (1987) claim.

The differing results will be contrasted depending on country-specific variables and their publishing date.

1.2 Problematization

While financial accounting is heavily regulated nowadays and, additionally, does not necessarily reflect the economic reality of a company (e.g., accounting for tax purposes), management accounting is argued to strengthen competitiveness and reflect actual corporate performance. A lot of management accounting tools and techniques even concern forecasting and help the companies to plan their resources to maximize value and efficiency. Challenges like market uncertainty, increasing pressure of competitors, and advanced technology have led companies to use contemporary management accounting practices over traditional ones. In today's world, management accounting is changing rapidly, depending on the need of business operations. As already mentioned in the previous section, the dominance of financial accounting depends on the extent to which firms adapt management accounting practices in their respective countries. According to Johnson and Kaplan (1987), 'Relevance Lost's primary focus is on American business failure adapting to an efficient management accounting system after World War II. As a result, management accounting became submissive towards external financial reporting demands. However, the claims hold validity within the U.S., but the validity of financial accounting dominating management accounting outside the U.S. is controversial and likely, not uniform. Reflecting on contingency theory, we argue that management accounting practices vary depending on the company's internal and external environment; hence, there is no universal applicability of one superior practice (Moniz, 2010). The circumstances affecting the adoption of management accounting techniques comprehend a set of contingent factors such as a firm's environment, organizational structure, globalization, managerialism, technological changes, and economic transition (Innes & Mitchell, 1990). Even though much time has passed, since 'Relevance Lost' was published, the research problem arising from it still imposes relevance for today's research. Specifically, international harmonization of financial and management accounting practices resulting from globalization and digitalization impose a new angle in the time dimension and should theoretically reduce differences in the adoption of traditional vs. new management accounting practices.

Financial accounting focuses on overall financial and profit-generating results of the entire business, whereas management accounting reports such profits more specifically at product and customer levels. Its financial reports can trace the efficiency of a business, but in the scenario of financial accounting dominating management accounting, the factors causing a reduction in overall business efficiency can be overlooked. Management accounting plays a vital role in determining the factors causing inefficiencies for the business and forecast future threats to business efficiency. Hence, financial accounting produces financial reports, and management accounting produces operational reports of its financial position. The complications of financial accounting being too dominant over management accounting cannot be underemphasized. Therefore, the primary focus of this master thesis is to observe the opinions of Johnson and Kaplan's claim in terms of validity by examining the extent to which financial accounting dominates management accounting and what role the countries' economic position plays in such dominance.

Finally, the thesis will contribute to existing research in this field with a longer time perspective and provides an additional perspective specifically by comparing the practices of differing economies.

1.3 Purpose

The framework of the paper is developed based on Johnson and Kaplan's 'Relevance Lost' claims and a systematic review of available literature. Therefore, this paper aims to uncover and interpret the validity of the 'Relevance Lost' claim outside the United States. Drawing upon this theory and a systematic literature review of academic papers in this field, this study addresses the following research questions to be able to make conclusions about validity:

1) Does financial accounting dominate management accounting outside the U.S.?
2) What are the potential contingent factors that influence management accounting practices?

Our primary aim is to analyze if management accounting has lost its relevance and if, as a result of which, financial accounting imposes dominance before analyzing the potential outcomes of this phenomenon. For this purpose, we perceived financial accounting and management accounting as two separate realities. This paper attempts to take into account the impact of two major factors, i.e., time and geographical dimension, which potentially contribute to the dominancy in question of financial accounting over management accounting. More precisely, this paper attempts to highlight the effect on managerial accounting positions vis-à-vis financial accounting, depending on the adoption rate of traditional and newly developed managerial accounting techniques in different periods across the globe. We aim to reveal the impact of various contingent factors in different countries to determine the country-wise validity of Johnson and Kaplan's claim outside the U.S.

1.4 Outline of the thesis

Following the introduction, which entailed the theoretical background of the 'Relevance Lost' debate, we describe the method with which we want to answer our research questions. The method includes the reason for choosing a systematic literature review to address our research questions as well as the critical steps we conducted. To provide a historical context, chapter 3 gives additional background about the two accounting fields and where similarities and differences are expected to occur in the findings. In chapter 4, the findings of the systematic literature review are presented in the default order. These reviewed findings, in turn, form the basis for the discussion chapter. Furthermore, this chapter entails the limitations to our findings, further research opportunities, and practical implications. Finally, chapter 6 concludes the discovered outcomes and answers our research questions.

2 Method

2.1 Systematic Literature Review

As our research questions require a lot of different data from a different time and places, we decided on conducting a systematic literature review following Bryman and Bell (2011). Notably, the use of previous academic findings to evaluate the validity of Johnson and Kaplan's claims supports the choice of conducting a systematic review. This form of literature review deviates from a traditional narrative "by adopting a replicable, scientific and transparent process […] that aims to minimize bias through exhaustive literature searches of published and unpublished studies […]" (Tranfield, Denyer & Smart, 2003, p. 209).

A collection of primary data is not possible concerning the scope of the thesis, and hence, the literature review findings are our primary source for discussion and interpretation of such results (Bryman & Bell, 2011). Over 30 years after Johnson and Kaplan (1987) published their work and gave rise to a debate, numerous researchers published their perspective and contributed with first-hand analyses from their respective countries, which makes it possible to review and discuss the debate in a structured way systematically. A review only including quantitative studies is called a meta-analysis, and those including qualitative findings are approached by meta-ethnography (Bryman & Bell, 2011). To obtain as many different and international views on the 'Relevance Lost' debate as possible, we include qualitative and quantitative papers. Generally, the systematic review process is as follows: (i) specifying the research question and develop a review plan; (ii) conducting the review and (iii) reporting on the subject (Tranfield, Denyer & Smart, 2003; Bryman & Bell, 2011). In this paper, the research questions are specified in chapter 1.3, and the review is planned in the rest of this chapter. The review outcome can be found in Appendix A and B, where all articles have been collected and displayed transparently. Chapter 3 includes the findings of Appendix A, which are the articles that passed our eligibility criteria for this paper.

2.2 Search Terms

Articles that were collected for preliminary research purposes for this paper influenced our choice of search terms (Hopper et. al, 1992; Joseph et. al, 1996; Drury & Tayles, 1997). In addition to our research question 'Does Financial Accounting dominate Management Accounting' as initiated by Johnson and Kaplan (1987) and motivated in our first chapter, we defined the following search terms for our review:
‘Relevance Lost’, ‘Management Accounting’, ‘Financial reporting domination’, ‘Financial Accounting’, ‘Internal Accounting’, ‘Accounting Regulation’, ‘External financial reporting’, ‘Accounting mentality’, ‘Debate’, ‘Survey’ and ‘Case study’.
Additionally, 1987 is the earliest year of publication for articles to be reviewed, as this is the publication year of Johnson and Kaplan's work.

2.3 Information Sources

As earlier stated, we intend to include sources from as many countries as possible. Hence, the central database for article search was 'Google Scholar.' Google Scholar offers a great variety of published papers and hence provides us with the ability to conduct a broad search of global scholarly literature (Google Scholar, 2020).

Concerning objectivity in qualitative journals in which articles are published, we chose to extend our search to the following journals from the Academic Journal Guide 2015: 'Accounting Review,' 'Accounting, Organizations and Society,' 'Journal of Accounting and Economics,' 'Journal of Accounting Research,' 'Contemporary Accounting Research,' 'Review of Accounting Studies,' 'Abacus,' 'Management Accounting Research' and 'Critical Perspectives on Accounting.'
These journals were chosen because they show a high ranking or specialize in management accounting.

2.4 Inclusion and Exclusion Criteria

In the first selection, articles were collected and registered in an Excel sheet based on their title, i.e., that the title contained the desirable search terms specified in chapter 2.2. As mentioned before, papers that were published before 1987 were excluded. Both qualitative and quantitative papers are included.

Subsequently, the next step was to exclude duplicates, articles that are not peer-reviewed, and those that have not been published in a journal. These exclusion criteria were imposed on remaining integrity and quality. We specifically included papers from different journals, some of which are not listed in the Academic Journal Guide, to provide a broader perspective. Book chapters have been excluded as well as they have more of an informative character rather than portraying an academic study.

The third and final step consisted of screening for eligibility for the literature review. To be more precise, papers that reflect management accounting practices from certain countries concerning the 'Relevance Lost' debate (or in the broader sense, the degree of adoption of traditional vs. newer techniques) were included in the review. This was found out through screening abstract and introduction of each article to determine its usefulness to answer our overall research questions. All other articles have been excluded in this step. The articles that have been excluded in the selection process (Fig. 1) are listed in Appendix B. 32 articles have been deemed eligible for review and are enclosed in Appendix A with a small summary of each article.

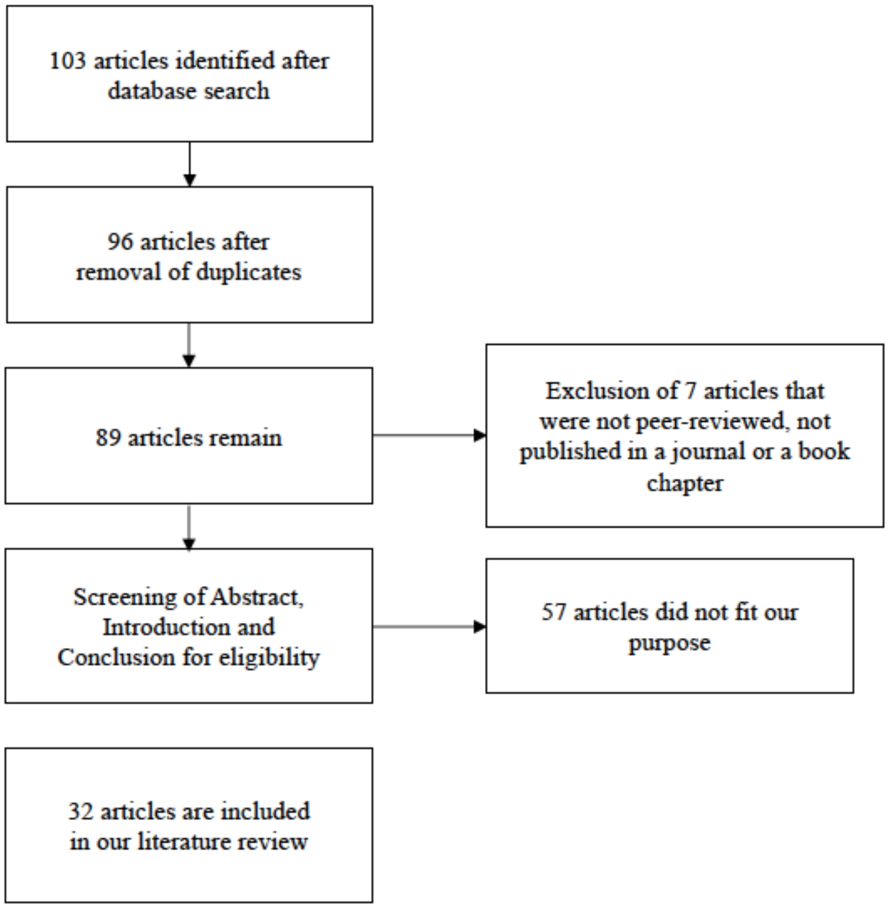

Figure 1: Study Flow Diagram

2.5 Assessment of Included Studies

We collected and screened articles individually and then compared our selection and decision. There has been a discussion in case of a disagreement, and if doubt over eligibility prevailed, the article has been excluded from the study.

To provide a clear structure to the findings, we chose to organize the articles for the review in a separate table sorted geographically (s. Appendix A). As mentioned in 2.1, we included both quantitative and qualitative articles. However, quantitative papers are preferred as they are perceived to be more objective and focused than qualitative papers. In the case of multiple articles of one geographical area, we sorted them chronologically with the oldest article first. This sorting subsequently represents the order of the literature review. Articles that contain more than one country are labelled with the country of their primary focus, e.g., Hyvönen (2005) compares her findings from Finland with the Australian study conducted by Chenhall and Langfield-Smith (1998). In this case, Hyvönen (2005) is assigned to Finland. Studies that review practices of more than two countries are either assigned their respective continent of origin or if that does not apply are labelled as international.

2.6 Limitations

A systematic literature review conducted in the English language raises the limitation of the natural domination of articles from Anglo-Saxon countries. Lukka and Kasanen (1996) pointed out that even though accounting is a globally researched field, there is a significant amount of researchers publishing in their mother tongue in domestic journals. Additionally, the topic originated in the United States, which makes it more prominent is the U.S. than in other countries. Another general limitation of a literature review is the reliance on the included published articles in the presenting of findings, even though they had to undergo specific eligibility criteria.

