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National Culture and Management Control Systems

By:
Gareth Wright
Nikolaos Lappas

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Abstract

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Authors:	Gareth Wright and Nikolaos Lappas
Supervisor:	Anders Anell
Keywords:	Management control systems, National culture, Levers of control
Purpose:	The purpose of this study is to identify how multinational companies set their central management control systems and how are these are perceived and implemented at a local level; and why any differences may exist in local adaptation/implementation.
Methodology:	This case study has followed a qualitative, hybrid deductive-inductive research strategy. The empirical data has been collected through interviews. The results were complemented with secondary data such as official websites, annual reports, and codes of ethics.
Theoretical framework:	The theoretical framework of this paper was comprised from theory concerning management control systems, national culture, local and international adaptation of MCS.
Empirical foundation:	The empirical perspective was derived from four interviews with four managers from two companies, company A and company B, in Greece and Sweden, and Mexico and Colombia respectively. Additional information was retrieved from the companies' websites, annual reports, and codes of conduct.
Conclusions:	The findings of this thesis indicate that MCS within a multinational company tend to converge, rather than follow the parent company's national culture. They also suggest that local culture is not a significant factor in the local implementation of the centrally-set MCS.

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1 Introduction

“Culture. . . is that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society” (Tylor, E., 1871).

National cultures are different to one another in varying degrees, having developed within their own particular context, be it independently from one another, with reliance and cooperation with one another, or even as rivals or enemies of one another. Edward Tylor (1871) illustrates the complexity, uniqueness, and importance of culture in his definition above, aware that each country has developed its own independent attitudes, values, customs, and even languages from collective past experience. These cultural differences extend to the modern workplace where they may now be more relevant than ever, affecting the means by which employees are best controlled, which is the concentration of this thesis.

In today’s globalised world companies often have operations in many different countries, often doing so to seek resources, efficiencies, or markets (Tayeb, 1998); it is natural for the head offices of these organisations to desire standardisation of practices and to control the group by applying the same formula to all branches, indeed, a standardised MCS would be simpler and cheaper to design and apply.

This thesis is a comparative study of management control systems (MCS) used within two multinational companies, specifically those used in two of each multinational in which it operates. Hofstede’s (1980) cultural dimensions framework is used for interpretation and analysis of this information in order to identify possible reasons for any differences in the MCS used in different locations.

1.1 Background

Since Hofstede (1980) developed his framework for cultural analysis, researchers have increasingly become aware of the influence that culture can have on the effectiveness of MCS. Hofstede (1980) suggested that the transfer of MCSs from one country to another may be ineffective because the MCS may conflict with cultural diversities. This is supported by Chow, Kato, and Merchant (1996), who urge that an efficient MCS may become dysfunctional if the cultural context changes. Consequently, a company may not notice that its benchmarking efforts are misleading and do not accurately represent the performance capabilities of a subsidiary (Lere and Portz, 2005).

In order to prevent this potentially damaging outcome, Lere and Portz (2005) advocate additional management training for cultural awareness. If a company's leaders understand that a once-functional control system cannot simply be copied to another location, but instead needs to be adapted and shaped to the cultural environment, then there is a higher likelihood that the control systems will be aligned with the company's strategy and objectives. This development of cultural awareness has already been observed with the emergence of hybrid management control systems (Tallaki and Bracci, 2015), whereby a business does not only utilise one MCS

throughout its organisation, but uses several MCS which are ideal for the location in which they are used.

The benefit of such hybrid approaches has been argued by Frimousse, Swalhi, and Alaoui (2011), who found that the hybridisation of HRM practices led to a higher employee commitment, and in turn to a lower intention to resign. Therefore, a successful implementation of strategy through an MCS might not be as successful, or even successful at all, for a subsidiary which operates in a different cultural environment.

Another method to examine this effect of culture is the use of the previously mentioned framework by Hofstede. For example, Zhang, Liang, and Sun (2013) applied the individualism versus collectivism (IC) dimension to analyse the cultural influence on corporate governance. They found that the IC dimension would affect the moral behaviour and judgement of employees which in turn shaped the corporate governance. Therefore, one can argue that if Hofstede's dimensions can form the type of corporate governance, the base of a corporation, then they also affect everything else within that company. In a similar manner, Pakdil and Leonard (2016) argue that an ideal culture for successful implementation of lean manufacturing is one with a societal emphasis on femininity, individualism, high uncertainty avoidance, and high-power distance.

1.2 Problem

MCS cannot be applied in a uniform manner to all circumstances, they are contingent on environmental factors such as national culture and the legal environment, indeed, contingency theory states that organisations are open systems which need to balance internal and external circumstances, and that while there is no formula for optimal organisation, it is instead up to management to find the best fit to the circumstances (Morgan, 1986). It may be ineffective or even detrimental to implement MCS without considering culture and how employees will react to said MCS.

“Multinational organisations are often characterised by a high degree of decentralised decision making . . . the geography dimension requires managers to be sensitive to each of the national cultures in which they operate” (Merchant and Van der Stede, 2003), this means that since decisions will be taken locally in the subsidiaries in various locations, they will be taken from the cultural perspective of that location.

In order for a multinational company to implement strategy in an effective and efficient way, it is thus important that their MCS is functioning optimally in all locations within the group. So, the impact, effects, and advantages of cultural differences should be considered and exploited.

1.3 Purpose and Aim

This paper aims to identify how MCS are set by the parent companies in two multinational organisations, and why they are set in any particular configuration, with a focus on national culture as an influence on the design process.

The paper will also aim to address how these centrally-set MCS are implemented within subsidiaries of the two case companies, and whether any variation between them is due to national culture at a local level.

We seek to represent the empirical data in an understandable manner, identify any correlations between dimensions of national culture and the emphasis placed on different aspects of an

MCS using both empirical data and extant literature, and make inductive suppositions which may explain the results.

1.4 Research Questions

The research questions can be split into two areas which will be addressed. The first two are concerned with the central design of the MCS:

- How are centrally-set MCS designed by the parent company in a multinational organisation?
- Can the national culture of the home nation explain why the MCS are set in this way?

The next two questions are concerned with the local use of MCS:

- How is local implementation different between subsidiaries in different national cultures? (explained with Simons)
- Why is local implementation of centrally-set MCS different? (explained with Hofstede)

2 Method and Design

In this following chapter, the applied research method and design are presented. Furthermore, the reason behind the decision to follow a qualitative case study design with a partly deductive and partly inductive approach is stated. Therefore, empirical data has been primarily collected through open and semi-structured interviews and subjective information from the interviewees. Consequently, discussion about validity, reliability, and methodological limitations of this study are presented in subsections 2.2 and 6.2 respectively. This section also covers the criteria for the selection of companies, respondents, as well as the collection of data and the analysis of the empirical data.

In this study, we take a case study approach in looking at the operations of two multinational companies in two of their subsidiary countries, making a study of four countries in total. We assess differences in the design and local application of their MCS, that is, for the multinational as a whole and for each individual country.

The study takes a qualitative approach for various reasons, since we aim to understand the link between national culture and MCS. The area of study concerns a dynamic and complex reality where aspects of culture and controls are not fixed or permanent as they would be in a quantitative study. The method used is one with which we collected data through interviews and subjective information from the interviewees. Data are reported primarily through language rather than statistics, and comparisons are based on subjective criteria. There is minor use of basic statistics in order to provide a visual representation of the empirical results in the analysis in chapter five.

This study takes a partially deductive and partially inductive approach. A deductive approach is taken in the first part of the study in order to discover how MCS are used and applied at both a central and local level within each case company and they are categorised accordingly. An inductive approach is then taken to address the questions of why the MCS may be used in the way that they are according to the national culture in each situation, and how this may be a key factor in the design and application of the MCS. An inductive approach is appropriate for qualitative approach since it allows the “existence of multiple subjective perspectives and constructing knowledge rather than seeking to find it in reality” (Bryman and Bell, 2008).

It is expected that national culture may have an effect on the MCS of each multinational, with the controls used being contingent on the location and national culture. Thus, the MCS may have a different emphasis depending on the branch/subsidiary location.

Three frameworks were required in order to collect and analyse the data, and so we have adapted the following well-known frameworks for this study. The frameworks are developed further in the theoretical chapter (chapter 3), they are:

1. Ferreira and Otley’s (2009) extended framework for analysis on the design and use of MCS, which we used for the collection of data.
2. Simons’ (1994) levers of control framework, which was used to categorise the collected data on the controls used.
3. Hofstede’s (1984) cultural dimensions framework, which was used to analyse the use of controls and relate it to national culture. Hofstede’s (1984) table of cultural measurements can also be found in Appendix 1.

Since the multinationals are likely to be aware of cultural differences between their subsidiary locations, they may use some mechanism which recognises this.

2.1 Interviews

We held four main interviews by Skype and telephone with a mid-level manager from each of the four case countries – Sweden, Greece, Mexico, and Colombia. The managers in Sweden and Greece work for company ‘A’, and the managers from Mexico and Colombia work for company ‘B’. After the main interviews, we discussed matters further and raised any additional questions by means of emails and telephone calls with the managers.

The case companies were selected because, primarily, they are multinational companies which have operations in various locations with differing scores according to Hofstede’s (1984) cultural dimensions, thus allowing for ease of comparison. Company ‘A’ has operations in both Greece and Sweden, whilst Company ‘B’ operates in Mexico and Colombia. Since each company may be a special case which does not conform to a norm, two were selected to mitigate against this, and more would have been included in this study given greater time and resources.

Respondents in the study are middle-managers who are involved in the implementation of the MCS at a local level, thus giving first-hand experience of how they are used or followed; but they are also at a high enough level in the organisations to understand the aims of the central administration in setting the MCS and the outcomes they hope for. This level of manager was chosen in order to get a fuller picture of the MCS, as opposed to the view of either the implementation or setting departments in isolation.