Any form of bias was tried to be prevented through transparent and objective selection processes (Bryman & Bell, 2011). However, despite our best efforts to remain unbiased and transparent in our methodology, there may still be a possibility that some bias affected our selection process. Some studies might have been relevant after all, but since their abstract did not contain the content, we were searching for, they were excluded.

3 Literature Review of Historical Context

3.1 Financial Accounting

To put our findings in the following chapter into context and enable a discussion based on our overall question if Johnson and Kaplan's claims are valid, it is crucial to give a historical overview of both fields. Mainly since this entails the domination of financial accounting over management accounting.

In most literature, the history of accounting starts 1494 in Europe with the development of double-entry bookkeeping, and its primary concern is the preparation of publicly available financial information (Scott, 2015). Scott (2015) pointed out that this was necessary to provide uniform information to stakeholders, i.e., investors, and support the transformation of financial information solely controlled by the vendor. Since then, financial accounting developed all over the world, but mostly on a national level. Hence, accounting laws and regulations deviate from country to country (Nobes & Parker, 2016). The authors note that the different national solutions cannot be sustained as accounting is an essential instrument in a global environment, and the last decades have made great effort to harmonize financial accounting rules and practices. However, total harmonization has not yet been achieved due to world politics, economic globalization (e.g., international trade), stock market globalization, patterns of share ownership, and development of an international financial system (Nobes & Parker, 2016). Following Nobes and Parker's (2016) logic, the factors mentioned above aim to explain which measures have been undertaken to lead to a harmonization of accounting standards.

Firstly, in a political context, accounting is majorly influenced by world politics. After the fall of the Soviet Union in the 1980s, the United States emerged as a superpower and hence had a dominating influence on accounting and financial reporting (Lukka & Kasanen, 1996). International accounting standards (IAS) from the International Accounting Standards Board (IASB), formerly IASC, originate from the late British Empire by which also developing countries are still strongly influenced in terms of accounting practices (Nobes & Parker, 2016). On the other hand, the E.U. created various Directives in order to harmonize accounting within

Europe and made the adoption of International Financial Reporting Standards (IFRS) mandatory for listed companies (European Commission, 2020).

Since the Second World War, there has been significant globalization of economic activity. The two most influential outcomes for accounting are international trade and foreign direct investment, making the harmonization of standards more desirable, especially for multinational companies (Nobes & Parker, 2016). This leads to the assumption that countries with a higher percentage of multinationals take a more significant initiative, making their national standards more compatible with the ones from, e.g., IFRS. This shall be illustrated in the example of Germany, which is an economy containing globally recognized corporations. Buchner, Ernstberger and Friedl (2016) argue that Germany took significant steps to converge their national Handelsgesetzbuch (HGB) with international standards by orientating it towards a 'true and fair view.' Historically, German financial accounting is severely influenced by taxation, prudence principle and capital maintenance principles which make the harmonization a big task – primarily due to Germany's high percentage of small- and medium-sized companies which have trouble adjusting to more international standards (Buchner, Ernstberger & Friedl, 2016).

Parallel to this, capital market globalization also increased due to the deregulations of financial markets, among other factors. This leads to companies being able to gain more shareholders, hence more capital, and attract potential customers or employees (Nobes & Parker, 2016). The integration of stock markets has provided stock exchange regulators with a role in the internationalization of accounting.

Economic and stock market globalization are in place, and patterns of share ownership still vary around the world. Nobes and Parker (2016) distinguish ownership patterns between widely-held and narrowly-held. Within the narrow spectrum are family-owned companies, state-owned companies, and companies held by widely-held financial corporations or non-financial corporations. While widely-held organizations strive to serve their investors useful information to potentially gain more equity, narrowly-held organizations might have other incentives (Nobes & Parker, 2016). For example, a family-owned company might want to attract banks for loans with favorable conditions.

The last factor presented in this paper is the international financial system. After the Second World War, fixed exchange rates dominated the international monetary system. Starting from 1973, this was lifted for major currencies, which then have been volatile. This lead to concern from standard-setters about companies' hedging activities in foreign currencies. With the subprime mortgage crisis 2007/08, the global financial system was under severe stress. This lead to discussions about stock market regulations, and fair values were criticized (Nobes & Parker, 2016).

Despite all efforts, national differences remain. Nobes and Parker (2016) provide possible reasons to justify the existence of such differences: (i) culture; (ii) legal systems; (iii) providers of finance; (iv) taxation; (v) other external influences and (vi) the profession. The latter is hereby not of high relevance for this paper and hence will not be presented in detail.

As the environment is a major influential factor in accounting, culture is naturally a part of that. Hofstede (2001, p. 1) defines culture as "collective programming of the mind" which "manifests itself not only in value, but in more superficial ways: in symbols, heroes, and rituals." His main findings were the following dimensions of national culture:

(i) individualism vs. collectivism: the degree of interdependence of individuals in a society;
(ii) large vs. small power distance: the degree of acceptance of inequality among people within a society;
(iii) strong vs. weak uncertainty avoidance: the degree of risk avoidance of a society, i.e., how it reacts to the unpredictable nature of the future; and
(iv) masculinity vs. femininity: the former is now defined as society's preference for, e.g., heroism, material success, and achievement. The latter stands for a society's preference for, among others, quality of life, relationships, and modesty.

Gray (1988) based his study on Hofstede’s cultural dimensions and complemented them with accounting values derived from literature and practice:

(i) professionalism vs. statutory control: the degree of a society's exercise of self-regulation contrary to prescriptive legal requirements;

(ii) uniformity vs. flexibility: the degree of enforcement of uniform standards and practices as opposed to more flexibility depending on individual circumstances;

(iii) conservatism vs. optimism: the degree of risk avoidant measurement in terms of future events and profit calculation as opposed to a more optimistic and risk-taking approach; and

(iv) secrecy vs. transparency: the degree of transparency in publicly available information as opposed to the preference of restricted disclosure.

Gray (1988) sees a contrast between Anglo-Saxon culture and culture in Asian areas, as well as the former and Latin and Germanic cultures. However, Nobes and Parker (2016) point out that the measurement of cultural attributes in accounting is comparatively vague and needs a more detailed and reliable context. Subsequent research papers conclude different findings, and hence, Nobes and Parker (2016) do not provide a general 'cluster' for national accounting culture.

A more reliable determinant is the legal system of a country. Here, the authors (2016) distinguish between codified and common law. While codified law seeks to formulate one general rule for the future, common law tries to provide an answer on a case basis (Nobes & Parker, 2016). The common law system originates in England; however, the law system of other Anglo-Saxon countries (incl. former Commonwealth nations) is modelled after it. This lead to a higher degree of accounting professionals in formulating accounting rules or recommendations. A more conservative approach is the codified law, which lead to company law establishing rules for financial reporting, and hence, the accountancy profession does not have as much influence – which is still valid until this day (Nobes & Parker, 2016). Countries with a codified law system are, e.g., France, Germany, and the Netherlands. The authors point out associations of common law countries with higher transparency, faster reporting of losses, and large equity markets.

Concerning providers of finance, contrary to common law countries and their larger equity markets, code law countries exhibit a significant amount of capital from financial institutions (Nobes & Parker, 2016). Over time, the degree of outside shareholders in code law countries increased, but still, as of 2012, a clear difference of share ownership can be observed. Nobes and Parker (2016) expect a higher degree of foreign and outside investors to have a positive influence on accounting harmonization. However, as there is still a lack of these outside investors in comparison to Anglo-Saxon countries, indicates that external financial reporting still follows its original purpose: protecting creditors, tax collection, and control of the economy. This implies an explanation of more careful accounting practices as creditors are most interested in getting their money back than an investor who wants to know their future earnings prospects with his/her investment (Nobes & Parker, 2016).

An important factor in determining differences in accounting standards and practices is how much taxation regulations influence these. The higher the difference between tax rules and accounting practices, the higher the deferred taxation. In the United Kingdom and the United States, this amount is high compared to a country like Germany where tax rules are mostly accounting rules – even though because of the so-called Maßgeblichkeitsprinzip, which lead to differences between the two, this changed as well (Nobes & Parker, 2016).

Other external influences include examples like the E.U. making IFRS adoption mandatory for listed companies and how countries deal with inflation in their accounting standards. Most relevant are, nonetheless, the 1920s economic crisis in the United States, major accounting scandals (e.g., Enron and WorldCom), and the subprime mortgage crisis 2007. These examples, which are deemed a failure of accounting, had consequences that lead to a higher degree of regulation and formation of new organizations that enforce and monitor the correct implementation of standards (Nobes & Parker, 2016). The trend is rather an increase in regulation than a decrease.

Overall, with the identification of significant national differences and which factors influence the progress of international accounting harmonization, we expect management accounting practices to differ due to similar factors. To determine the degree of financial accounting influence on management accounting, it is crucial to obtain an overview of this field.

3.2 Management Accounting

Management accounting is a branch of accounting that enables managers to identify information in an organization in order to ensure effective and efficient decision-making. The Charter Institute of Management Accountants perceive management accounting as an integral part of management that is responsible for identification, creation, demonstration, evaluation, and analysis of pertinent information that fosters the planning and controlling activities, decision-making, efficient resource allocation, business strategies, performance evaluation, and improvement and value creation (Scapens, 1999).

The International Federation of Accountants (IFAC) render a framework to describe the evaluation of management accounting in order to provide clarity and an in-depth understanding of changing practices of management accounting (Abdel-Kader & Luther, 2006). It is notably a significantly more contemporary field of accounting than financial accounting. The evolution framework is designed and demonstrated in four stages. Stage one, also referred to as the pre-1950 stage, focused on product cost determination as it enables managers to plan and forecast organization costs and thus control financial positions and production processes accordingly. Therefore, managers' attention was limited to budgeting and cost accounting technologies for internal evaluation and production cost analysis. Hence, management accounting in stage one was referred to as *'Technical activity'* (Abdel-Kader & Luther, 2006). After 1950, management accounting's focus shifted towards generating information for management planning and control, and management accounting were referred to as *'management activity'* and evolved as a part of a management control system. By 1985, as a result of increased global competition and rapid technological changes, management accounting outlook expanded in terms of cost reduction through '*reduction of resource waste in business process'* (Abdel-Kader & Luther, 2006). Just in time and activity-based costing were primary techniques practiced for this purpose. The last stage evolved after the 1990s when world-wide industries faced technology challenges and the dominance of e-commerce. According to Abdel-Kader and Luther (2006), in stage four, management accounting's primary focus was towards '*value creation through effective resource use*.' The significant shift in management accounting's role took place in stage three and stage four as it shifted from an information provider to resource management. In stage one and stage two, the dependency of management accounting on financial accounting can be seen clearly, and hence, management accounting was submissive towards external financial reporting requirements. However, stages three and four reflect a more independent role of management accounting in organizations (Abdel-Kader & Luther, 2006).

During the 20th century, the failure of management accounting systems to keep pace with the evolution of product and process technologies led to the dominance of financial accounting.

Global competition of the 1980s was the primary factor behind the failure of the management accounting system in most organizations. High inflation coupled with a low dollar exchange rate completely changed the dynamics of the competitive environment among American businesses. U.S. manufacturers considered Japan to be the biggest threat in such conditions as Japanese manufacturers introduced innovative technologies that directly reduced labor costs for manufacturing goods (Johnson & Kaplan, 1987). Hence, it became a challenge for U.S. manufacturers to develop new and flexible management accounting system and techniques to deal with the emerging competition from foreign producers, e.g. Japan. They further argued that over the past 50 years, needs for external financial reporting have taken over the management accounting to such extent that management accounting later has lost its relevance. Which is why the diminishing importance of management accounting is a novel situation. The nineteenth and early 20th century marked the origins of management accounting's independence of financial accounting demands. In the past 60-70 years, the need of financial reporting and auditing dominated the management accounting system (Johnson & Kaplan, 1987). As a result of rapid technology changes, a growing global and domestic competition, and an astounding increase in information processing, management accounting does no longer provide relevant and timely information to managers for decision-making, thus losing relevance.

The framework of management accounting's evolution highlights the importance of adopting the new management accounting techniques to deal with global competition and technological changes occurring in the business environment (Abdel-Kader & Luther, 2006). New sets of management accounting practices and techniques are evolving to improvise its as strategic-oriented discipline. According to Abdel-Kader & Luther (2006) world authority of accounting, IFAC, is driving a new vision for management accounting. However, despite the continuous developments done by IFAC to improve and develop new management accounting practices, the evidence of adopting the same and abandoning the traditional practices cannot be observed. The transition from traditional towards adopting new practices is visible, but the complete elimination of traditional management accounting practices does not appear (Abdel-Kader & Luther, 2006).