The main interviews we conducted were semi-structured and based on the Ferreira and Otley (2009) framework, which we adapted for our purposes. This is discussed and developed in the theoretical chapter (chapter 3) below. Interviewees were asked the prepared questions from the Ferreira and Otley (2009) framework, but then given opportunity to expand on what they said, and the interviewers asked further questions that seemed relevant even though not in the framework.

The purpose of the interviews was to collect quantitative data for analysis, identifying various aspects of the MCS in place, making use of what we see as relevant to the case. We adapted our questions in order to ensure that a concentration on Simons’ (1994) levers of control is clear.

We asked the interviewees to rate the level of use, or the local emphasis given, to each aspect of the MCS which they described, with the options of ‘none’, ‘low’, ‘medium’, and ‘high’. This rating allowed us to make comparisons between the extent to which each tool is used in each country, and how this might contrast to the central design of the MCS.

The ratings provided by the respondents were assigned a number which was then used to create an index which could be used for comparison. The concept of an index allows direct, ordinal, comparison as to whether a greater or lesser emphasis is given to any of the levers of control. The rankings of low, medium, and high, were converted into a numerical format, as a Likert scale, from 0 for ‘not applicable’, 1 for ‘low’, 2 for ‘medium’, to 3 for ‘high’. These numbers were then aggregated for each lever of control to give a mean value for both the central design and local application of each lever in each country.

The mean values for each country were converted into an index which can then be represented in graphical format, thus making comparison and analysis easier. The data were converted into an index by multiplying the mean values by 100/3.

Once the empirical findings were collected, tables of the emphasis ratings given by the respondents were created in a standardised format in order to allow for ease of comparability. Each lever of control was then analysed in turn and in an ordinal nature with reference to the index and tables which were created. An inductive approach and rationale in the analysis section attempts to explain why certain levers may receive greater emphasis depending on the cultural dimensions of the location.

2.2 Validity and Reliability

Notwithstanding the limitations with regards to the present research design, several criteria were used to enhance the quality of the research. Based on Bryman & Bell (2015) we can divide the evaluation of the validity and reliability of a qualitative study into four categories; credibility, transferability, dependability, and confirmability. Bryman & Bell (2015) suggest that credibility refers to the internal validity, transferability refers to the external validity, dependability is extending equally with reliability, and confirmability with objectivity. They also highlight that all four aspects ensure the trustworthiness of the qualitative study. Based on the aforementioned, we conducted tests for all four evaluation criteria.

Bryman & Bell (2015) suggest that credibility shields the study in order to be conducted appropriately and carried out according to good practice. This has been ensured, in this case study, by allowing the respondents to double-check the material they provided us and to finalise their responses. In addition, the comparability of the results drawn from the interviews enhances the internal validity of the study. Furthermore, recording all interviews and by using direct quotes from these interviews establishes a chain of evidence as Yin (2014) suggests. In that regard, we have taken both actions so that the reader can have a direct relation with the source of information and see with ease what the arguments are based on, so as to decide individually whether he agrees or not.

Following, transferability has been referred to as the possibility of generalising the findings from Yin (2014) and Bryman & Bell (2015). Case studies are generally criticised for not being generalisable because of their tendency to a smaller sample size. Also, since we chose to have two case companies, the findings included some different and unique characteristics, such as company culture, which may not be similar to other companies in the same field. As Mason (2002) and Yin (2014) maintain, the aim of generalisability in a case study is not statistical; rather it aims for analytic generalisation. Instead of drawing conclusions about a population based on empirical data from a sample, analytic generalisability is more closely linked to the theoretical framework of the study. An analytic generalisation is at a higher conceptual level than statistical generalisation, and may be based on either confirming, modifying, or rejecting the theoretical concepts, or on new concepts that arose upon the completion of the case study (Bryman & Bell, 2015; Mason, 2002; Yin, 2014).

Dependability runs parallel to reliability, and it entails ensuring access to all records of all the phases within the research process. As Yin (2014) suggests, reliability refers to whether the case study can be performed again by a different researcher and gain the same results. In addition, to ensure the reliability of the study, researchers should act as auditors to assure the complete description of all the steps that were taken in the process (Bryman & Bell, 2015). Considering

this, to prove reliability, documentation of the procedures is essential. Hence our selected research approach and procedures have been presented throughout the research process. We have also kept track of the interviews for two reasons. Firstly, to make it possible for a future researcher to make an individual interpretation of the given answers, and secondly, to make it possible for us to listen to the recordings separately and ensure this way an interpretation convergence of the findings. In this manner, as Yin (2014) suggests for the goal of reliability, decreasing the incidence of errors and biases was achieved.

The last criterion is confirmability which refers to the extent that the study is objective. We acknowledge that when conducting a qualitative case study, impeccable objectivity is impossible. This can be further linked to researchers having acted in good faith, and that personal values have not been overtly allowed to influence the results of the case study (Bryman & Bell, 2015). As Yin (2014) recommends, in order to be objective, we have used evidence from multiple sources. Our additional sources consist of data from documents concerning the organisations, their websites, annual reports, and corporate responsibility reports which we used to complement the interviews. In this sense, we were able to crosscheck and verify the information obtained during the interviews.

3 Theoretical Frameworks

This chapter explores the main literature which is used in the study, developing the frameworks which are used, starting first with the categorisation of the MCS for which Simons' (1994) levers of control is used, and then developing the Ferreira and Otley (2009) extended framework for analysis which will be used as a basis for the data collection. Lastly, Hofstede's (1984) cultural dimensions are explored and used in section five 'Analysis' as an analytical tool to make comparisons between the cultures in each of the countries studied. All three frameworks used for the purposes of the current paper are presented and discussed separately below.

3.1 Simons' (1994) Levers of Control

Simons' levers of control comprise a framework where MCS's usage is twofold. It aims to promote the creativity while at the same time restricts employees' behaviour. He sets four different categories to segregate the controls; belief systems, boundary systems, diagnostic control systems, and interactive control systems. Both a controlling and an enabling role are encompassed in the above systems. It is stated that "Controlling use aims to mitigate problems of information asymmetry, whereas enabling use seeks to reduce uncertainty and improve decision-making" (Sprinkle 2003 in Mundy 2010).

The LOC framework has been used to investigate how organisations exploit their MCS through the aforementioned controls in order to implement business strategies. It is argued that the power of the levers derives from their interdependence and from how they work in synergy to achieve balance and desirable outcomes for the company rather than the effect of their individual characteristics (Simons 1995). (Kruis et al., 2016) maintain that the levers generate positive and negative forces that produce a dynamic tension between innovation and strategic renewal, and effective, predictable achievement of targets set, which eventually assure long-term success. A good balance between the 4 levers is required to manage the tensions between profit, growth, risk and control in an organisation albeit Simons does not provide a clearly defined concept of what balance is, nor how balance is reflected in the control system (Kruis et al., 2016). The Simons levers of control have permeated in management control environment. Notwithstanding that its influence is not obvious, due to difficulties to document, its influence

over literature and its widespread usage in empirical studies as the main theoretical framework and/or as a means of interpretation of data is ubiquitous (Tessier and Otley ,2012, Sweeney et al., 2012).

Both strengths and weaknesses have been identified in Simons’ LOC framework. The broad perspective the framework uses up on the control system by examining the range of the controls used and the way they are deployed by the companies as well as its focus on strategic issues and on its implications for the control system, form the framework’s strength (Ferreira, 2002). That is because the correlation of specific uses to particular control mechanisms enhances our understanding of the design of the MCS. The manner controls are used, helps us perceive whether all four LOC are applied and in which extent. In other words, enables to assess the balance -or not- between positive and negative controls (Ferreira, 2002; Simons, 1995).

The framework, however, has also its critics. Bisbe et al. (2007); Ferreira and Otley (2009) and Tessier and Otley (2012) argue for the framework’s ambiguity. The former, with regards to individual constructs in the theory and the latter for the framework as an entity. Following, other researchers have criticised the LOC framework for being vague and ambiguous. Pointedly, Krus et.al. (2016) with regards to the concept of balance, which is a central idea of the framework, argue for it to be an indeterminate notion.

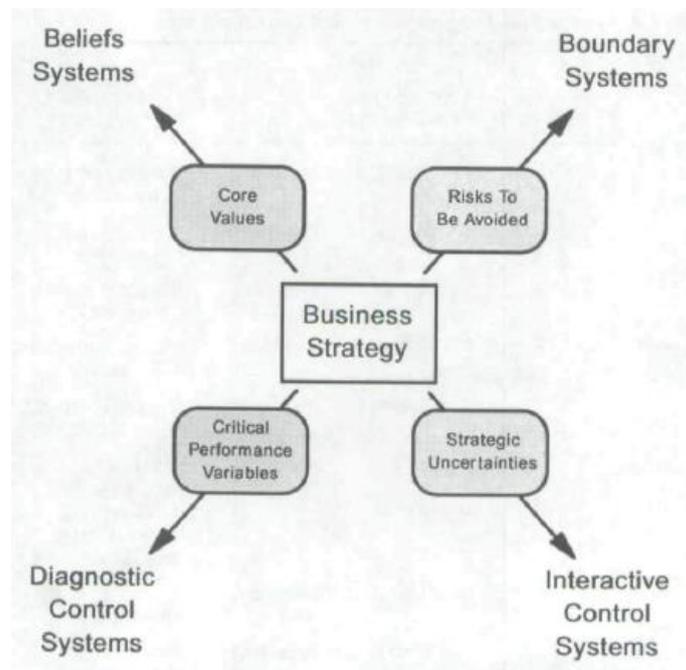


Fig. 1 - Simons’ (1994) Levers of control

Following, Collier (2005) maintains that the LOC framework “does not give sufficient emphasis to socio-ideological controls”. This is linked with the observation that the framework is focused on the top management and that it finds it difficult to follow the variety of informal controls that exist in organisations, especially in small ones (Ferreira, 2002) or on the operation of controls at lower hierarchical levels. So, in cases those informal controls are of utmost importance this is

a problem to confront and consequently it is unlikely that the LOC framework can satisfactorily explain the control system as a whole. "The levers of control are best explored in a large organisation because smaller firms can alter patterns of behaviour through more informal means" (Simons, 1995). We can argue that in this paper we overcame this last weakness as our subject matter is multi-national companies thus there is less room for informal processes to be involved.

Ferreira, Otley (2009) framework is a development of its predecessor Otley (1999) framework, which initially contained five questions before its evolution in 2009. Consequently, both frameworks used in this paper (Simons' LOC and Ferreira & Otley's framework) share strategy as a common feature. Other features are also shared in these two frameworks, a case in point is target setting and rewards that are addressed by Otley independently, they are consolidated to Simons' diagnostic control systems, while information flows are embedded in all LOC. (Aldónio Ferreira, David Otley 2009)

Beliefs systems

Belief systems are formal systems used by management to "define, communicate, and reinforce the basic values, purpose, and direction for the organisation" (Simons', 1994). Simons states that the beliefs systems of a company are actualised and promulgated through formal documents as for instance credos, mission statements, and statements of purpose. He further maintains that the assessment of the core values is crucial to the design of the beliefs systems. Beliefs systems and interactive control systems create "positive and inspirational forces." Boundary systems and diagnostic control systems create "constraints and ensure compliance with orders" (Simons 1995).

Belief systems' deployment by organisations helps them with their purpose to align individuals' goals to those of the organisation, by influencing peoples' mindset and behaviour (McCarthy & Gordon, 2011). Mundy (2010) indicates the lack of uniformity in the sense of processes and ways of how these activities are implemented. A connection has been also established between the belief control systems and the firm culture. Heinicke et al. (2016) found in their paper that belief control systems have a positive correlation with a flexible corporate culture, in other words, that means that the emphasis placed on belief control systems comprises a significant control mechanism in organisations that promote a flexible culture.

Boundary systems

Boundary systems are formal systems used by management to institute explicit limits and rules within which people must comply and act. Boundary systems are declared usually in negative terms or as minimum standards and are generated through codes of conduct, strategic planning systems, and operating directives provided to business managers from the central management. Simons 1994 stresses that the evaluation of risks to be avoided affects the design of them. The main focus of the boundary systems is the caution on avoiding risks related to strategy based on a given market position, such as price and quality.

Furthermore, they consist of business conduct boundaries and strategic boundaries. The former are based on legal constraints, the organisation's belief systems, and industry and professional standards. For instance, centralised multi-national companies define and impose uncompromising rules of conduct regarding several aspects of their processes, as training, quality, cleanliness that are in accordance with their belief system and chosen business strategy. In arduous times for the company and when the performance pressure is intense these conduct

boundaries may be needed. The latter are imposed when a lack of focus jeopardises wearing away resources. Common ways to serve this purpose are strategic planning and capital budgeting (Simons 1995, a review by Joyce M. Shelleman).

Finally, as stated by Mundy (2010) “any MCS that sets out minimum standards or guidelines for behaviour can be used by managers as a boundary lever of control”.

Diagnostic control systems

Diagnostic control systems represent a third lever of control and are the formal systems useful to provide the necessary feedback, to monitor organisational outcomes and to make any amendments need if standards of performance diverge from the pre-set ones. They observe performance and make sure it is in compliance with the strategy and plan of the company, and if not, correct any deviations.

Diagnostic control systems are concentrated only on results and common examples are budget and profit plans. Furthermore, they are characterised from high sovereignty for organisational members and allow top managers to keep track of exceptions. As mentioned above, original feedback systems can be business plans and budgets as they are deployed to keep track of goals or any deviation from them and make the amendments necessary, however, in cases of measures that are not accurately or entirely developed dysfunctional behaviour may be authored. For example, “using the measure of sales calls per day may lead salespeople to maximise total calls without regard for actual sales potential” (Simons 1995, a review by Joyce M. Shelleman).

Simons (1994) also states that the evaluation of critical performance variables affects the design of diagnostic systems.

Interactive control systems

Interactive control systems are the fourth lever of control and it consists of “formal systems used by top managers to regularly and personally involve themselves in the decision activities of subordinates” (Simons, 1994). Simons (1994) also clarifies that frequent top management attention and interest can transform any diagnostic control system into interactive, by encouraging the managers to interact with their subordinates, listen to them in common debates, as well as including them in the decision-making. Focus on attention, dialogue and learning is what gained, and what the purpose is, to make a control system interactive. Simons (1994), maintains that the analysis of strategic uncertainties affects the design of interactive systems.

The controlling and enabling role, to which we referred to in the very first part of this section, seem to be configured uniquely by the interactive lever of control that accomplishes and sustains a balance between these roles. Another unique characteristic and organisational capability of the particular lever is the impact it has on the other levers (Mundy, 2010).

It is supported by Mundy (2010) that the purpose of interactive control systems is to criticise and question the in-process action plans, by creating a discourse between individuals with multidisciplinary backgrounds to contribute with their knowledge.

There is no general consensus or restriction on what an interactive system of control is or should be. Any control that is deployed by the top managers and is used interactively to “direct attention and to guide the bottom-up emergence of strategy” (Simons, 1995) is essentially an interactive control.

As mentioned earlier with regards to the diagnostic control systems, they are focused only on results whereas the interactive controls “move beyond a focus on outcomes and open the black box that diagnostic controls keep shut” (Simons 1995).

3.2 Ferreira and Otley (2009) Extended Framework for Analysis

In order to collect the required information to be used in the Simons (1994) framework above, questions are needed which are able to collect all of the relevant information. For this purpose the Ferreira and Otley (2009) framework has been chosen since it addresses our needs. The whole framework will not be used, but selected questions which are most relevant to the study.

The framework proposed by Ferreira and Otley (2009) puts forward “. . . a research tool for describing the structure and operation of PMSs in a more holistic manner”, whereby it aims to provide a template to aid in the description of key aspects of a company’s PMS. This is done with a series of twelve questions which have been developed from earlier work by Otley (1999) and with the integration of some aspects of Simons (1994) levers of control, which is discussed above in section 3.1. The authors state that an updated framework was required in order to provide a more comprehensive approach, since previous literature often had too narrow a focus for the whole picture to be considered.

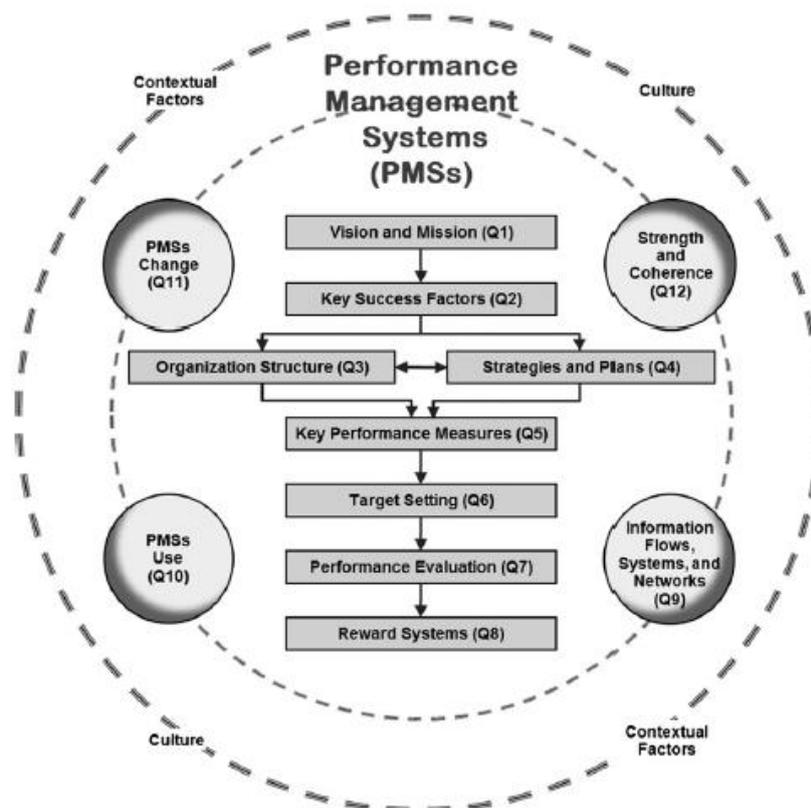


Fig. 2 – Ferreira and Otley (2009) Framework

The framework identifies twelve key aspects of a PMS and aims to address each one so as to gain a broad picture of them for the PMS in use, the specific aspects can be seen in Ferreira and Otley’s (2009) diagram in fig 2 above. As is demonstrated in the diagram, the whole PMS is framed within cultural and contextual factors, which are not investigated by the model.

This 2009 framework considers aspects of Simons' (1994) levers of control, though tries to address the fact that some control mechanisms are part of more than one lever of control. Collier (2005) provides criticism that the framework relies heavily on diagnostic interactive controls, though Ferreira and Otley (2009) challenge this, saying that "... vision, mission, key success factors, strategies and plans, and organisation structure ... are expected to be part of or, at the very least, influence belief systems, boundary systems or both". Thus, the belief systems and boundary systems levers are, indeed, incorporated into the questions.