Management is required to prepare and deliver reports to the external stakeholders and other interest parties regularly. Nonetheless, there is no legal obligation for accountants to prepare and provide relevant information to management for effective planning and decision-making (Sharman, 2003). Rapidly increasing global competition and technology demands helped organizations to analyze and observe that their old management accounting technologies were insufficient to meet the needs of present business scenarios. Similarly, according to IFAC, the business environment in which management accounting operates was changing expeditiously, and the degree of sophistication required was much more than in the 1980s. According to Sharman (2003), the need for organizations to shift their dependency from external financial reporting towards management accounting was significant and highly required in the 21st century.

After this historical context in both fields, we present our literature review findings to determine if Johnson and Kaplan's claims are valid outside the United States.

4 Findings

Relevance Lost: The Rise and the Fall of Management Accounting (Johnson & Kaplan, 1987) has stimulated research in management accounting. Researchers have used theoretical perspectives of 'Relevance Lost' to examine how and why Johnson and Kaplan's (1987) claims are perceived and validated outside the U.S. Johnson and Kaplan (1987) profess that management accounting has lost its relevance either because market mechanism failed or exhibits a lack of new management accounting techniques to deal with the current market situation. According to Rom and Rohde (2007), a major focus was given towards management accounting's transactional role rather than strategic decision-making. Regardless of the availability of extensive managerial data, companies reporting structures did not show considerable improvements (Rom & Rohde, 2007). The authors argued that the emerging role of informational technology in current business dynamics significantly supported the evolution of management accounting practices. Hence, it was suggested to develop new management accounting practices to deal with current market scenarios and implement an efficient and effective management control mechanism.

Furthermore, in this section, we tend to analyze the gap in the development of management accounting practices in different countries. Also, we examine the adoption rate of traditional in comparison to contemporary management accounting practices and its impact on the role of management accounting vis-à-vis financial accounting.

4.1 Anglo-Saxon Countries

4.1.1 United States

During the 1970s, Japanese manufacturers revolutionized management accounting practices such as total quality control, just-in-time inventory system, and computer-integrated manufacturing system (Johnson & Kaplan, 1987). Because of this, the U.S. considered Japan as a legitimate threat to their traditional market. This article is a review of the 'Relevance Lost' debate and understanding the implications of transplanting successful Japanese management accounting practices in the U.S. Thus, the article challenges the historical analysis and the corrective measures suggested by Johnson and Kaplan (1987), relating to the problems persisting with U.S. cost accounting and management control systems (MAS). Johnson and Kaplan have emphasized on understanding the importance of accounting history with U.S. business history in general. However, Ezzamel, Hoskin and Macve (1990) were of opposite view and perceived different history for the development of management accounting. They believed 'managing by the numbers' as a fundamental and essential role and the nature of MAS. Simultaneously, Johnson and Kaplan (1987) suggested the 'Japanese approach' and a cost management system independent of financial accounting as a remedy for production control. Contrary views were expressed by Ezzamel, Hoskin and Macve (1990) for the utility of these remedies in the U.S./U.K. organizational atmosphere. The author highlights the importance of understanding the interrelationship between human performances in the organization and how such performances are measured within an organization using MAS and outside organizations using financial accounting. 'Managing by numbers' is a new form of a technique developed contradictory to past management accounting practices. This technique enables modern business organizations to objectively measure individual performances and formulate a standard of performance for human behavior (Ezzamel, Hoskin & Macve, 1990).

Adopting such practices in Western culture enables organizations to prioritize individual performance and responsibilities over group identity and loyalty. Such a Western approach started to gain popularity in the U.S. and became one dominant form of control among organizations. The opposite approach was practiced in Japanese culture, where control was exercised and focused on a group rather than individuals (Ezzamel, Hoskin & Macve, 1990). Therefore, it can be summarized that management accounting practices adopted by countries reflect upon their cultural characteristics. This article unfolds the international differences and comparisons between management accounting practices based on accounting culture. The author provides the connectivity between the present-day accounting and managerialism. The key findings of the article highlight the fact that rather than focusing on implying Japan's successful management techniques to Western MAS or vice versa, the focus should be shifted towards utilizing the accounting numbers to its best in the system of control. Hence, managerialism plays a significant role in the degree to which management accounting techniques are adopted and practiced by organizations across the world. On that account, Johnson and Kaplan's 19th-century virtues of management accounting 'Relevance Lost' need to be studied in the present-day business phenomenon of accountability and managerialism.

4.1.2 United Kingdom

After this perspective on Johnson and Kaplan's (1987) work, researchers from the United Kingdom conducted a pilot study that focused on the dominance of financial accounting over management accounting (Hopper et al., 1992). The sample of this study consisted of six large U.K. public companies in varying industries. Hopper et al. (1992) noted that almost all participants used one system of data capture to observe the degree of integration between the accounting fields. However, the technology seemed to be sufficient to produce distinct managerial reports, and hence, this single system did not impose financial accounting domination. Overall, the authors found no unambiguous evidence of financial accounting harming management accounting, like Johnson and Kaplan (1987) claimed. Concerning the 'management by numbers' criticism, it has been recognized that financial ratios were emphasized, especially at headquarter level.
Nevertheless, contrary to call the management accounting systems outdated, the participants were not dissatisfied. With this article, the authors (1992) set the foundation for future studies in a similar manner. The following two papers provide additional insight into this matter in the 90s.

Joseph et al. (1996) conducted a survey by sending out a postal questionnaire to 100 qualified members of the Chartered Institute of Management Accountants (CIMA) in 1993. The response rate was 31%, and respondents have a diverse background concerning industries and size of employing company. Results show that there has been disagreement that management accounting systems are most of all designed to support published information of financial accounts. Combined with the agreement that the internal accounting systems are designed for internal purposes, e.g., meeting management information needs independently, the authors (1996) conclude that there is little evidence that respondents perceive their field of expertise to be dominated by the needs of financial accounting. However, there have also been contradictory findings, i.e., the usage of integrated systems due to which they have little leeway in internal reporting content. Joseph et al. (1996) state that this could be due to the circumstance that external reporting requirements have become such an integral part of information gathering within corporations that it reflects that in their perceptions. This is where they call for further research as the nature and mechanics of the organizational procedures are embedded and somewhat subconscious, which makes an investigation through a gathering of opinions obsolete and involved.

Drury and Tayles (1997) expand this issue by conducting a survey to have grounds for discussions about the differences in management accounting practices and what conventional wisdom imposes on the requirements of internal and external reporting. For this, a postal questionnaire was sent to 866 business units, 35% of which answered. The paper is split into two main parts: 'Product Costing' and 'Management Control Systems and Performance Measurement.' Concerning the first section, Drury and Tayles (1997) found that 79% of the respondents use costs derived from stock valuations. Therefore, it is rejected by conventional wisdom as this includes fixed costs, which are not expedient for decision-making. The findings suggest that most business units use their cost information in a flexible manner, indicating that their decisions are not exclusively based on said full cost information. The widespread use of stock valuation provides some support for the domination of financial accounting. Judging by the responses to the company's overhead allocation, the authors (1997) conclude that more simple methods have been used, which in turn supports the claim for Johnson and Kaplan (1987). These results could also derive from other reasons than the subservience of management accounting. Drury and Tayles (1997) name the failure of conventional wisdom to address practitioners' reality or U.K. companies' need to ensure that all costs are integrated into the cost-plus formula. The latter section shows that 84% of the respondents prefer internal reports (including profits) to be consistent with the externally reported numbers as the same basis for valuation is used. This could be to monitor the information which is being published to the financial community. Another result to be pointed out is that many participants use profits based on financial accounting to evaluate the manager's performance, and none of them distinguished between managerial and economic performance (Drury & Tayles, 1997). Lastly, none of the respondents used the annuity depreciation method according to conventional wisdom, and close to 90% used historical cost.

In summary, the findings show the widespread use of the same information for internal and external reporting. Hence, Johnson and Kaplan's (1987) claims cannot be rejected, but the authors call for further research to determine eventual alternative explanations. In the end, in the authors' opinion, these results call for an improvement of financial accounting quality.

Since Johnson and Kaplan’s (1987) claims regarding 'Relevance Lost,' management accounting systems are continuously evolving to develop new techniques and tools to deal with the present-day business demands and operations (Yazdifar & Tsamenyi, 2005). Regardless of such evolution, the adoption rate of new management accounting techniques was considerably low. It has been found that organizations continuously prefer to use traditional management accounting systems rather than contemporary practices. Business environmental uncertainty and complexity can cause such behavior of the organization. To investigate the reasons behind such an approach, Yazdifar and Tsamenyi (2005) conducted a survey in the United Kingdom where 279 professionally qualified members of Charted Institute of Management Accountants, U.K. responded to a postal survey. The management accountants from both dependent and independent organizations participated. The survey's focus was to understand the similarities or differences in the management accounting system of both the organizations and the changing role of management accountants. The significant difference between the adoption of management accounting practices is based on institutional theory, i.e., the relation between subsidiary and parent company (Yazdifar & Tsamenyi, 2005). In dependent organizations, efforts towards 'interpreting/presenting management accounts' and 'implementing and designing new information systems' were prioritized. Independent organizations, on the other hand, showed different approaches towards management accounting system implementations and adoption due to the absence from parent company's guidelines and pressure. The study found that organizational restricting, new management style, and globalization were some significant reasons for management accounting changes. Thereupon, the ‘Relevance Lost’ argument of Johnson and Kaplan (1987) is subjected to various factors like based on the nature of institutional pressure faced by the organization, the degree of integration between financial and non-financial information may vary. As a result, variation in the degree of adoption and implementation of new versus traditional management accounting practices, for instance, in dependent and independent organizations, may affect the submissive role of management accounting practices in every organization.

Over the period from 1992 to 2005, it can be observed that management accounting practices in the U.K. were not adopted and developed according to the current business scenarios. Economic performances remain the center of information for internal reporting in organizations. However, most research results did not show dissatisfaction with management accounting practices within the U.K. Thus, the U.K. does not gravitate towards Johnson and Kaplan’s (1987) ‘Relevance Lost’ claims.

4.1.3 Australia

As one of the first studies on the adoption and benefits of management accounting practices in Australia, Chenhall and Langfield-Smith (1998) conducted a survey targeting 140 large manufacturing firms. Due to increasing influence from the U.S., Japan, and the Australian government, the adoption rate for newer management accounting practices was higher than that of surveys conducted in other countries. Still, overall the traditional techniques were found to be relatively more widely adopted. Concluding, the authors reject the thought of traditional techniques to be lacking in relevance. This can be translated into a rejection of Johnson and Kaplan's (1987) claim. Also, the dependence between traditional and recently developed techniques needs to be further investigated as the latter's perceived benefits raise additional questions of eventual implementation issues as well. An explanatory suggestion has been made, which will be discussed later in chapter 4: Several factors may influence the adoption rates and perceived benefits of management accounting practices - namely, cultural factors and historical differences in the costing system development.

Coyte, Emsley and Boyd (2010) surveyed Australian public sector organizations to analyze the changes in management accounting practices as a change in rules and routines. The authors refer to rules as 'the way things should be done' and routine as 'the way things are done'. The study examines the stability and changes in management accounting practices by separating management accounting rules and routines. The study shows that rule precision influences the nature of rule/routine relationships (Coyte, Emsley & Boyd, 2010). Therefore, when precise rules are tightly coupled with routines, they provide providing more excellent stability in management accounting practices as compared to imprecise rules. Hence, other than cultural and historical differences, the rule and routine relationship also influence the role of management accounting vis-à-vis financial accounting in Australia.

Australia shows a higher rate of adopting and developing new management practices to manage global competition. Hence, the Australian approach towards adoption and implementation of management accounting practices is inconsistent with Johnson and Kaplan's (1987) claims of 'Relevance Lost'.

4.1.4 New Zealand

Guilding, Lamminmaki and Drury (1998) conducted a survey for cross-country comparison between New Zealand and the United Kingdom. They mailed 1269 and 268 questionnaires to qualified accountants in the U.K. and New Zealand, respectively. The response rate amounted to 24% for the U.K. companies and 32% for the N.Z. companies. It is anticipated that company size is positively related to the adoption of management accounting techniques. Most U.K. companies in the sample are bigger than the N.Z. companies. The main survey result is that around 75% of both N.Z. and U.K. manufacturers still employ standard costing systems and budgetary control systems. According to the authors, this popularity of traditional management accounting practices contrasts with the predictions of the changing role of the practice. The change, e.g., in technology, should have provoked the implementation of more recently developed practices that support Johnson and Kaplan's (1987) claim. On the comparison aspect of the survey, N.Z. and U.K. management accounting systems share more similarities than differences. One noteworthy difference is the lag between management accounting theory and practice, which tends to be more prominent in New Zealand. For Guilding, Lamminmaki and Drury (1998) the few differences between the two countries show the great effort of New Zealand companies to build up their management accounting practices to the standards of developed economies like the U.K. and conclude that the foreseen decline in traditional practices is either overstated or about to be realized. In a similar manner to Drury and Tayles (1997), the claim in 'Relevance Lost' cannot be rejected but also not fully supported in the case of New Zealand.