The diagnostic and interactive levers of control are addressed in questions 5, 6, 7, and 8 of the framework, namely the key performance measures, target setting, and performance evaluation aspects. These questions address Simons' (1994) critical performance variables from setting them to rewarding them, whilst strategic uncertainties are addressed particularly in PMS use, and the interactive nature of controls addressed in the target setting, evaluation, and reward questions.

Stringer (2007) suggests that the interconnections made between the components of the PMS mean that the framework may only be applicable at the top level of management, though the authors say that this is too narrow an application of the framework since it serves to identify both components of and links between aspects of the PMS. Indeed, they argue that "... the general nature of the framework enables other frameworks to be used to complement its interpretations and insights" (Ferreira and Otley, 2009) thus the framework is not hermetically closed and can be extended and used with others.

Cultural and environmental considerations pervade the whole PMS, as indeed the authors state, they are a third level which they have left unexplored since "the factors involved are largely outside the control of the organisation" (Ferreira and Otley, 2009). The authors do, however, assert that the framework can be used to investigate the influence of culture on MCS when they state that "It is entirely appropriate to try to study the (contingent) relationship between external circumstances and PMSs design and use ... we hope that it provides a valuable tool to be used in the conduct of research that seeks to examine the appropriate design of PMSs in different contexts", being mindful that "... the framework is intended to act as a descriptive mechanism to capture the latter [design and use] variables only" (Ferreira and Otley, 2009).

Ferreira and Otley (2009) integrate some aspects of Simons' (1994) levers of control in order to provide an updated version of their framework, which was required in order to provide a more comprehensive approach since previous literature often had too narrow a focus for the whole picture to be considered. The comprehensive approach allows the identification of factors which may not specifically come to mind when an interviewee is asked about a certain lever of control, and it provides more general information which may be used to explain more thoroughly the design and use of these levers in greater depth.

Question one of the Ferreira and Otley (2009) framework concerns the vision and mission of the organisation, with the questions aimed at identifying not only what the vision and mission are, but also by which means these are communicated to the employees. The vision and mission form part of Simons' (1994) belief systems lever of control which are related to the core values of the organisation, and as such this question directly addresses an entire lever of control for the organisation.

Organisational structure is addressed in question two and helps to identify the design and combination of control mechanisms in order to implement the strategy of the organisation. Specifically, Ferreira and Otley (2009) state that “Organisation structure determines the responsibilities and accountabilities of organisational participants; it equally defines the activities that individuals with specific roles should not pay attention to”, and this allows the interviewer to achieve more depth in the interviews, discovering to whom certain controls correspond, and boundaries where employees should not be taking action or where they don’t have authority to act. This question probes further than a direct question about the levers of control because it identifies areas which may not be considered as a lever of control, but actually are.

Question three looks at the organisation’s “key performance measures deriving from its objectives” (Ferreira and Otley, 2009) and as such serves to identify the metrics or diagnostic control systems the organisation employs to achieve these, linking primarily to the diagnostic lever of control since these metrics will be the critical performance variables for the organisation, though links may also exist with both the interactive and boundary system levers.

The fourth question is one on target setting, it enquires as to the targets that are set, how these are set, and how challenging they are for the employees or groups to meet. In identifying the organisations’ targets in such detail it is possible to explore the diagnostic control systems and critical performance variables in greater depth than straight questions about those particular levers of control may. The nature of the question also addresses how targets are set, and so could include an interactive aspect, relating to that respective lever of control.

Performance evaluation is covered in question five, where the interviewee is asked how performance is assessed for individuals, groups, and the organisation. The evaluation addressed in this question relates to the targets set in the previous question and show how the organisation identifies whether said targets have been reached. This question makes it possible to identify whether the evaluation involves an interactive aspect which would relate to that lever of control. The evaluation systems identified may make use of a mixture of diagnostic control systems, core values of the organisation, and risks to be avoided, thus covering all of the levers of control.

The sixth question looks at reward systems, and is strongly linked to the performance evaluation in the previous question. As Ferreira and Otley (2009) state, this question “. . . opens up the issue of the distinction between positive (i.e. rewarded) and negative (i.e. penalised) control activities, which were hinted at in Simons’ (1995) distinction between beliefs and boundary systems”. Reward systems may make use of a mixture of diagnostic control systems, core values of the organisation, and risks to be avoided, thus, covering all of the levers of control.

The specific questions which were used in the interviews are detailed in Appendix 2.

3.3 National Culture and MCS

There is a plethora of meanings and definitions of culture. This plethora of definitions derives from its complex nature which makes it hard to be assessed and measured. “Culture is found in all aspects of a society and can only be fully understood after extensive study” (Hofstede, 1984). Kaplan (1965) claims there is consensus among anthropologists that “culture is composed of patterned and interrelated traditions, which are transmitted over time and space by non-biological mechanisms based on men uniquely developed linguistic and non-linguistic

symbolising capabilities”. Hofstede (1984) defines culture as the “collective programming of the mind which distinguishes the members of one group or society from those of another” (p. 82).

Furthermore, culture can be described by fundamental features such as knowledge, belief, art, morals, law, custom, and other capabilities and habits acquired by individuals as members of society (Seymour-Smith, 1986). However, often culture is perceived to be a set of characteristics intending only to suit the methodological and scientific needs of the researchers. Hofstede (1984) gave culture a common structure by developing four primary dimensions, individualism/collectivism, power distance, uncertainty avoidance, and masculinity/femininity. On this basis, it becomes less complicated to conceive a nation’s culture and the implications it holds for international management.

Even though these cultural values provide us with consistent and important information about a country’s culture, they are only a glimpse of the complex system defining a nation. Culture can only be fully understood when studied extensively (Hofstede, 1984). In that sense managers engaging in international business should be cognizant of the cultural diversities and the varying cultural systems comprising a foreign country.

Chenhall (2003) maintains that the relationship between the design of MCS and national culture represents an extension of contingency-based research from its organisational foundations into more sociological concerns. What Chenhall (2003) argues is that different countries have specific cultural characteristics. This attribute, consequently, makes it likely for individuals to respond in distinctive ways to MCS based on these unique characteristics. Multi-national operations and globalisation have popularised or even compelled the importance of culture in the design of MCS. Companies with multi-national operations face the issue of whether to transfer their domestic MCS overseas, or design their systems from scratch to fit the cultural characteristics of the offshore entities (Chenhall, 2003).

Contingency-based research in MCS has examined possible links between cultural dimensions and elements of structure such as standardisation, decentralisation, and control system characteristics such as formality on controls, reliance of accounting performance measures and budgetary participation. The extant research has provided comingled results as to whether culture does have an effect on MCS design. There has been little consensus on whether there is an association or not. According to Chenhall (2003) this is because studies have examined different combinations of cultural dimensions and have considered aspects of MCS in different ways, ergo there is little convergence between studies to facilitate comparisons and develop generalisations.

The four cultural value dimensions used in this paper, for analyses purposes, are individualism/collectivism, power distance, uncertainty avoidance, and masculinity/femininity. Following in section (3.3.1) we present the aspects of each of the four dimensions and how the underlying cultural attributes affect employee and organisational behaviour.

3.3.1 Hofstede, G. (1984)

Individualism/Collectivism

Kagitcibasi, (1987) proposed “individualism and collectivism constitute probably the most important dimension(s) of cultural differences in social behaviour” (p.76). Individualism and collectivism describes the degree of interdependence a society maintains among individuals

(Hofstede, 1984). It relates to the basic idea of “I” or “we”. Hofstede (1984, p.83) maintained that individualism is a “loosely knit social framework in society wherein individuals are supposed to take care of themselves and their immediate families only” whereas collectivism is a “tightly knit social framework in which individuals can expect their in-group to look after them in exchange for unquestioning loyalty”. What is most important in individualistic societies is the opposite to that of collectivistic societies. The former favour personal performance along with the own responsibility and individual rights, ties between individuals and organisation are relatively loose and people primarily take care of themselves (Sliburyte, 2005). To the contrary, the latter prefer that individuals work in groups to reach certain goals. Decisions are made in consensus with the group and not on an individual basis (Sliburyte, 2005). On Hofstede’s scale, a low score suggests a collectivist society whilst an increasingly higher score is characteristic of individualistic tendencies. Since this particular dimension has been considered as the most important, many researchers (Triandis 2004; Trompenaars & Woolliams, 2003; Triandis & Suh 2002; Bond, Leung, & Wan 1982; Gudykunst et al., 1992) have conducted studies in this respect. The percentage of a country’s individuality influences the work values and consequently management theories and practices. Motivational factors, rewards systems, and management techniques that individualistic societies and collectivistic ones react to, differ. Individualistic societies are focused on the individual while collectivistic societies, on the groups (Sliburyte, 2005). Companies from opposite sides of the individualism scale that are involved in mutual business activities are highly probable to encounter different behaviour, which might affect communication and management. Individualistic societies are motivated by self-interest and collectivistic societies by group interests (Hofstede, 1984). This fundamental difference affects the way people are motivated and are successfully rewarded. Chiang (2005) maintains that rewards are comprehended in different manners across cultures, which in turn affects the extent of impetus resulting from certain rewards. Considering the self and group interests, rewards based on individual performance and accomplishment are likely to attract workers from individualistic societies, whereas rewards based on the achievement of the group might appeal to collectivistic workers. Gatley, Lessem, and Altman (1996) ascertained that in individualistic societies, policies and practices are supported by the promotion of individual achievement and promotion should be based on the individual’s accomplishments. Conversely, in collectivistic environments, policies and practices are based on a sense of duty and loyalty, and promotion is done on ascriptive criteria (Gatley et al., 1996). It is substantial to be acquainted with these cultural differences when setting up a subsidiary in a foreign country and working with culturally diverse workers. The way those relationships are shaped comprises a heterogeneity that strongly affects business relationships between individualistic and collectivistic societies. In individualism, the task is most important and business partners should be treated alike (Hofstede, 1984). Gatley et al. (1996) suggest that in individualistic societies universalist contractual transactions determine work and business activity. Contrariwise, collectivists focus on relationships and trust (Hofstede, 1984). When a company makes its entrance into a market with collectivistic culture much time is needed to be spent on establishing relationships and gaining the trust of significant business people. The procedure of establishing a foreign subsidiary in a collectivistic society could therefore take longer than in an individualistic country. Since relationships should be established from the first minute of the venture we can reach to another substantial difference between individualism and collectivism. This is the present-giving act, which is often included in collectivist cultures, but on the other hand is often considered bribery in individualist societies and therefore not acceptable (Hofstede, 1984). “Investing in personal relationships in most collectivist cultures

also involves the giving of presents and the rendering of services, practices which in an individualist culture would be considered as bribes” (Hofstede, 1984).

Power distance

Hofstede (1984) defines power distance as “the extent to which the members of a society accept that power in institutions and organisations is distributed unequally”. Individuals in societies with larger power distance merely accept the hierarchical order and do not dispute their position within society. They accept the fact that power is distributed unequally. To the contrary people within small power distance societies question the allocation of power and attempt to counterpoise the power. They do not accept their position in society but strive for more power (Hofstede, 1984). On Hofstede’s scale, the higher the score the larger the power distance is within one country. The divergence in power distance has an impact on the way employees interact and influences the employee-employer relationship. It also influences management styles and the number of rules and employee responsibility. Lower or higher power distance also modifies the degree of hierarchical order. Divergence in power distance is perceptible in the organisational design and control. When the degree of power distance is fairly large there is a strict separation between the power and responsibility of superiors and subordinates (Sliburyte, 2005). “The fundamental issue addressed by this dimension is how a society handles inequalities among people when they occur” Hofstede (1984).

Uncertainty avoidance

Hofstede (1984) defines uncertainty avoidance as “the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity”. High uncertainty avoidance societies are very distressed with uncertainty. They maintain strict behaviour and codes of belief and have no tolerance towards persons and ideas that diverge from those norms (Hofstede, 1984). As Sliburyte (2005) suggests, high uncertainty avoidance leads to a high need for formal regulations and rules as individuals want to be in control. In low uncertainty avoidance societies, the atmosphere is more relaxed (Hofstede, 1984) and “deviance is more easily tolerated”. Flexibility is more important than principles and control (Hofstede, 1984). On Hofstede’s scale, a low score suggests low uncertainty avoidance and a high score is indicative of high uncertainty avoidance. Hofstede (1991) maintained that “people in such cultures look for a structure in their organisations, institutions, and relationships which makes events clearly interpretable and predictable” (p. 116). Like Power Distance, discussed above, uncertainty avoidance affects the way individuals build their institutions and organisations.

Masculinity/Femininity

Albaum (2003) defined Masculinity/femininity as the extent to which differences between men and women are used in a society to define roles for the genders. Hofstede (1984) maintained that masculine societies are characterised by assertiveness, achievement, heroism, ambition, and material success. In masculinity, the quantity of things is valued most. And Sliburyte (2005) suggested that in masculine societies individuals desire to be recognised for their performance and to gain increased earnings. Feminine societies, on the other hand, value relationships, caring for the weak, modesty, and quality of life (Hofstede, 1984). Fulfilling social needs is valued more than personal accomplishment according to Sliburyte (2005). On Hofstede’s scale, a larger score is indicative of a masculine society while a lower score shows the society has feminine tendencies.

Motivation differs in masculine and feminine societies, two main factors related to motivation comprise the difference. In masculine societies individuals are motivated by achievement and in feminine societies by relationships (Hofstede, 1984). According to Gatley et al. (1996) achievement motivation is expressed in masculine attributes of competition and individual decisions while wealth and recognition are the desired results of hard work and achievement. Gatley et al. (1996) also suggested that the main focus in feminine environments – where achievement motivation is low – is relationships and group integration. Differences in motivation and reward practices should be taken into consideration from the international management teams when entering new markets. For instance, in masculine societies it might be more compelling to reward based on individual performance while monetary rewards and promotion would probably be preferred. On the other side of the scale, in femininity conditions, rewards based on group accomplishments, social integration, additional time off and flexible work schedules might be more suitable. The first step, thus, to create a work environment that is valued by both cultures is taking those differences into account (Fening, F., Beyer, H., 2014). “Like the Individualism-Collectivism dimension, the Masculinity-Femininity dimension relates to people's self-concept: who am I and what is my task in life?” (Hofstede, 1984).

The above section has addressed the four cultural value dimensions as identified by Hofstede and the implications they encapsulate for international management. Furthermore the apparent importance culture plays for the management of foreign subsidiaries is shown. Culture naturally affects management in the headquarters of the company as well, but it is often not confronted as an influential factor since its MCS are initially tailored centrally to fit the home country first. Entering and cooperating with markets with varying cultural conditions makes these differences obvious. According to Hofstede (1984) “to operate successfully in a foreign country requires the identification of the cultural attributes and the determination of how it will affect the company’s operation”.

4 Empirical Findings

The case companies which are studied are, company A, which is a Swedish-based, and long-established (over 100 years), multinational company with its headquarters in Sweden. The company is active in over 30 different countries, and operates in the manufacturing and engineering sector. The second case company is company B, which is a Mexican-based multinational company, established in the 1980s, with its headquarters in Mexico. The company is active in five Latin-American countries, and operates in the personal assistance sector.

In this section we present the information which was obtained through the interviews. Four main interviews were held, one with each manager in each subsidiary location, follow up questions were later either sent to the interviewees, or we were able to hold shorter clarification interviews by telephone.

The MCS used in each scenario are explained in the text, with the key elements arranged into a standardised table for ease of direct comparison of the MCSs and their application in their local settings. The information is also categorised into Simons' (1995) levers of control, as can be seen in the tables, which further aids the analysis in chapter 5, enabling like-for-like comparison.

The interviewees were also asked to provide a ranking – none, low, medium, and high – of how they perceived the central emphasis or level of importance that is placed on each aspect of the MCS; and they were also asked to provide a ranking for the local emphasis or use of each element of the MCS, which aims to show how important each aspect is from both the perspective of central management, and from the local perspective of the subsidiary.

The information provided in the interviews is summarised in the tables in each subsection, whilst further details are in the running text. The tables contain each interviewee's responses to the ranking questions for both the central and local emphasis placed on each MCS aspect.

4.1 Company 'A'

Company A is a Swedish-based, and long-established (over 100 years), multinational company with its headquarters in Sweden. The company is active in over 30 different countries, and operates in the manufacturing and engineering sector.

4.1.1 Greece

In our interviews and follow-up questions with an operations manager in Greece we were able to identify the most important aspects of the company's MCS, both those set centrally, and actual local practise.

Company A - Greece			
Lever of Control	MCS Aspect	Central Emphasis	Local Emphasis
Belief System	Vision	Low	Low
	Mission	High	Medium
	Drivers and values	Medium	Medium
Boundary System	Code of Conduct	High	High
	Zero accidents	Medium	High
Diagnostic Control System	Financial KPIs	High	High
	Non-financial KPIs	Medium	Medium
	Incentives/rewards	High	High
Interactive Control System	Financial KPIs	High	High
	Employee reviews	High	High
	Budgets	High	Medium

Fig. 3 – Company A data, Greece

Belief Systems

The same belief systems are in place within all subsidiaries of company A, these systems are set centrally, though there is some variation in their local application, as can be demonstrated in the Greek case. In our interviews with an operations manager in the Greek subsidiary we found that the central organisation of the company places a high emphasis on the primary belief systems, those being the vision, mission, and drivers and values.

The vision relates to the products produced by the company, and whilst this is an important belief lever for the company as a whole, which appears in all annual reports emitted by the parent company, the attention given to this lever of control is minimal. The vision is not communicated to the employees very strongly in Greece, save for official communication from the parent company.

The company mission is to be the undisputed leader in their field, and this mission has a high emphasis in the group’s strategy and documents produced by the parent company such as the annual report. The mission is, again, not communicated intensely throughout the Greek subsidiary, but is informally disseminated throughout the subsidiary. As the interviewee said:

“there is a general attitude that we are a global leader”.

Drivers and values of the group are identified in their annual reports as “empowerment, high ethics, openness, teamwork”. The drivers and values are known amongst employees in the subsidiary and are, indeed, followed, but not explicitly or consciously, as the interviewee stated:

“Of course we hold these values, but I think that teamwork is most important of these in my day-to-day activities”.

Boundary systems

Company A has centrally set a code of conduct that seems to be important for the company and all its direct co-operators. The significance of the code is explicitly stated along with the need for all directly involved parties, to comply with the rules set in the code. The code of conduct puts in place the boundary systems of the organisation.

According to the code all members of the company must comply with the rules and act accordingly, while there is no such a circumstance that an individual or a situation can be characterised an exception. Top management is in charge of supervising the compliance and

make sure no divergence whatsoever takes place within the boundary system as well as take the respective measures in case of unlawful actions.

Drawing from the code of conduct itself, a high emphasis seems to be placed in this field as the code is stringent and strictly expressed, leaving not the slightest margin of declination. The risks addressed are bribery, corruption, conflict of interest and protection of information and facilitation payments among others. Avoiding gift transactions with public servants and bodies is stressed, apart from when a situation demands it, but even then, the amount spent should not exceed the local customs.

The manager in the Greek subsidiary stated that the code of ethics was not communicated that intensively in the Greek subsidiary but he stressed that it has become increasingly important over the last two to three years. He stated how elated he is with the obligatory and intensive code of conduct trainings that have been in place the last years. He believes it was something necessary for the corrupted nature prevalent in many aspects of the legal environment and processes in Greece.