4.2 European Countries

In 1998, Shields conducted a study on "Management accounting practices in Europe: a perspective from the States." According to the study, the seven factors constituting management accounting practices in Europe were academics, education, government, professional association, consultants, technology, and inter-nation transfer of information (Shields, 1998). All these elements caused the transformation of the role of management accounting practices in European nations. This, on the other hand, indirectly impacts the relationship between financial and management accounting. Furthermore, Johnson and Kaplan (1987) were aware that management accounting practices were ineffective in contemporary business scenarios. For this reason, European nations imitated to develop and implement new management accounting practices (Shields, 1998). The evidence from Shields' study exhibited that across European nations more changes are occurring in management accounting practices terminology (e.g., cost driver, value driver) and techniques (e.g., activity-based costing) as compared to purpose (e.g., decision-making, operational control, strategic management) and style of using (e.g., implementation flexibility, centralization, decentralization, integration with other processes) such practices. The key finding of the study suggests the convergence of management accounting practices across the nations and diverging across industries both within and between nations (Shields, 1998). Accordingly, it would be interesting to witness nation-wide adoption and improvisation of management accounting practices in different scenarios. The magnitude to which nations use financial information for decision-making or employ new management accounting practices to deal with contemporary business situations in organizations will affect the submissive role of management accounting.

4.2.1 Finland

As discussed above the national accounting culture affected the management accounting practices in Europe. Granlund and Lukka (1998) reveal the impact of the transformation of accounting culture in Finland on their management accounting practices. The role of management accountants appears to modify as core players in the organizations' decision-making process. The authors consider globalization and internationalization as a significant component behind such transformation (Granlund & Lukka, 1998). The Finnish management accounting practices are changing from bean-counter towards controller type as a result of increasing decentralization of management accounting functions (Granlund & Lukka, 1998). Such alternation in the role of management accountants and management accounting practices signifies that management accounting is not losing its relevance in Finland. Contrary, management accounting is gaining importance in business organizations in Finland.

Building on the factors behind the transformation mentioned in Granlund and Lukka (1998), Hyvönen (2005) states that within firms that are operating within a global competition, increasing digitalization and technological change, traditional management accounting practices are suboptimal. To present empirical evidence from Finland, Hyvönen (2005) send a questionnaire that follows, among others, Chenhall and Langfield-Smith's (1998) study to 132 firms at the business unit level. As a technology-dominated economy, with companies like Nokia, Finland put a greater emphasis on newer management accounting practices, including non-financial measures, than Australian firms in Chenhall and Langfield-Smith (1998). Comparing her results to other European studies, there were no significant differences mentioned. Lukka and Granlund (1998) also emphasize an absolute uniformity within Europe. Aside from the higher anticipation of newer management accounting practices by Finnish companies, the study reveals that the three perceived most beneficial practices were traditional financial measures (Hyvönen, 2005). Overall, it seems there is little support that financial accounting dominates management accounting in Finland.

4.2.2 Germany

Glaum (2000) conducted two surveys among German executives in 1994 and 1997, early 1998. In the first survey, 63 responses were submitted out of 80 Chief Financial Officers of large German corporations excluding financial institutions and insurance firms. The principal aim of the survey was to examine the harmonization of accounting standards and the globalization of German accounting (Glaum, 2000). Another survey was conducted in 1997/1998 with a broader perspective, including the companies' capital-market and shareholders-value. The findings of the survey exhibit transformation of the traditional German accounting system over time due to globalization and internationalization of the German financial market. The companies were at liberty to use traditional German accounting rules, International Accounting

Standards (IAS), or U.S.-Generally Accepted Accounting Principles (US-GAAP). German firms showed a considerable preference for IAS compared to US-GAAP, mainly because the latter is perceived to be 'over-regulated' (Glaum, 2000). However, there was no evidence on how the German accounting system's harmonization and internationalization of accounting practices will affect the role of financial information in management accounting. Although the availability of transparent and uniform financial data will improve the method of internal reporting and management accounting practices and techniques, hence, in light of such practices, financial accounting may dominate management accounting, and management accounting may lose its relevance because of increasing demands for internationalization of the financial accounting system.

Contrary to the above, the study conducted by Friedl et al. (2009) implies that due to the general difference of German and U.S. management accounting practices, Johnson and Kaplan's (1987) claim of management accounting's fall is not supported in this case. The survey consisted of the 250 largest German companies with a response rate of 18% (45 firms in total). Friedl et al. (2009) mention that around 80% of U.S. firms used traditional cost-allocation systems and that more than 70% of the respondents were dissatisfied with the information resulting from it. In Germany, management accounting systems were developed to overcome financial accounting and followed a so-called dual ledger approach. To be more precise, to work around the flaws as German financial accounting primarily serves tax purposes and safety for creditors. However, no single system is being used exclusively, e.g., only 7% of the respondents use activity-based costing (ABC) alone. A mixture between Grenzplankostenrechnung (GPK) and ABC is adopted by around 24% of the respondents, which has been promoted 'recently' in the U.S. as Resource Consumption Accounting as both systems serve different purposes. GPK supports short-term decision-making, and ABC focusses more on the longer-term perspective. Additionally, Friedl et al. (2009) noted that the level of detail and managerial satisfaction also results from I.T. software support, primarily SAP.

The dual ledger approach, as presented by Friedl et al. (2009), is no longer fully supported according to Brandau et al. (2017). Their paper reflects on the relationship between management and financial accounting in Germany from around 1869 to the 21st century. Even though according to Brandau et al. (2017), German managerial and financial accounting is gradually more harmonized than in the past, it is still not entirely integrated. An integral part of the harmonization was the introduction of IFRS and making it mandatory for public firms. The main conclusion the authors drew is that accounting is not only shaped by its current environment but is also heavily influenced by its historical path, as is the case here.

Drawing from all three papers over the last two decades, German management accounting has become more integrated with financial accounting and vice versa. Nevertheless, it cannot be said that the 'Relevance Lost' debate is relevant in Germany today.

4.2.3 Greece

In a similar approach to Hyvönen (2005), Angelakis, Theriou and Floropoulos (2010) conducted a survey to determine the adoption and benefits of management accounting practices in Greece. The sample for this study consists of 157 large-size Greek companies, but the actual questionnaire was only to 97 management accountants, and around 90% of them answered it. The results show that the implementation rate of newly developed management accounting practices was generally high and comparably similar to other countries. However, traditional practices were still of higher implementation than current ones. Compared to Hyvönen's (2005) results, the Greek implementation rates fall behind on the Finnish sample. An increasing trend of firms to focus on newer techniques is supported by Greek firms expanding internationally and generally growing (Angelakis, Theriou & Floropoulos, 2010). As the differences to other European studies are only marginal, there is little support for Johnson and Kaplan's (1987) claim.

Cohen and Karatzimas (2013) focus their study explicitly on the consequences that the mandatory IFRS adoption had on Greek management accounting systems. This was to be investigated by a questionnaire-based survey that was sent to 150 companies. The response rate was 27%. The results show that the majority of firms apply the same methods for both internal and external reporting – as in adopting financial accounting rules and regulation for their management accounting systems. The authors (2013) agree with Hopper et al. (1992) in the interpretation of their findings and hence do not support Johnson and Kaplan's (1987) claim that management accounting is subservient to financial accounting. There was also no support found that the transition to IFRS caused a significant change in the management accounting practices of Greek firms overall. In the cases where IFRS had some influence, it was positive, i.e., firms starting to adopt more recently developed practices than before the adoption of IFRS (Cohen & Karatzimas, 2013).

Hence, it is observed that Greece's approach to adopt and implement management accounting practices is contradictory to Johnson and Kaplan's (1987) claims; it is slightly on the contrary financial accounting and management accounting are equivalent to each other.

4.2.4 Romania

Albu et al. (2011) study findings show evidence of harmonization of Romanian business regulations with European Directives and the introduction of IFRS. The study reveals that the differences between French and Anglo-Saxon accounting systems are the relationship between financial and management accounting. Anglo-Saxon systems show a more integrated relationship between financial and management accounting, unlike continental European countries where financial and management accounting operate as a dualist accounting system (Albu et al., 2011). The evidence from the study indicates that historically Romanian companies used a two-cycle accounting system, and the new perspective is now the process of hybridization of financial and management accounting. Thus, Johnson and Kaplan's (1987) claim that financial accounting is dominating management accounting diminishes in the Romanian context where both the accounting system shows evidence of interrelationship.

4.3 Caribbean Region

4.3.1 Barbados

The study conducted by Dick-Forde, Burnett and Devonish (2007) represents the first study in management accounting research in Barbados. Barbados represents the Caribbean region in their study. A self-administered questionnaire was sent out to 50 companies of various industries, and 38 responses were usable. This translates to a response rate of 76%. According to the authors (2007), the findings are mainly consistent with similar studies from Asia, namely

Sulaiman, Ahmad and Alwi (2004). That means that more traditional management accounting practices are in use.
Nevertheless, as most respondents do not have a clearly defined management accounting function, there is a call for further research and education regarding the issue in Barbados. The study identified an underrepresentation of certified management accountants in comparison to financial accountants. Together with the authors' assessment that the respondents probably answered the questionnaire in a more positive light to be perceived in a more qualified manner, it can be concluded that there is a degree of financial accounting domination present in the Caribbean region.

4.4 Asian Countries

Sulaiman, Ahmad and Alwi (2004) conducted a study on four Asian countries, namely Singapore, Malaysia, India, and China, to recognize management accounting tools and techniques adoption rate and pattern, i.e., traditional versus contemporary. The four developing countries exhibit a high preference for adopting and implementing traditional management accounting practices. Accordingly, the lower adoption rate of contemporary management accounting practices as compared to traditional ones is a result of a lacking awareness of new techniques and lacking expertise among developing countries (Sulaiman, Ahmad & Alwi, 2004). Additionally, countries tend to avoid risk, and high costs of implementing new techniques are inclined towards an established traditional management accounting system.

As discussed above and according to Johnson and Kaplan (1987), the traditional management accounting practices are not effective in current business surroundings. Therefore, new management accounting practices must be developed to deal with global competition in present-day business dynamics. Hence, such a conservative approach of not finding reasons to change keep countries away from adopting new and developed techniques will lead towards the domination of financial accounting. Traditional accounting practices are ineffective and inefficient in the modern world, and thus, under increasing global competition, such management accounting practices will lose their relevance.

4.4.1 China

Skousen and Yang (1988), in their article 'Western Management Accounting and the Economic reforms of China,' discussed the relevance of adopting western management accounting practices by China. Evidence from state-owned Chinese enterprises was analyzed to understand the same. Around 1949, China was a wholly controlled, socialist economy. The managers had no authority to make decisions in the organizations, and hence they lacked economic responsibility towards their organizations' performance. In the wave of various economic reforms, in 1979, China introduced a management system aligned to the Western management accounting systems. The accounting system played a supporting role in the successful implementation and execution of new management accounting practices in Chinese enterprises (Skousen & Yang, 1988). The study showed evidence that the enactment of such new management techniques enhanced the economic performance for enterprises with 'increased autonomy' and 'increased responsibility’. The development and implementation of western management accounting practices improved decision-making in Chinese enterprises and resulted in increased productivity in the economy. Hence, the key findings of the study demonstrate that in China, financial accounting is not dominating management accounting, relatively, both the accounting systems seem to be inter-related.

4.4.2 India

There has been increased pressure and change in information needs since the Indian economy was liberalized in 1991 (Joshi, 2001). Joshi (2001) conducted a questionnaire survey sent to 246 large companies, and the response rate was 24,4%. The survey's design was influenced by Chenhall and Langfield-Smith (1998), and their findings were compared to this study. The key findings of Joshi (2001) were that the adoption rate of traditional management accounting practices in Indian companies was generally higher than those of the Australian counterpart. The author argues that the differences have a cultural background, such as that Indians tend to avoid risk, are conservative, and less innovative in adopting newly developed management accounting techniques. Notably, the future perceived benefits were higher in traditional practices than in more recently developed ones. These findings lead to the conclusion that there is a degree of subservience in management accounting.

A more recent perspective is provided by Akbar (2010) and his comparative study on management accounting change. The survey questionnaire was sent to 100 randomly selected companies in India and the U.K. and obtained a response rate of 20% - 10 companies from each country. The evidence suggests a still predominantly usage of traditional management accounting techniques in India, even though the study revealed similarities between the management accounting change scenarios and drivers. Findings of Akbar (2010) point towards the implication that India caught up to speed with the U.K. as their implementation of newer practices does not seem to be far behind from the U.K. observation.

Overall, the results still point to a slight subservience. However, it is taken into account that there has been an apparent change in Indian practices compared to developed countries like Australia and the U.K., but even now Johnson and Kaplan's (1987) ‘Relevance Lost’ debate seems to be valid in the Indian context.

4.4.3 Malaysia

Zainun, Tuanmat and Smith (2011) surveyed various manufacturing companies in Malaysia. The survey shows evidence of the transformation of management accounting practices over the period starting from 2003 to 2007. The transformation is a result of the development and implementation of new management accounting practices, modification of existing practices in line with current business requirements, and replacement of worn-out practices. The findings demonstrated a positive relationship between management accounting practices and performances. Globalization and internationalization of the Malaysian market was the most significant reason behind the tremendous changes in traditional and advanced management accounting practices. The study contradicts Johnson and Kaplan's (1987) ‘Relevance Lost’ view and instead exhibits evidence where traditional and advanced management accounting practices complement and substitute each other.

In consideration to Sulaiman, Ahmad and Alwi's (2004) view on developing countries like Malaysia showing lower adoption rate of new managerial accounting techniques in 2004, Zainun, Tuanmat and Smith’s (2011) finding exhibits that Malaysia is expanding globally and sustaining the global competition by adopting new management accounting practices. Such a transformation in adoption and implementation of management accounting practices eliminate the traces of Johnson and Kaplan’s (1987) ‘Relevance Lost’ claims in Malaysia.

4.4.4 Singapore

Ghosh and Chan (1997) surveyed 109 companies to understand the management accounting practices in Singapore with a response rate of 16.8%. The companies have shown a notable improvement in their management accounting practices. The survey, however, had two perspectives while analyzing management accounting practices in the country. One is the adoption of new management accounting practices by local companies, and the other is the privilege of multinational companies in using such practices. The survey's key findings concluded that local companies are slowly and gradually adopting and using new management practices.

In contrast, MNC's have a dominating power over local and regional companies in adopting management accounting practices because of the parental companies' control and guidelines (Ghosh & Chan, 1997). Developing countries like Singapore have a small and closed economy due to which financial control practices are exercised at a shallow rate; therefore, the adoption rate of new management accounting practices is comparatively low. Additionally, Ghosh and Chan (1997) and Sulaiman, Ahmad and Alwi (2004) indicate interchangeable views on adoption traditional versus new management accounting practices in developing countries. In such a scenario of low or no adoption rate of new and developed management accounting techniques that deal with current business situations, management accounting will become submissive towards the demand of financial accounting.

4.4.5 Vietnam

Ngoc Phi Anh, Nguyen, and Mia (2011) surveyed 181 medium and large size Vietnamese enterprises to analyze the consequences of adoption and benefits of Western Management accounting practices implemented during the transition phase of the Vietnamese economy. Since the late 1980s, Vietnam has been transforming itself from a centrally planned economy towards a market-oriented economy. The study helps discover that in Vietnam, the adoption rate of traditional management accounting practices is higher than that the one in new and contemporary practices. Another salient finding was that the management practices showing higher perceived benefits also had a higher adoption rate (Ngoc Phi Anh, Nguyen & Mia, 2011). However, the adoption rate in state-owned enterprises tends to be lower as compared to other enterprises. The primary reason for the introduction and adoption of Western management practices in Vietnam was to address the higher group of stakeholders with accounting information and foster decision-making (Ngoc Phi Anh, Nguyen & Mia, 2011). The study also identifies certain Western management accounting practices that were compatible with the former central planning system, and these compatible management accounting practices were adopted widely and with more significant perceived benefits in Vietnam. The survey findings were in line with Sulaiman, Ahmad and Alwi's (2004) claim that developing countries tend to show lower adoption rates towards contemporary management accounting practices. Thus, the inclination towards traditional accounting practices over contemporary ones in modern business dynamics with the increasing global competition will make management accounting lose relevance and become submissive to the requirements of external financial reporting.

4.5 Middle Eastern countries

4.5.1 United Arab Emirates

Halbouni and Hassan (2012) examine in their paper Johnson and Kaplan's (1987) claim of the domination of financial accounting on management accounting in the case of the United Arab Emirates. The survey was addressed to financial and managerial accountants in different UAE companies and achieved a response rate of 70,6%. Listed companies have to prepare their annual reports under IFRS, and the authors mentioned that there had been a shift within the UAE towards a diversified and outward-oriented economy. This transformation is expected to be related to the existence of proper internal reporting that supports decision-making and is separated from financial accounting requirements (Halbouni & Hassan, 2012). However, contrary to studies conducted in the U.K., the survey finds evidence that supports Johnson and Kaplan's (1987) claim that financial accounting indeed dominated management accounting in the UAE. Halbouni and Hassan (2012) explain this by stating that regulators and accountancy professionals pay more attention to financial accounting and hence influence the respondents' general perception that management accounting is subservient.

4.5.2 Turkey

Yalcin (2012) send a questionnaire, which has been based on among others Chenhall and Langfield-Smith (1998) and Joshi (2001), to 472 mediums to large-sized Turkish companies and received 17% of them back. Overall, the survey results show that there is a higher rate of traditional management accounting practices than of recently developed ones. The results have been compared to six previous studies, containing the two previously mentioned and Hyvönen (2005), and Turkey obtained higher adoption rates in comparison to those studies. Inter-country comparisons revealed differences in adoption rates, e.g., cash budgeting and transfer pricing between indigenous Turkish and multinational firms whose target markets are primarily European or Asian, and open or closed corporations. Adoption means are higher for multinational companies. This supports the claims that a higher degree of international competition leads to different information needs, and hence, the adopted practices differ. The lower adoption rate of more recently developed management accounting practices indicates some evidence for Johnson and Kaplan's (1987) claim, but Yalcin (2012) does not provide further explanation of this matter. Thus, evidence of management accounting practices in Turkey supports Johnson and Kaplan's (1987) findings, where management accounting is submissive to the requirement of financial reporting.

4.5.3 Egypt

Youssef (2013) organized a case study in Egyptian textile company (TexCo) to understand the impact of e-commerce on the changing role of management accounting. The evolution of the internet and e-commerce have a significant influence on transforming the nature of management accounting. Egypt is a developing country and has documented a notable boost in the e-commerce industry. Therefore, this study findings indicate that over four years, the changing process of management accounting practices towards decision-making and control within TexCo is a result of the implementation of B-to-B e-commerce. (Youssef, 2013). New Management accounting practices in Egypt have been developed and implemented to deal with rapid technological changes and global competition. The management accounting practices have been modified from the role of a bean-counter to business orientation. Therefore, the positive impact of economic and technological factors on management accounting practices can be observed. Such findings challenge Johnson and Kaplan's (1987) claim and believe that management accounting has not lost its relevance and is not dominated by external reporting demands.

4.6 African Countries

4.6.1 Libya

While developing economies are underrepresented in management accounting research, Lasyoud, Haslam and Roslender (2018) provide some relatively recent evidence from Libya. The study covers an empirical analysis of two significant public companies in the Libyan economy called TBC and NTC from 1999 to 2012. The period is chosen to show the change in management accounting in a developing country. The changing environment is primarily shaped by the need to comply with political pressure, laws, and regulations, the influence of professional associations, and wanting to imitate efficient organizations (Lasyoud, Haslam & Roslender, 2018). The changes that have occurred were preferably in the field of traditional management accounting practices, which have been adapted to the circumstances of the observed companies. As more recently developed management accounting practices were not of particular interest in the findings, this instead suggests support for a subservience of management accounting.

4.6.2 South Africa

Waweru, Hoque and Uliana (2005) surveyed 300 South African companies selected from the Johannesburg Stock Exchange list out of a total of 652 companies. The study shows the changes in management accounting practices from 1996 to 2001 in South Africa. It exhibits that the adaption rate of old and new management accounting practices significantly varies between developed and developing countries (Waweru, Hoque & Uliana, 2005). The study shows evidence that developing countries like South Africa are under controlled economies due to which management accounting systems are different from free economies of developed countries. There has been tremendous change in management accounting practices of South African over the last 17 years. The country is adopting modern management accounting techniques, at a slow pace, but an inclination towards traditional practices can be observed more frequently. The findings suggest that, firstly, changing business dynamics locally and globally, and secondly, rapid technological changes are the most prominent reasons for changing management accounting practices.

Similar views were expressed by Maina et. al. (2004) in their case study on retail services in South Africa. The author argues that transplanting a successful management accounting model from a developed nation like the U.S. will not be effective in South Africa as various factors like political, economic, social, and cultural impacts the adoption of management accounting practices. According to the findings of the study, two contingent factors, global competition and changes in technology, force organizations to change management practices (Maina et. al., 2004).

Therefore, Johnson and Kaplan's (1987) affirmations of management accounting remain unchanged despite changes in its operating environment collapse in light of South Africa's changing management accounting practices based on the factors mentioned above.

4.7 Chapter Summary

Firstly, it can be observed that information about validity is inconsistent within regions, and there is an overall mixed pattern that leads us to present our findings on a country-specific basis. As table 1 shows, developing countries express greater validity and support for Johnson and Kaplan's (1987) claims than developed countries. However, in total, the study outcomes are balanced as around 50% exhibit agreement with their claim. The number of studies from each country is indicated in parentheses behind their findings. Studies that contained multiple countries are not enclosed here as they cannot be assigned to specific countries.

Region/Country	Validity for Johnson and Kaplan's claim
Anglo-Saxon	**Mixed – but mostly no validity**
United States	Yes (1)
United Kingdom	Mixed to little (4)
Australia	No (2)
New Zealand	Little (1)
European	**No validity**
Finland	Little to no (2)
Germany	No (3)
Greece	No (2)
Romania	No (1)
Caribbean	**Yes**
Barbados	Yes (1)
Asian	**Mixed**
China	No (1)
India	Yes (2)
Malaysia	Little to no (1)
Singapore	Yes (1)
Vietnam	Yes (1)
Middle Eastern	**Mixed**
United Arab Emirates	Yes (1)
Turkey	Yes (1)
Egypt	No support (1)
African	**Yes**
Libya	Yes (1)
South Africa	Yes (2)

Table 1: Summary of Findings

Globalization and internationalization of economies were observed to be the significant factors for countries to continually develop new techniques to deal with the competitive pressure and rapid technological changes. Hence, economic transformation played a significant role in determining management accounting approaches in countries. Adoption and implementation of the techniques in each country determine the role of management accounting vis-à-vis financial accounting. Therefore, countries like Australia, Germany, Romania, China, Malaysia, and Egypt exhibit contradictory views with Johnson and Kaplan (1987) Relevance Lost claim as these countries have adopted and developed new management accounting techniques to cope with increasing global competition and rapid technological changes. Other countries discussed above, like the U.S., India, and South Africa agree with Johnson and Kaplan's view on management accounting, losing its relevance to external financial reporting demands.

5 Discussion and Limitations

5.1 Discussion of Findings

A process of change in management accounting can be observed. As we concluded in our findings, the discussed regions did not exhibit certain validity information in a consistent matter, which lead us to conduct our discussion in a country-specific pattern.
Various examples of management accounting change have been described in the context of different countries, and the findings indicate that such changes take place due to numerous reasons. This can be observed through the different time dimensions of our findings. Conducted comparative studies show a certain reluctance to differences due to the varying times in which the researches took place. However, differentiating in between the lines, a change of management accounting practices can be identified and that countries are on different levels of progress is implied through their degree of implementation of more recently-developed practices. Hence, this discussion mostly focusses on the geographical dimension and its influential factors.