“We all knew it existed and had to sign up for it several years ago, but not until now have we been made to actually read it and get the appropriate education on it”

With regards to the strategic planning the interviewee said that it all comes from the headquarters in Sweden and there is no room for discussion. So the strategic plan is set centrally from the company and they are not allowed to deviate from it at all. What can be subject to differentiation is the target setting which will be discussed in a following section.

Diagnostic control systems

Company A used to make use of budgeting and profit measures to follow the performance of its subsidiaries. Budgeting was left aside the last two to three years as it was a very time-intensive process usually taking place in mid-August to mid-September. As stated from the interviewee:

“The company has streamlined the process by asking for a minimum flat sales increase, giving free space - accompanied by the respective accountability of course - to country managers of how this will be achieved”

This shift to strategy as well as the loyalty and assiduity to the code of conduct - mentioned in the previous section- occurred due to the new CEO of the company.

Nonetheless not many KPIs are communicated to the employees. The interviewee stated that the input is limited to the higher group management and it is only them who have information on the exact KPIs and their task is to make sure their subordinates reach the targets set:

“The employees are not familiar with the KPI's but they do know the monthly targets, I don't believe it is essential for them to know such details, since they only have to follow the orders to achieve the company's targets”

Following, the interviewee spoke about the review process in the company which is followed by an incentive and reward system. Employee 360 reviews are in place to keep track of the employees' performance and efficiency. Employee evaluation is taking place twice a year and is based on soft (more subjective criteria) and hard (measurable indices) skills. Employees who get valued high in both categories, are rewarded after the salary review procedure (once a year), and can get a raise or even a promotion if they are eligible for it.

He stated that there is a climate of goodwill and growth and the employees are given equal opportunities to develop their skills and competence in order to reach their full potential, while the bargain is that they shall continue working towards the firm's goals under its values and drivers.

There is a difference between the above mentioned soft and hard skills when it comes to reward. Soft skills are rewarded with trainings and professionally oriented fairs aiming to personal and/or professional amelioration while high score in both categories comes hand in hand with financial rewards i.e. bonuses or a salary rise.

Failure to achieve targets or deviation from budgets is not punished in any way. Instead, discourse sessions and meetings are in place to examine what the management was expecting, what actually happened and the reasons behind the malfunction. Through this constructive procedure, which demonstrates the existence of the interactive lever of control, the amendments to be made are discussed.

The interviewee also maintained, that the failure to reach a target, results the bonus not to be distributed but in case an employee was to get a raise, they still get it but depleted. A handling like this, shows that the company "punishes" the employees while at the same time has the intention to incentivise them by rewarding them and keeping them motivated.

Interactive control systems

As mentioned earlier the financial KPIs and the strategy for the group are set centrally and there is no room for interposition from the subsidiaries. However, under circumstances such as divergence from budgets or targets, discuss is mandatory between the local managers and the owner-managers in order to come up with a sustainable solution for the subsidiary.

As the interviewee stated, there is plenty of interaction in this control method as the subsidiaries are able to set the targets according to local market circumstances. The interviewee stressed that there is the flexibility (from local managers) to prioritise the targets and set them to fit the market demands, of course, after discussion and abiding communication with the directors of the parent company that result to amendments in scheduling and action planning:

"In Sweden there is high activity in the paper industry. So they develop projects and working towards innovation in this field, whereas in Greece there is no interest whatsoever in this sector so setting targets and strategic plans in this direction is a waste of time and resources"

Strategy, however, as mentioned before, is not subject to change despite the ease of target modification depending on market allowance. This can be accorded to the strict, top-down hierarchy nature of the organisation.

Additionally, and with regards to the budgets, he declared that the parent company sets them according to the needs of the Greek subsidiary, hereto, but they are open to discussion. The manager of the Greek subsidiary stated that when necessary for the purposes of the subsidiary (and by extension for the firm in general), the parent will allocate more resources to the subsidiary to achieve the targets set.

"The company provides us with all necessary resources upon request and after discussion. They often approve extra reasonable and relative financial and/or non-financial aid, in order for us to achieve the targets set"

Expected deadlines are another issue the interviewee characterised as relatively flexible. He stated:

“They never force us in this respect; there is neither reward nor penalty if you fail to meet a deadline. All this, within a reasonable timeframe of course”

Finally, as addressed to a previous section -diagnostic control systems- the employee reviews apart from being a means of evaluation can be useful a technique for creating constructive discourse on important issues for the company’s prosperity. Employees’ performance is assessed twice a year. The evaluation is conducted based on relevant KPIs both financial (hard skills) and non-financial (soft skills).

These reviews appertain to both diagnostic and interactive LOC. In the former as a result based, evaluation tool, and in the latter as a way of creating a dialogue between the employees and the management and giving the opportunity to the managers make changes to improve efficiency and performance.

Targets are also a subject of discourse between senior managers and subordinates. As the interviewee stated:

“It is obligatory to discuss in this respect; we use an interface in intranet. It officially takes place twice a year, but practically it is done more often, maybe 5-6 times per year”

4.1.2 Sweden

Company A - Sweden			
Lever of Control	MCS Aspect	Central Emphasis	Local Emphasis
Belief System	Vision	Medium	Medium
	Mission	Medium	Medium
	Drivers and values	Medium	High
Boundary System	Code of Conduct	High	Medium
	Zero accidents	High	High
Diagnostic Control System	Financial KPIs	High	Medium
	Non-financial KPIs	High	High
	Incentives/rewards	Medium	High
Interactive Control System	Financial KPIs	Medium	High
	Employee reviews	High	High
	Budgets	Medium	Medium

Fig. 4 - Company A data, Sweden

Belief Systems

With the belief systems set centrally by the parent company in Sweden, the same medium emphasis in the Swedish subsidiary was, if anything, expected. The interviewee confirmed the same level of importance. Consequently, it is obvious a difference to the local application of the belief systems control.

Despite both subsidiaries placing a high emphasis on the primary belief systems, the Swedish subsidiary seems to place a higher emphasis on the vision compared to its counterpart in Greece.

The attention given to this lever of control is high. The vision is disseminated to the employees stronger in Sweden, whereas the mission remains in the same level of communication intensity in both companies.

Drivers and values are identified to be identical for both companies. The distinguishing difference, however, is the degree of communication of these drivers and values. The interviewee B maintains that employees in the Swedish subsidiary are familiar with the drivers and values so they consciously work towards the targets achievement.

Boundary systems

The code of conduct is set centrally by the group and it is important for the Swedish subsidiary ditto, as reinforced by the interviewee, for it puts in place the boundary systems of the organisation, and the acceptable behaviour.

Top management is, like in the Greek subsidiary, the guardian and assurer of complying with the regulations and the code of conduct and considering of necessary measures in case of not aligning with it.

The interviewee stated that the communication of the code of ethics is not that assertive in the Swedish subsidiary. Opposite to the first interviewee, the interviewee did not disclose any mandatory training on the code of ethics, fact that he attributes to the general attitude of the Swedish working environment. As he stated:

“Our Code of conduct is applied thoroughly and it is important for all of us to adhere to, but it is not communicated intensively. I don’t know how to explain this, but I believe that the code of ethics is a mentality to us and it is expected from everyone, to be aware of”

The interviewee stated that an important tool for risk avoidance is the policy according to which the goal of the organisation is zero workplace accidents. As he supported, the company follows all the requirements and complies with the local workplace regulations.

Finally, strategic planning is treated in the same exact way as in the Greek subsidiary. The parent company in Sweden sets the strategy to be followed and the targets to be achieved.

Diagnostic control systems

Same as in the Greek subsidiary, the performance of the Swedish subsidiary is assessed by the parent company by the degree of devotion to the budgets and profit (mainly) and non profit-based measures.

Ability to meet or exceed the targets set by the parent company is a criterion for the employees’ evaluation and by extension for the directors in charge.

KPIs, both financial and non-financial are evenly important for the Swedish subsidiary and they are disseminated to the employees. As opposed to company A the non-financial KPIs are taken into account more seriously. Consequently, the Swedish subsidiary has attached the same importance to the soft skills as to the hard skills.

The employee review process place emphasis on the KPIs for which the employee is accountable for, and their direct manager’s view of performance and progress. Good reviews can go hand in hand with a pay rise, promotion or a bonus which is dependent on the KPIs and is given to the manager of the department who distributes it evenly to his subordinates.

Divergence from the budget or weakness to achieve a target demands discourse between the manager and the subordinates in order to detect any malfunctions in the process and put in place any amendments necessary that will ultimately lead to the desirable effect.

Interactive control systems

Dialogue between the subsidiary director and the parent company is central to the process of defining the appropriate budget. The budget allocated to each subsidiary is prefixed from the headquarters and similar to the Greek subsidiary there is room for influencing the budget-setting process. That is achieved, after discussion between the parties involved, in the case that certain local circumstances like market adaptation demand it.

Contrariwise, strategy is not subject to modification and there is no saying from the subsidiary's director. This is a fact that makes more apparent the strict, top-down hierarchy of the organisation, since there is no predisposition towards countries, but all subsidiaries are treated likewise.

Furthermore, the employee reviews take the same structure as those in Greece. Employees are assessed twice a year and the evaluation is conducted based on financial and non-financial KPIs.

Efficiency and effectiveness, as in high scores in the evaluation process, result to financial remuneration.

In case those KPIs are not met, the employees have to report to their direct manager and through teamwork and discussion changes in process are set to eliminate flaws and improve efficiency and performance.

4.2 Company 'B'

Company B is a Mexican-based multinational company, established in the 1980s, with its headquarters in Mexico. The company is active in five Latin-American countries, and operates in the personal assistance sector.

4.2.1 Mexico

In fig. 5 the empirical information received from the company B manager in Mexico is summarised into the standard table.

Company B - Mexico			
Lever of Control	MCS Aspect	Central Emphasis	Local Emphasis
Belief System	Vision	Medium	Medium
	Mission	Medium	Low
	Drivers and values	Low	Low
Boundary System	Code of Conduct	High	High
	Zero accidents/safety	Low	Medium
Diagnostic Control System	Financial KPIs	Medium	Medium
	Non-financial KPIs	Low	Low
	Incentives/rewards	Medium	Medium
Interactive Control System	Financial KPIs	High	Medium
	Employee reviews	Medium	Low
	Budgets	Medium	High

Fig. 5 - Company B data, Mexico

Belief Systems

The belief systems in place within company B are set centrally by the parent company in Mexico, which gives a medium emphasis on them when they are disseminated to the subsidiaries.

The company mission is to make life easier for customers, providing them with excellent services which are linked to the values of the company (Company website, 2017), this is given a medium emphasis when it comes from the central organisation. Locally in Mexico the mission is communicated to the employees in a mainly indirect way, it can be seen printed on some office products such as mouse pads, and it is displayed on the wall in the lobby, but not much more effort is made to communicate it to employees or instil it into their belief systems, generally giving it a low emphasis at the local level. It may be that the mission is not seen as relevant, since in our interview with a company B manager in Mexico they said of the mission and vision:

“The mission is a bit flowery . . . I think the vision is more relevant day-to-day, it’s easier to tell the employees that we want to be the best”.

Company B’s vision is to be the best company in its field in Latin America (Company website, 2017), and this is also given a medium emphasis by the central organisation. The subsidiary in Mexico can also be said to place a medium emphasis on the vision, with it being communicated slightly more than the mission at a local level and sometimes verbally by superiors, as indeed our interviewee said it is easier to communicate.

The company sets out six values on its website, those being trustworthiness, honesty, innovation, loyalty, leadership, and responsibility (Company website, 2017). These values are identified by the central organisation as important to the company but, again, the interviewee says that these are not usually communicated directly to employees.

Boundary systems

Company B’s code of ethics and conduct is important to the organisation and is given a high emphasis by central management when it is disseminated.

The code of conduct addresses specific risks to be avoided and gives employees clear and detailed instructions on how to deal with ethical, legal, and strategic risks. The risks identified include aspects such as competition, marketing and communication, bribery, corruption, conflict of interest and protection of information (Code of ethics and conduct, 2017).

The interviewee stated that the local emphasis placed on the code of ethics and conduct is also high, with it seen as an important tool for risk avoidance:

“It’s really relevant to the situation in Mexico, there are many who abuse the system and something should be in place to fight it”

Under the code, employees are not allowed to receive valuable gifts, rules are set out for conflicts of interest, and protection of the company’s confidential information.

Punishments for violating the code of ethics and conduct in Mexico can be strict, with the most serious violations resulting in immediate dismissal from the company.

There is no policy which explicitly states that the goal of the organisation is zero workplace accidents, but the central management insist that local subsidiaries comply with local workplace regulations. The Mexican subsidiary follows this requirement and complies with local workplace law.

Diagnostic control systems

Central management primarily uses budgets and profit measures to track the performance of its subsidiaries, and evaluation of their performance is carried out by the owner-managers. Bonuses for subsidiary directors are dependent on adherence to budgets and improving measures such as gross profit. Any deviations from the subsidiaries' budgets is investigated by the owner-managers who will take decisions on what actions to take, this crosses with interactive controls since there is also involvement from the subsidiary director who is involved in this process.

Since the company states that taking responsibility for one's actions is one of its core values (Code of Ethics and Conduct, 2017), there are non-financial KPIs relating to environmental matters such as recycling and energy use at the subsidiary and group level, though there are none at employee level.

Company B does not communicate many KPIs to the employees, instead preferring only to emphasise what they see as the most important or most relevant. An example would be the finance department in Mexico whose tasks include closing the books each month for their subsidiary and also for the whole group, in this case the only KPI used to measure the department's performance is the number of days taken to close the month; any bonus members of the finance department receive depends heavily on this KPI.

Our interviewee was not pleased with the employee review process because they are based on very few criteria and the rewards are not sufficient. He said:

"For many there is no space for growth, so motivation for growth within the organisation is kind of non-existent".

The rewards offered by the review process were not, in the interviewee's opinion, sufficient to motivate employees to exert effort in self-improvement or to seek promotion.

Interactive control systems

Deviations from the subsidiaries' KPIs such as failure to meet budgets results in a discourse between the owner-managers and the subsidiary director where solutions are sought. The aim of this discourse is to discover any underlying reasons for the variation and for the organisation to learn how to address such matters. The subsidiary directors and owner-managers work together in the preparation of subsidiary budgets, focusing attention and forcing dialogue as per Simons' (1994) definition of the interactive lever of control.

During the employee reviews, the employee is assessed by their direct manager on their performance during the year, with an objective focus on their relevant KPIs, which is usually limited to one or two indicators which may be either financial or non-financial. There is also a subjective aspect to the reviews where the direct manager will discuss the employee's general performance and how it meets their expectations. The reviews are interactive to some degree since they may allow minor changes to be made to working processes in order to improve performance, but they are unlikely to affect the group's strategy in any way.

4.2.2 Colombia

In fig. 6 the empirical information received from a company B manager in Colombia is summarised into the standard table.

Company B - Colombia			
Lever of Control	MCS Aspect	Central Emphasis	Local Emphasis
Belief System	Vision	Medium	Low
	Mission	Medium	Medium
	Drivers and values	Medium	Low
Boundary System	Code of Conduct	High	High
	Zero accidents/safety	Medium	Medium
Diagnostic Control System	Financial KPIs	High	Medium
	Non-financial KPIs	Low	Medium
	Incentives/rewards	Medium	Medium
Interactive Control System	Financial KPIs	High	Medium
	Employee reviews	Low	Low
	Budgets	High	High

Fig. 6 - Company B data, Colombia

Belief Systems

With the belief systems set centrally by the parent company in Mexico, the same, medium, emphasis is placed on them when they come from central management. However, in the Colombian subsidiary the group mission is enhanced with another locally-specific mission, namely putting a greater emphasis on providing a ‘designated driver’ service to customers in order to avoid the risks of driving after drinking alcohol. This mission was developed due to local market and legal conditions where the problem of drink-driving exists and fines are very large for offenders. The local mission is not communicated on any branded material but is informally disseminated throughout the subsidiary.

“We focus a lot on providing services to stop drink-driving, it has concordance with the group mission but is also relevant to our context”

The group mission of making life easier for customers, providing them with excellent services which are linked to the values of the company (Company website, 2017), is communicated in Colombia using much the same indirect means as in Mexico, viz. through branded office stationery, posters on the wall in the office, and on the company website.

The group vision and values are not strongly communicated to employees within the Colombia subsidiary, save for on some of the internal office stationery and posters.

Boundary systems

The interviewee stated that the local emphasis placed on the code of ethics and conduct is also high, with it seen as an important tool for risk avoidance:

“It [code of conduct] gives clear rules which are easy to communicate to the employees and ensures they know what is unacceptable”.

As in Mexico, the punishments in Colombia for violating the code of ethics and conduct can be strict, the most serious violations resulting in immediate dismissal from the company.

As stated above, there is no explicit policy on zero workplace accidents, but the Colombian subsidiary must comply with local laws and workplace regulations.

Diagnostic control systems

The performance of the Colombian subsidiary is assessed by the owner-managers in Mexico using profit-based KPIs and adherence to budgets. The director of the subsidiary is evaluated on his ability to meet or exceed these targets, and his bonus depends on these indicators, that

is, increasing profit and reducing costs. It is borne in mind when the assessment is done that the Colombian subsidiary has some different activities to others in the group, namely the large focus on the designated driver service, and so the review allows for expected variances due to the nature of the different activities involved in this business line.

“What HQ really care about is the financial results, the environmental KPIs are more for show, or a nice-to-have thing”.

The director of the subsidiary is not evaluated much on the non-financial environmental KPIs because the owner-managers are more concerned with profit levels, though they do factor in his evaluation. Other employees in the subsidiary, however, have no KPIs related to environmental or sustainability matters.

The KPIs that are communicated to employees are limited, and they are given very few per employee or department. The finance department, for example, uses the same KPI as that in Mexico which is simply the number of days it takes to close the books for the month, the only variation is the time given since the Colombia office only need to close their own books and not those of the whole group.

“For employees, we usually use the same KPIs as in Mexico [HQ], it’s pretty centralised so they give us the formula to use”

The employee review process is both objective and subjective, with emphasis on the KPIs for which the employee is responsible, and their direct manager’s view of performance and progress. A good review can lead to a pay rise, promotion; the bonus is dependent on the KPIs but is also assessed objectively in the review process.

Interactive control systems

The Colombian subsidiary’s budget is set through a process which involves dialogue between the owner-managers at HQ and the subsidiary director. The director is able to influence the budget-setting process by arguing his case for certain local circumstances. Through this process and ongoing discussion throughout the year, the director of the Colombian subsidiary is able to request resources or amend the revenue or cost expectations.

“The discourse we have with head office sometimes results in a change in local strategy, like the specialisation we now have in the designated driver scheme which other subsidiaries don’t have”.

It is through the interactive discussions between the subsidiary director and central management that the Colombian office was able to concentrate more resources on the designated driver strategy when the opportunity came about.

The employee reviews take the same structure as those in Mexico, with both objective and subjective assessment done by the employee’s direct manager. The objective focus is on the small number of KPIs that each employee has, and the subjective part is how the manager views their performance. Employees provide feedback to their direct manager in these reviews as to why KPIs were exceeded or not met, and can result in a change in processes if the manager thinks it is an important enough matter.