Contingency theory explains why management accounting practices widely differ between countries (Innes & Mitchell, 1990). The circumstances affecting the adoption of management accounting techniques comprehend a set of contingent factors such as a firm's environment, organizational structure, globalization, managerialism, technological changes, and economic transition (Innes & Mitchell, 1990). Implementation and adoption of management accounting practices profoundly differ due to organizational structures as dependent organizations were under complete control and directions of parent organizations to exercise management accounting practices. In contrast, independent organizations had a free hand to adopt and implement the same (Yazdifar & Tsamenyi, 2005). Therefore, dependent organizations cannot implement new or contemporary techniques based on their business demands; instead, they can only implement techniques used by parent organizations. This limits the options of adopting management accounting techniques for such organizations. Managerialism or managers' approach has a significant influence on the adoption of traditional versus contemporary management accounting techniques in organizations (Ezzamel, Hoskin & Macve, 1990). Ezzamel, Hoskin and Macve (1990) align with Hofstede, Hofstede and Minkov's (2010) views of differences in managers' behavior due to differences in national culture and industry culture. The author states that management practices vary in different nations due to differences in cultural settings, which implies that adoption and implementation of management accounting techniques show variation in different countries. Another compelling finding from a study conducted in South Africa is that a successful management accounting system in a developed country cannot be replicated in a developing country as it loses its effectiveness (Maina, Waweru, Hoque & Uliana, 2004). Hofstede, Hofstede and Minkov's (2010) theory of cultural relativism justifies such findings. According to the author, one cultural practice differs from another due to which the dynamics of their operations also differ. Hence, management accounting practices differ in each culture and each nation.

According to Pierce and O'Dea (2003), it is vital for management accounting to be skilled in three significant areas for well-defined management accounting practices. Firstly, technological knowledge to maintain a balance between technical and organizational validity. Secondly, in-depth knowledge of all other business functions and, finally, a qualified set of social and interpersonal skills. The presence and practice of these skills will mitigate the impact of the gap in managers' perceptions. Consecutively, the role of management accountants will be modifying as core players in strategic decision-making in organizations.

The important findings were that the lower rate of adoption of contemporary techniques could result from a lack of awareness of such techniques or lack of expertise in the organizations. Such factors were highly noticed in developing countries as compared to developed ones. Developing countries like India, Malaysia, Vietnam, and others showed an inclination towards traditional management accounting practices to avoid risk and high cost of implementation of new techniques (Sulaiman, Ahmad & Alwi, 2004). Economy transitions also played a vital role in determining the preference in the adoption of management accounting practices. Controlled and centrally planned economies had a high rate of adopting traditional practices, unlike market-oriented, diversified, and outwards-oriented economies, which showed preference towards adopting new management accounting practices (Ngoc Phi Anh, Nguyen & Mia, 2011). Accordingly, the degree of globalization and digitalization in the particular country had a notable impact on the adoption rate of management accounting techniques. Therefore, to deal with such emerging circumstances, not only the development of new management accounting practices is required, but also modification of existing practices with the current business scenario and replacement of worn-out practices is essential. As discussed above, IFAC attempts to create a new vision for management accounting by developing new technologies. Accordingly, the adoption of such new technologies which develop a more influential role of management accounting vis-à-vis financial accounting. Therefore, countries where new and contemporary practices are adopted and successfully implemented as compared to traditional ones exhibit evidence of management accounting not being submissive to the requirements of statutory financial reporting. Thus, the validity of Johnson and Kaplan‘s (1987) 'Relevance Lost' claim is highly controversial to above mentioned contingent variables.

Coming back to Hofstede's cultural dimensions, we put the values of each country in our findings into table 2 and sorted them according to their degree of support of Johnson and Kaplan's claims. It is important to note that there was no data available for Barbados.

Country	Power Distance	Individualism	Masculinity	Uncertainty Avoidance	Validity judgment from Chapter 3
United States	40	91	62	46	Yes
Barbados	0	0	0	0	Yes
India	77	48	56	40	Yes
Singapore	74	20	48	8	Yes
Vietnam	70	20	40	30	Yes
United Arab Emirates	90	25	50	80	Yes
Turkey	66	37	45	85	Yes
Libya	80	38	52	68	Yes
South Africa	49	65	63	49	Yes
Average	**68,25**	**43**	**52**	**50,75**	
Unites Kingdom	35	89	66	35	Mixed to little
New Zealand	22	79	58	49	Little
Finland	33	63	26	59	Little to no

Malaysia	100	26	50	36	Little to no
Australia	38	90	61	51	No support
Germany	35	67	66	65	No support
Greece	60	35	57	100	No support
Romania	90	30	42	90	No support
China	80	20	66	30	No support
Egypt	70	25	45	80	No support
Average	**56,3**	**52,4**	**53,7**	**59,5**	

Table 2: Country Comparison of Hofstede's Cultural Dimensions[1]

Interestingly, there is no significant difference between the two groups in the masculinity dimension. This implies that the preference to strive for achievements, heroism, and career in contrast to more 'feminine' work goals is not of great importance in the difference in management accounting systems. The score for individualism and uncertainty avoidance is around 9 points lower on average for countries that support Johnson and Kaplan's (1987) claim. The higher degree of risk aversion in countries that do not report management accounting being subservient might result from them using more recently developed practices or having a different system, e.g., Germany's GPK (Friedl et al., 2009), due to their low-risk tolerance. Concerning the individualism/collectivism dimension, Hofstede (2001) assumes a more 'calculative' involvement in an organization where individualism dominates and a more 'moral' involvement when collectivism prevails. Hofstede (2001) also points out that a more substantial power distance in most, but not all, cases goes together with a higher degree of collectivism, which our results show on average.

This leads us to the most prominent difference shown in our findings: the group that supports Johnson and Kaplan's claim scored, on average, 12 points more than the group that does not or only a little. A higher degree of inequality in an organization is connected to power, which is crucial for the control and manifestation of hierarchies within (Hofstede, 2001). This implies that companies with higher power distance see the management accounting department with

[1] The values in the table have been taken from Hofstede Insights: https://www.hofstede-insights.com/country-comparison/ [Accessed 2020-05-19]

less importance. The bosses rather demand specific numbers, preferably based on financial accounting and traditional management accounting practices, instead of letting their subordinate management accountants suggest and introduce newer forms that might be more efficient. It is more efficient and less dominated by financial accounting and, hence, better for short-term and long-term decision-making.

Countries where stock market performance and external financial reporting are monitored and maintained regularly display the traits of financial accounting dominating management accounting. The primary factor behind that observation is the standardization and harmonization of accounting standards (Glaum, 2000). According to Lukka and Kasanen (1996), globalization and harmonization of accounting standards indicate that different countries have different accounting problems with similar underlying principles. However, in practice, every country has a specific accounting system with different levels of economic development. The globalization of financial accounting across the countries is affected by cultural, institutional, regulatory, and structure variance (Lukka & Kasanen, 1996). In such cases, there is an added risk of standardized financial accounting dominating management accounting. The adoption of IFRS by countries introduced uniform financial reporting standards due to which financial accounting became harmonized and globalized across the globe. Cohen and Karatzimas' (2013) study in Greece shows that transition of IFRS does not cause any direct impact on management accounting. However, as financial accounting gained considerable recognition, management accounting became submissive to the demands of financial accounting reporting and lost relevance due to standardized financial accounting practices.

To summarize, the interpretation of evidence and observations exhibit that management accounting role as opposed to financial accounting in each country is subjected to various contingent variables like firm's environment, organizational structure, globalization, managerialism, technological changes, and economic transition. The validity of Johnson and Kaplan’s (1987) claim of financial accounting dominating management accounting outside US is dubious and uncertain subject to different nation and industry cultures. Out of 19 country examined outside US, 47% (total 9 countries) showed clear evidence of validity for the Johnson and Kaplan (1987) claim whereas 53% (total 10 countries) either clearly state the claim of

financial accounting dominating management accounting as invalid or partially valid. Thus, the validity of the claim, financial accounting dominates management accounting, outside US is highly instinctive and contentious.
After stating the limitations of our findings and discussion, we will summarize and conclude our main findings based on our research questions. The paper ends with a possible future outlook.

5.2 Limitations

Naturally, the findings and discussion feature certain limitations. The reviewed articles differ in their method. Even though most of the papers included are quantitative, there are also some of qualitative nature. Concerning the studies that conducted surveys in the form of a questionnaire, there is a great variety in sample sizes, the structure of the asked questions, and also their respective response rates as well. The quality of the included articles varies due to the inclusion of as many different researchers as possible. Also, the journals in which the articles were published, vary in quality. Some journals are on the list of the Academic Journal Guide 2015 whereas others are not.

Broadness in the scope of the articles is also a factor that influences the actual usefulness in the end. Some specifically surrounded the 'Relevance Lost' debate; others, however, encompass a broader scope as they view, e.g., adoption rates of traditional vs. recently-developed management accounting practices in their countries. This leads to a variety of views, also within one country, as can be observed in the United Kingdom: Drury and Tayles (1997) had a very narrow scope and evaluated different practices and came to a divergent conclusion than Hopper et al. (1992) and Joseph et al. (1996) who had a broader scope in their studies.

It is important to note that bias from respondents and researchers is also a limitation to the findings of this paper. As the demographics and size of the responding companies vary, so do their perception and hence answer on the topic. Mostly, the respondents are rooted in the manufacturing industry. Therefore, there is a certain underrepresentation concerning, e.g., the financial and insurance sector. It cannot be assumed that the management accounting practices are the same in every industry. Respondents might also have different opinions based on to which degree they have internalized that financial accounting numbers are the basis for management accounting in their company. They might simply not realize that there is domination in place, or their management accounting has become obsolete (Drury & Tayles, 1997). However, the researchers themselves can also be biased in interpreting their findings. No matter how objective a study appears to be, the researchers still make their own choice of solution and may have been defensive in the debate as a sort of representation of their country.

5.3 Future Research Opportunities

In the previous section, research on management accounting adoption and techniques were reviewed and as a result the validity of the 'Relevance Lost' debate discussed. The discussion was based on the systematic literature review developed in chapter 4. Based on the systematic literature review, management accounting relevance within different countries was reviewed. Many suggestions can be identified for future research on the basis of literature review.

The 'Relevance Lost' debate had its peak a long time ago but the major concern is still valid. As our findings exhibit, it was considered valid within U.S. and also outside the U.S. With a gradually increasing standardization and harmonization of financial accounting standards, Johnson and Kaplan's claims become valid globally. However, to gather strong evidence, we suggest to conduct comparative work with an international team of researchers to limit bias.
The most promising areas of future research in this context is to explore and examine the role of future technology developments on management accounting role. Future developments driven by Artificial Intelligence or Blockchain technology has great potential for improving the relevance of management accounting in current business scenarios. Financial accounting regulations and harmonized international accounting standards, i.e., the convergence between financial and management accounting should be analyzed. Future work could examine the unified and global role of management accounting in the world of technology and develop more powerful relevance of management accounting vis-à-vis financial accounting. Analysis exploration of interpretations in chapter 4 would add to our understanding of financial accounting dominating management accounting.

5.4 Practical Implications

As pointed out in the previous section, the main issue pointed out by Johnson and Kaplan over 30 years ago is still relevant. Based on our findings and subsequent discussion, several practical implications for preventing the submissiveness of management accounting became apparent. Most survey respondents use the same system for financial and management accounting, which could potentially lead to an unclear distinction between the two. It is essential for practicing management accountants to know where the values for their strategic decision-making come from and how they were calculated. This paper points out that in many firms, this is not satisfactory.

Another point to be made is that the restrictions imposed by parent companies are limiting a subsidiary’s freedom of action. As mentioned earlier, subsidiaries often still use traditional management accounting techniques, as they are forced upon by parent entities. However, subsidiaries have a different environment and economic position, which lead to the need for different instruments to adequately express their economic reality and efficiently adapt their strategy from the parent company's point of view.

Finally, as the convergence of financial and management accounting progresses, which facilitates the subservience of management accounting, companies need to understand this fact and counter this development. Implementing more recently developed management accounting practices, especially non-financial ones, and less dependence on traditional financial ratios support this. The management accounting department should be enabled to analyze crucial short-term and long-term determinants independently of financial reports and with them. All in all, it is an essential practical implication to prevent the domination of financial accounting with all its regulations and standards to preserve the flexibility and economic reality of management accounting.

6 Conclusion

The rise and fall of management accounting, as written by Johnson and Kaplan (1987), sparked a great uproar in research around the world. The authors pointed out shortcomings in the current American management accounting practice and that this accounting field has become subservient to financial accounting. However, is there external validity from outside the United States?

Based on our literature review, the researchers from different countries had mixed opinions on this matter. While European countries mostly concluded that the 'Relevance Lost' debate is of no importance; still a significant degree of traditional management accounting measures were present. On the contrary, the majority of Asian countries deemed Johnson and Kaplan's claims to be valid as they identified a dominance of financial accounting over management accounting. However, certain countries within Asia, specifically China and Malaysia, did not deem the claim to be valid. Hence, the first research question concerning the domination of financial accounting cannot be answered definitely. The identified mixed pattern implies that an answer depends on country-specific contingent factors, which leads to our second research question.

Comparing the results on a level from country to country, two contingency factors were evident in determining the validity of Johnson and Kaplan's claims:
Firstly, in the cultural dimension, a significantly higher degree of power distance has been observed among countries that agreed with Johnson and Kaplan. A correlation between the increased power distance and lower uncertainty avoidance has been observed per Hofstede (2001). The high power distance signifies a high degree of inequality within organizations and hence implies that top management might have a stronger favoritism concerning financial accounting numbers. Secondly, strong regulation of the stock markets and financial accounting is connected to subservient management accounting as most companies pay more attention to complying with the rules.

Overall, the degree of globalization and digitalization of an economy also plays a significant role in the adoption and successful usage of more recently-developed management accounting practices. The share of developing countries in favor of Johnson and Kaplan's claim is more prominent than those who do not deem their claim valid. On a final note, the researchers deemed the debate as important. However, most concluded that this amount of international recognition was not necessary and comparatively exaggerated.

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Appendix A

The following table provides the full set of articles that are presented in chapter 3 including a short summary.

Author/-s	Year	Country	Title	Summary of Findings	Journal
Rom, A. & Rohde, C.	2007	International	Management accounting and integrated information systems: A literature review	The findings indicates that the companies major focus is on the transactional part of management accounting than the strategic decision-making. The authors also argue that the reporting structure of companies have not changed even when a large amount of managerial data is available. The paper discusses the barrier in adopting innovative management accounting techniques like Integrated information system. Information system first use was for accounting. Therefore, author's study on dependency nature of both variables is interesting for analyzing depending characteristics of management accounting in general.	International Journal of Accounting Information Systems

Ezzamel, M., Hoskin, K. & Macve, R.	1990	United States	Managing It All By Numbers: A Review of Johnson & Kaplan's 'Relevance Lost'	The evidence indicates historical development and evolution of MA in four stages and thus express alternative views on the role of Management accounting system in Western and Japanese culture. The author is of the view that the western approach towards accounting based in financial measures of control is dominating in the U.S./U.K. unlike in Japan where more visible and physical form of control are exercised. The study indicates that the problems of management accounting and financial accounting are not separate but inter-related. The author analysis the degree of difference between western and Japanese culture based on managerialism and power/knowledge relations. Johnson & Kaplan 19th century virtues of MA Relevance Lost needs to be studied in present day phenomenon of accountability and managerialism.	Accounting and Business Research
Hopper, T., Kirkham, L., Scapens, R.W. & Turley, S.	1992	United Kingdom	Does financial accounting dominate management accounting - a research note	The small sample of interviewees all had one single system for data entry (but different formats were possible). Yet, they did not state that financial accounting is adversely affecting their management accounting systems. Finally, even though there has been some evidence that supports Johnson & Kaplan's (1987) criticism, the interviewees did not seem to be dissatisfied with it.	Management Accounting Research
Joseph, N., Turley, S., Burns, J., Lewis, L., Scapens, R. & Southworth, A.	1996	United Kingdom	External financial reporting and management information: a survery of U.K. management accountants	The survey conducted on U.K. management accountants showed little evidence of a belief that management accounting is dominated by financial accounting. However, it shoud be noted that the respondents use integrated financial accounting and management accounting systems and have little discretion in the content of their management reports (requirements from the head office in groups).	Management Accounting Research

Drury, C. & Tayles, M.	1997	United Kingdom	Evidence on the Financial Accounting Mentality Debate: A Research Note	The evidence indicates that many companies use the same information for both financial and management accounting. This means that Johnson & Kaplan's (1987) claims cannot be rejected, however, the authors present alternative explanations on why this is the case and hence call for improvement of the quality of financial accounting. Which is heavily influenced by regulation.	British Accounting Review
Yazdifar, H. & Tsamenyi, M.	2005	United Kingdom	Management accounting change and the changing role of Management accountants: a comparative analysis between dependent and independent organsiation	The survey conducted on U.K. management accountants showed significant differences exist between the perceptions of management accountants in dependent and independent organizations. The dependent organizations tend to adopt MA practices due to influence of parent company unlike independent organizations having different attitude towards MA practices due to absence of pressure form parent company. Based on the nature on institutional pressure faced by organizations' degree of integration between financial and non-financial information may vary. Thus, adoption of management accounting varies in dependent and independent organizations which may affect the submissive role of management accounting practices in every organization.	Journal of Accounting & Organizational Change
Chenhall, R.H. & Langfield-Smith, K.	1998	Australia	Adoption and benefits of management accounting practices: an Australian study	With influence from the U.S., Japan and the Australian government, the adoption rate for newer management accounting practices were higher than those of other surveys from other countries. But still, overall traditional techniques were found to be relatively more widely adopted. However, the authors call for more research as to the assumption that said traditional practices lack relevance as the recently-developed techniques scored relatively low when it came to associated benefits.	Management Accounting Research

Coyle, R., Emsley, D., & Boyd, D.	2010	Australia	Examining Management Accounting Change as Rules and Routines: The Effect of Rule Precision	The study based on large infrastructure based organization examines stability and change in management accounting practices by separating management accounting rules and routines. The study shows that rule precision influences the nature of rule/routine relationship. Thus, precise rule are tightly coupled with routines hence, providing greater stability in MA practices as compared to imprecise rules.	Australian Accounting Review
Guilding, C., Lamminmaki, D. & Drury,C.	1998	New Zealand / United Kingdom	Budgeting and Standard Costing Practices in New Zealand and the United Kingdom	The cross-country comparison resulted in the primary finding that 75% of the N.Z. and U.K. manufacturers still employ standard costing systems and budgetary control systems. This popularity is in contrast to predictions of a changing role of these practices due to changes in technologies. However, when comparing N.Z. and U.K. budgeting and standard costing systems, there are more similarities than differences. One difference to be pointed out is the lag between management accounting theory and practice: it tends to be bigger in N.Z.	The International Journal of Accounting
Shield, M.D.	1998	Europe	Management practices in Europe: a perspective from States	The study identifies changes and convergence in the management accounting practices across European nations. Across European nations more changes are occurring in management accounting practices terminology and techniques as compared to purpose and style of using such practices. The key finding of the study suggests the convergence of management accounting practices across the nations and diverging across industries both within and between nations.	Management Accounting Research

Granlund, M. & Lukka, K.	1998	Finland	Towards increasing business orientation: Finnish management accountants in a changing cultural context	The study indicates the link between national culture and management accounting practices in Finland. The study is based on analyzing communication pattern of accountants both with peer accountants and other organizational members. The Finnish management accounting practices are changing from bean-counter towards controller type as a result of increasing decentralization of management accounting functions.	Management Accounting Research
Hyvönen, J.	2005	Finland	Adoption and benefits of Management Accounting Systems: Evidence from Finland and Australia	Finland, as a technology-intensive economy, puts a greater emphasis on newer management accounting practices including non-financial measures than the Australian firms (Study by Chenhall & Langfield-Smith, 1998). However, it is important to note that both studies have a large time period in between them. Aside from the seemingly higher anticipation of newer practices by Finnish companies, the three perceived most beneficial practices were traditional financial measures.	Advances in International Accounting
Glaum, M.	2000	Germany	Bridging the GAAP: the Changing Attitude of German Managers towards Anglo-American Accounting and Accounting Harmonization	The study examines the attitude of financial executives of German corporations towards global harmonization of accounting principles and towards adaption of German accounting to Anglo-American standards. The survey was conducted in three years 1994, 1997 & 1998 and reveals the changing attitude of German managers over the three years. The survey provides evidence on how German accounting system from being inferior to Anglo-American accounting is now adopting international standards either IAS or US-GAAP.	Journal of International Financial Management and Accounting

Friedl, G., Hammer, C., Pedell, B. & Küpper, H.-U.	2009	Germany	How Do German Companies Run Their Cost Accounting Systems?	In contrast to their comparison survey in which 80% of U.S. organizations still use a traditional cost-allocation system, the authors point out the German GPK and fundamental differences in German and American cost accounting. The conducted survey leads to the conclusion that external accounting does not dominate management accounting. However, there is a growing desire and technical demand to integrate both systems.	Management Accounting Quartlery
Brandau, M., Endenich, C., Luther, R. & Trapp, R.	2017	Germany	Separation - integration - and now ...? A historical perspective on the relationship between German management accounting and financial accounting	The paper reflects on the relationship between management and financial accounting in Germany from around 1860 to the 21st century. The main finding is that accounting is not only shaped by its current environment but is also heavily influenced by its historical path. Even though German managerial and financial accounting is gradually more harmonized than in the past, it is still not entirely integrated. It is worth to mention that the authors pointed out that the introduction of IFRS had a significant influence on the (partial) integration of the accounting systems.	Accounting History
Angelakis, G., Theriou, N. & Floropoulos, I.	2010	Greece	Adoption and benefits of management accounting practices: Evidence from Greece and Finland	This study conducted on large-size Greek manufacturing firms came to the conclusion that the implementation rate of newly developed practices were of high level and similar to other countries. However, traditional management accounting practices were found to be even a bit higher implemented. In comparison, the Greek implementation rates are falling behind on the Finnish ones.	Advances in Accounting, incorporating Advances in International Accounting

Cohen, S. & Karatzimas, S.	2013	Greece	Has IFRS adoption affected management accounting systems? Empirical evidence from Greece	The study's focus lies in the examination of the implications of the IFRS adoption on the management accounting practices and techniques. The results show that the majority of firms apply the same methods for both internal and external reporting. More precisely, the respondents adopt financial reporting rules for internal reporting purposes. Contrary to this, the authors do not support the notion that management accounting is subservient to financial accounting. There was also no support found that the transition to IFRS causes a change in the management accounting practices overall.	International Journal of Accounting, Auditing and Performance Evaluation
Albu, C.N., Albu, N., Faff, R. & Hodgson, A.	2011	Romania	Accounting Competencies and the Changing Role of Accountants in Emerging Economies: The Case of Romania	The key findings of this study was the harmonization of Romanian business regulations with European Directives and introduction of IFRS. The study tend to highlight differences between French and Anglo-Saxon accounting system is the relationship between financial and management accounting. Anglo-Saxon shows more integrated relationship between financial and management accounting unlike European continental countries where financial and management accounting operates as dualist accounting system. The evidence from the study indicates that historically Romanian companies used two-cycle accounting system and now the new perspective is process of hybridization of financial and management accounting.	Accounting in Europe

Dick-Forde, E., Burnett, J. & Devonish, D.	2007	Barbados	A Preliminary Survey of Management Accounting Practices in Barbados	The study conducted represents the first study in management accounting research in Barbados. According to the authors, the findings are consistent with similar studies from Asia. This means, that more traditional management accounting practices are in use. But as the majority of respondents do not have a clearly defined MA function, there is a call for further research and education in that field in Barbados. The study identified an underrepresentation of certified management accountants in comparison to financial accountants. This leads to the conclusion that financial accounting dominates managerial accounting in the Caribbean region.	Journal of Eastern Caribbean Studies
Sulaiman, M., Ahmad, N.N.N. & Alwi, N.	2004	Asia	Management accounting practices in selected Asian countries - A review of the literature	The study examines the extent to which traditional and contemporary management accounting tools are used in four countries. The evidence shows the lack of use of contemporary accounting practices and strong use of traditional management accounting practices in all four countries. The survey identifies that the traditional management accounting practices are highly preferred in developing countries over contemporary practices because of lack of awareness of new techniques and lack of expertise. The major reason behind non-adoption of contemporary practices is the high cost of implementation of new tools and techniques.	Managerial Auditing Journal
Skousen, C.R.	1988	China	Western Management accounting & the economic Reforms of China	The study exhibits the integral role of adoption of Western management accounting practices by State owned enterprises in China. The evidence shows that the implementation of new management accounting methods resulted in improved economic performances for the state enterprises operating with increased autonomy and increased responsibility.	Accounting, Organizations and Society

Joshi, P.L.	2001	India	The international diffusion of new management accounting practices: the case of India	The key findings of this study was that the adoption rate of traditional management accounting practices in Indian companies were higher than those of the Australian counterpart. The author argues that the differences have a cultural background such as that Indians tend to avoid risk, are conservative and less innovative in adopting new techniques.	Journal of International Accounting, Auditing & Taxation
Akbar, S.	2010	India	Management accounting change: a comparative study of Indian and UK organisations	Even though the study revealed similarities between the management accounting change scenarios and drivers, traditional accounting systems continue to be more dominant in India. However, the implementation of recently developed management accounting practices are in their early stages in India and do not seem to be far behind from the observation in the U.K.	Journal for Global Business Advancement
Tuanmat, T.Z. & Smith, M.	2011	Malaysia	Changes in management accounting practices in Malaysia	The survey shows evolution of management accounting practices from 2003 to 2007 in Malaysia. Globalization was the major reason behind tremendous change in traditional and advanced management accounting practices in Malaysia. Therefore, new MA practices were developed, old practices were replaced and modifying existing practices to meet current business needs and gain competitive advantage. The study contradicts Johnson and Kaplan "Relevance lost" view and rather exhibit evidences where traditional and advance MA practices complements and substitute each other.	Asian Review of Accounting

Ghosh, B.C. & Chan, Y.-K.	1997	Singapore	Management accounting in Singapore - well in place?	The survey shows that the new management accounting practices such as TQM ABC are slowly being accepted and used by companies in Singapore. Economic base of Singapore is small due to which most companies are smaller in size and show evidence of weaker financial control practices. Therefore, developing countries like Singapore have low rate of adoption of management accounting practices.	Managerial Auditing Journal
Ngoc Phi Anh, D., Nguyen, D. & Mia, L.	2011	Vietnam	Western management accounting practices in Vietnamese enterprises: Adoption and perceived benefits	The study examines the Western management accounting practices adoption experience of developing economy in transition. Vietnam since late 1980's has been in the process of transforming itself from centrally planned economy towards market oriented economy. The key findings of this study was that the adoption rate of traditional western management accounting practice are higher as compared to contemporary ones and also adoption rate in state own enterprises was low as compared to other enterprises. Additionally, MA practices with higher perceived benefits had higher adoption rates. The study also identifies Certain western MA practices that were compatible with former Central planning system and these compatible MA practices were adopted widely and with greater perceived benefits in Vietnam.	Pacific Accounting Review
Halbouni, S.S. & Hassan, M.K.	2012	United Arab Emirates	The domination of financial accounting on managerial information: an empirical investigation in the UAE	Contrary to studies conducted in the U.K., this survey finds evidence of financial accounting dominating managerial accounting in the UAE. The authors explain this by stating that regulators and accountancy professionals pay more attention to financial accounting and hence influence the respondent's general perception that management accounting is subservient.	International Journal of Commerce and Management

Yalcin, S.	2012	Turkey	Adoption and Benefits of Management Accounting Practices: An Inter-country Comparison	Overall, the survey results show that there is a higher rate of traditional management accounting practices than of recently developed ones. Additionally, the results have been compared to six previous studies, containing Chenhall & Langfield-Smith (1998), Joshi (2001) and Hyvönen (2005), and Turkey obtained higher adoption rates in comparison to those studies. Inter-country comparisons revealed differences in adoption rates for e.g. cash budgeting and transfer pricing between indigenous Turkish and multinational firms whose markets are primarily European/Asian, and open or closed corporations. Adoption means are higher for multinational companies.	Accounting in Europe
Youssef, M.	2013	Egypt	Management Accounting Change in an Egyptian Organization: An Institutional Analysis	This study findings indicates that change process of management accounting practices towards decision-making and control within an Egyptian textile company (TexCo) is a result of implementation of B-to-B e-commerce. The author argues that the MA changes in TexCo were formal, revolutionary and progressive in nature. The management accounting. practices in TexCo modified from bean-countering to business orientation.	Journal of Accounting & Organizational Change
Lasyoud, A.A., Haslam, J. & Roslender, R.	2018	Libya	Management accounting change in developing countries: evidence from Libya	The management accounting change of two selected state-owned manufacturing companies in Libya is primarily shaped by the need to comply with political pressures, laws and regulations, influence of professional associations and the need to imitate efficient organizations. The changes/developments that occurred in traditional management practices, rather than advanced ones.	Asian Review of Accounting

Waweru, N.M., Hoque, Z. & Uliana	2004	South Africa	Management accounting change in South Africa: Case studies from retail services	The survey is based on four retail companies sin South Africa to understand the changes in management accounting system and to analyze the reasons for such changes. Author argues that transplanting successful management accounting system of developed nation will not be satisfactory as considerations should be made of political, economic, social and cultural environment that surrounds the firm. Two contingent factor, global competition and changes in technology forces organization to change management practices. Thus, environmental factors affecting the organization impacts accounting and control systems.	Accounting, Auditing & Accountability Journal
Waweru, N.M., Hoque, Z. & Uliana, E.	2005	South Africa	A survey of management accounting practices in South Africa	The survey conducted on South African tertiary institutions using consulting firms to represent practitioners. The study shows the changes of Management accounting practices from 1996 to 2001 in South Africa. The study exhibits the variation in adaption of old and new MA practices depending on developed and developing countries. The author discussed the impact of various factors determining the adoption of management accounting techniques. Author also argues that developing countries like South Africa are under controlled economies due to which Management accounting system are different from free economies of developed countries. Author argues how modern MA practices are strategic oriented and forward looking in today's competitive environment as compared to narrow traditional MA practices. The findings shows contrasting views on Johnson and Kaplan "‘‘Relevance Lost’’" debate.	International Journal of Accounting, Auditing and Performance Evaluation

Appendix B

The following table represents the articles that have been classified as not eligible for literature review.

Author/-s	Year	Title	Journal
Sharman, P.A.	2003	The Case for Management Accounting	Strategic Finance
Lukka, K. & Kasanen, E.	1996	Is Accounting a Global or Local Discipline? Evidence from Major Research Journals	Accounting, Organizations and Society
Sharman, P.A.	2003	Bring On German Cost Accounting	Strategic Finance
Granlund, M. & Lukka, K.	1998	It's a Small World of Management Accounting Practices	Journal of Management Accounting Research
Taipaleenmäki, J. & Ikäheimo, S.	2013	On the convergence of management accounting and financial accounting - the role of information technology in accounting change	International Journal of Accounting Information Systems
Bryer, R.	2013	Americanism and financial accounting theory - Part 2: The 'modern business enterprise', America's transition to capitalism, and the genesis of management accounting	Critical Perspectives on Accounting
Roslender, R.	1996	'Relevance Lost' And Found: Critical Perspectives on the Promise of Management Accounting	Critical Perspectives on Accounting
Yazdifar, H., Askarany, D. & Askary, S.	2008	Management Accountants' Role in Dependent and Independent Companies: Does Ownership Matter?	Journal of Accounting - Business & Management
Previts, G.J., Parker, L.D. & Coffman, E.N.	1990	Accounting History: Definition and Relevance	Abacus
Macintosh, N.B.	1998	Management Accounting in Europe: a view from Canada	Management Accounting Research
Modell, S.	2014	The societal relevance of management accounting: An introduction to the special issue	Accounting and Business Research
Coad, A.F.	1999	Some survey evidence on the learning and performance orientations of management accountants	Management Accounting Research
Xydias-Lobo, M., Tilt, C. & Forsaith, D.	2004	The Future of Management Accounting: A South Australian Perspective	Journal of Applied Management Accounting Research
Drury, C. & Tayles, M.	1995	Issues arising from surveys of management accounting practice	Management Accounting Research
Jönsson, S.	1998	Relate Management Accounting Research to Managerial Work!	Accounting, Organizations and Society
Kasanen, E., Lukka, K. & Siitonen, A.	1993	The Constructive Approach in Management Accounting Research	Journal of Management Accounting Research
Johnson, T.	1994	Relevance Regained: Total Quality Management and the Role of Management Accounting	Critical Perspectives on Accounting
Abdel-Kader, M., & and Luther, R.	1998	IFAC's conception of evolution of Management accounting : A research note	Advances in Management accounting

Waweru, N.M.	2010	The origin and evolution of management accounting: a review of the theoretical framework	Problems and Perspectives in Management
Perren, L. & Grant, P.	2000	The evolution of management accounting routines in small businesses: a social constructive perspective	Management Accounting Research
Hail, L.	2013	Financial reporting and firm valuation: ‘Relevance Lost’ or relevance regained?	Accounting and Business Research
Francis, J. & Schipper, K.	1999	Have Financial Statements lost their Relevance?	Journal of Accounting Research
Farouk Abdel Al, S. & McLellan, J.	2011	Management Accounting Practices in Egypt – A transitional economy country	Journal of Accounting – Business & Management
Burns, J. & Scapens, R.	2000	Conceptualizing management accounting change: an institutional framework	Management Accounting Research
Shields, M.D. & Chow, C.W.	1991	Management Accounting Practices in the U.S. and Japan: Comparative Survey Findings and Research Implications	Journal of International Financial Management and Accounting
Otley, D.	2008	Did Kaplan and Johnson get it right?	Accounting, Auditing & Accountability Journal
Kihn, L.-A. & Näsi, S.	2017	Emerging diversity in management accounting research - The case of Finnish doctoral dissertations, 1945-2015	Journal of Accounting & Organizational Change
Innes, J. & Mitchell, F.	1990	The process of change in management accounting: some field study evidence	Management Accounting Research
Scapens, R.W.	2006	Understanding management accounting practices: A personal journey	British Accounting Review
Busco, C., Quattrone, P. & Riccaboni, A.	2007	Management Accounting Issues in interpreting its nature and change	Management Accounting Research
Hemmer, T. & Labro, L.	2008	On the Optimal Relation between the Properties of Managerial and Financial Reporting Systems	Journal of Accounting Research
Lowry, J.	1993	Management Accounting's Diminishing Post-Industrial Relevance: Johnson and Kaplan Revisited	Accounting and Business Research
Jazayeri, M. & Hopper, T.	1999	Management accounting within world class manufacturing: a case study	Management Accounting Research
MacArthur, J.B.	2006	Cultural Influences on German versus U.S. Management Accounting Practices	Management Accounting Quarterly
Drury, C. & Tayles, M.	1995	Issues arising from surveys of Management accounting practices	Management Accounting Research
MacDonald, L.D. & Richardson, A.J.	2002	Alternative Perspectives on the Development of American Management Accounting: ‘Relevance Lost’ induces a Renaissance	Journal of Accounting Literature
Drury, C.	1990	Lost Relevance: A note on the contribution of Management accounting education	British Accounting Review
Alfraih, M.M.	2016	Have financial statements lost their relevance? Empirical evidence from the frontier market of Kuwait	Journal of Advances in Management research
Hoon Ki, D., Bin Leem, W. & Hoon Yuk, J.	2019	The effect of IFRS adoption on the value relevance of accounting information: evidence from South Korea	Investment Management and Financial Innovations
Lukk, K.	2007	Management accounting change and stability: loosely coupled rules and routines in action	Management Accounting Research

Quinn, M.	2011	Routines in Management accounting research: Further exploration	Journal of Accounting & Organizational Change
Arroyo, P.	2012	Management accounting Change and sustainability : an institutional approach	Journal of Accounting & Organizational Change
Weissenberger, B. E. & Angelkort, H.	2011	Integration of financial and management accounting systems: The mediating influence of a consistent financial language on controllership effectiveness	Management Accounting Research
Schmidt, M.	2017	Aligning Financial & Management policies - What drives integration? Empirical Evidence from German IFRS 8 Segment Reports	Advances in Management Accounting
Pierce, B. & O'Dea, T.	2003	Management accounting information and the needs of managers perception of managers and accountants compared	British Accounting Review
Caria, A.A. & Rodrigues, L.L.	2014	Evolution of financial accounting in Portugal since 1960's: A new institutional economic perspective	Accounting History
Sloan, G.R.	2001	Financial accounting & corporate governance : a discussion	Journal of Accounting & Economics
Sweiringa, R.J.	2011	Fundamental Concepts of Financial accounting	American Accounting Association
Hines, R.D.	2017	Financial accounting knowledge, conceptual framework projects and social construction of accounting profession	Accounting, Auditing and Accountability journal
Benston, G.J., Carmichael, D.R., Demki, J.S., Dharan, B.G., Jamal, K., Laux, R., Rajgopal, S. & Vrana, G.	2007	The FASB conceptual framework for financial reporting: A critical analysis	American Accounting Association
Reider, B. & Saunders, G.	1988	Management Accounting Education: A defense of criticisms	Accounting Horizons
SZendi, J.Z. & Elmore, R.C.	1993	Management accounting: are new techniques making In-roads with Practitioners	Accounting Education
Bakke, N.A. & Hellberg, R.	1991	Relevance lost? A critical discussion of different cost accounting principles in connection with decision-making for both short and long term production scheduling	International Journal of Production Economics
Lebedev, P.	2019	Three Decades of Management Accounting in Russia: The Evolution of Understanding of Management Accounting Concept	Contemporary Issues in Business, Management and Economics Engineering
Bartov, E., Goldberg, S.R. & Kim, M.-S.	2002	Comparative Value Relevance Among German, U.S. and International Accounting Standards: A German Stock Market Perspective	Journal of Accounting, Auditing and Finance
Lardenoije, E.J.H., van Raaij, E.M. & Weele, A.J.	2005	Performance Management Models and Purchasing: Relevance Still Lost	Researches in Purchasing and Supply Management
Kaplan, R.S.	2006	The Competitive Advantage of Management Accounting	Management Accounting Research