“The employees sometimes have good efficiency ideas which they will bring up if performance was below expectations. If they are good, we will think about adopting the ideas”.

4.3 Summary of Empirical Data

In order to make the qualitative empirical data more easily comparable we created a simple index which represents the data we collected regarding the local application of each aspect of each lever of control. The index can then be represented graphically for the purposes of comparison. The rankings of both central emphasis and of local application/use were taken separately in order to divide the analysis in a logical manner. The rankings of low, medium, and high were converted into a numerical format, in a similar style to a Likert scale, ranging from 0 for 'not applicable', 1 for 'low', 2 for 'medium', to 3 for 'high'. This information for each individual aspect was then aggregated for each lever of control to give a mean value for both the central design and local application of each lever in each national culture, viz. country.

The mean values for each country were converted into an index which can then be represented in graphical format, thus making comparison and analysis easier. The data were converted into an index by multiplying the mean values by 100/3.

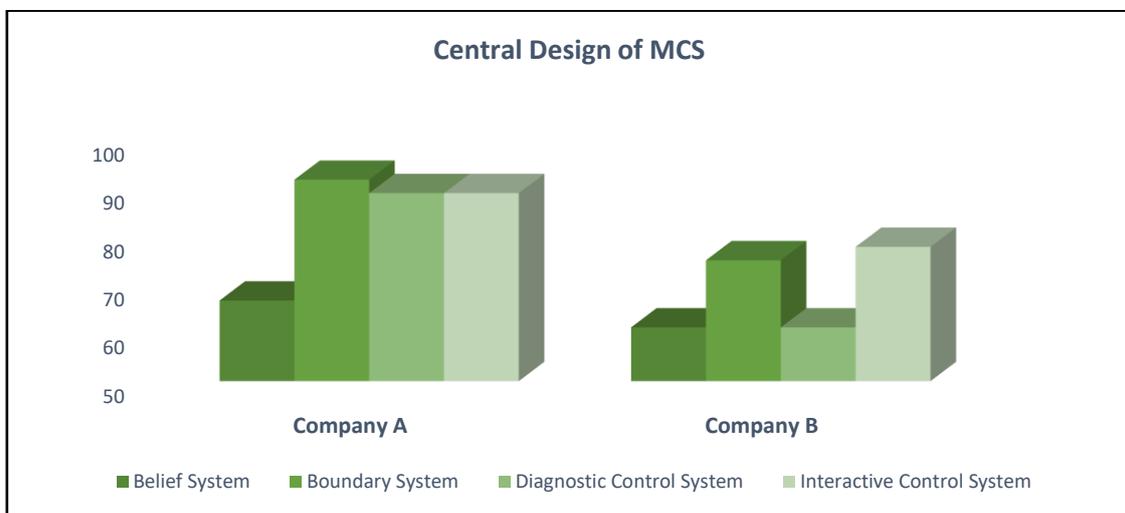


Fig. 7 - Index of central design and application of levers of control by parent

The resulting indices can be seen above in fig. 7 for the central design and emphasis placed on each lever, and below in fig. 8 for the local application.

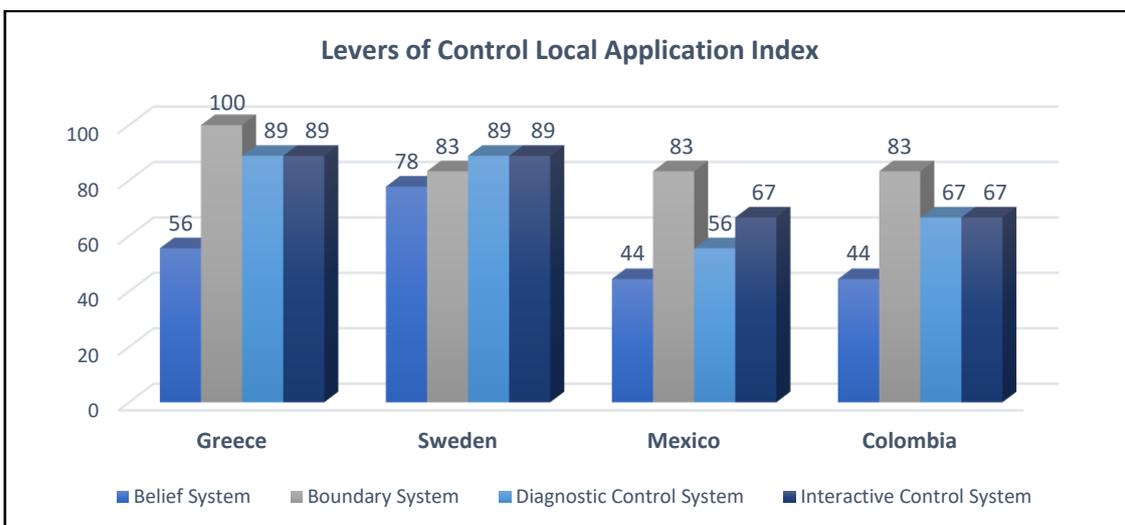


Fig. 8 - Index of local application of levers of control

5 Analysis

5.1 Use of Hofstede's (1980) Cultural Dimensions

Hofstede's (1980) cultural dimensions are used in this section as an analytical tool to make comparisons between the cultures in each of the countries studied.

As presented above in section 3.3.1, the four cultural dimensions used in this paper for analysis purposes are individualism, power distance, uncertainty avoidance, and masculinity; and they were developed by Hofstede in a study of IBM employees around the world aiming to show differences in certain aspects of the “collective programming of the mind that distinguishes the members of one human group from another” (Hofstede, 1984, *Hofstede's definition of culture p.82*).

The four cultural dimensions are shown below, in the chart in fig. 9, for the four national cultures included in the study. This information is used to make comparative analyses of the subsidiary countries and the empirical data on their use of MCS which was identified above in chapter 4.

As Van der Stede (2003) states, “the adoption of Hofstede's framework to discuss the impact of national culture on MCIS design is consistent with most prior studies in management control”, meaning that it is a widely accepted and appropriate tool for this analysis.

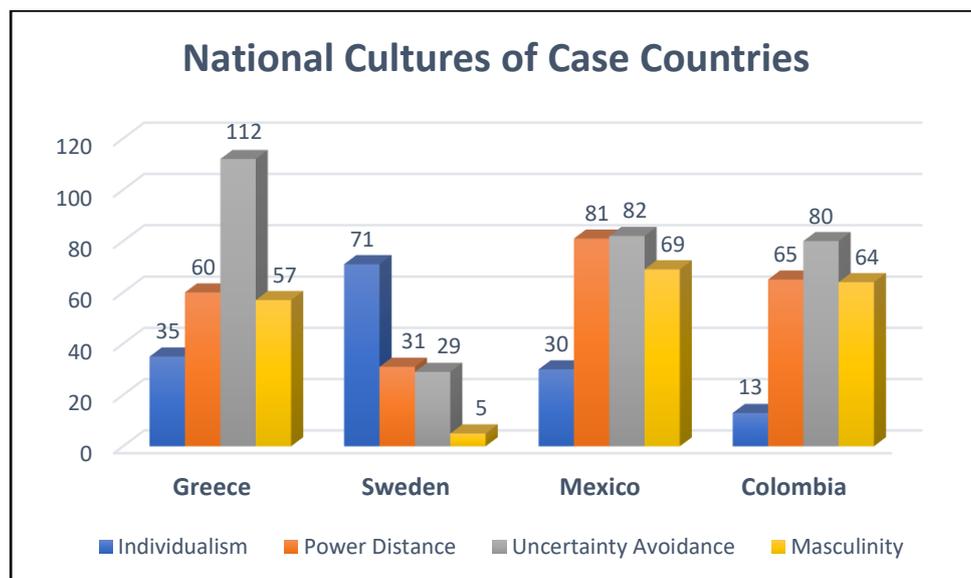


Fig. 9 - Cultural dimensions of case countries (Hofstede, 1980)

We can see from fig. 9 that there are good means for comparison, since the highest ratings of cultural aspects are split amongst the sample. Sweden has the highest level of individualism, Greece has the highest level of uncertainty avoidance, and Mexico has the highest levels in both power distance and masculinity.

5.2 Analysis

Using the graphical representation of the cultural dimensions in fig. 9 above, the central design information in fig. 7, and the levers of control application table in fig. 8, we are able, to identify the most conspicuous differences in central design and local application of levers of control and

then systematically compare these differences with the cultural dimensions to test for correlations, whilst using extant literature to support or rebut inferences from the data where relevant. Since there is limited literature available which makes direct comparisons between Hofstede’s (1980) cultural dimensions and Simons’ (1994) levers of control, suppositions are made using any relevant literature where a reasonable link can be found, though the majority of analysis in the local application sections is data-comparative in nature.

The majority of the comparisons made in this analysis of the empirical data are ordinal in nature, meaning that they concern the place or ranking of each measure, and not the size of the interval between them unless it is explicitly stated.

All references to local application, local emphasis, and local use refer to the intensity of each lever of control in the subsidiary as a result of local decisions or attitudes to said levers.

Before each subsection, both the indices for cultural dimensions and for the relevant lever of control are shown in order to make the analysis easier to follow for the reader.

5.2.1 Central design of MCS

The central design of the MCS concerns how the parent company sets the MCS to be used within the multinational group, that is whether the national culture of the home nation influences the central design. Below in fig. 10 and fig. 7 the data for the parent countries of company A and company B are represented for the purposes of this analysis.

The headquarters of company A are in Sweden, and the headquarters of company B are in Mexico, so the national culture of these two countries is shown below in fig. 10, and the empirical data regarding the central design is shown again in fig. 7 below.

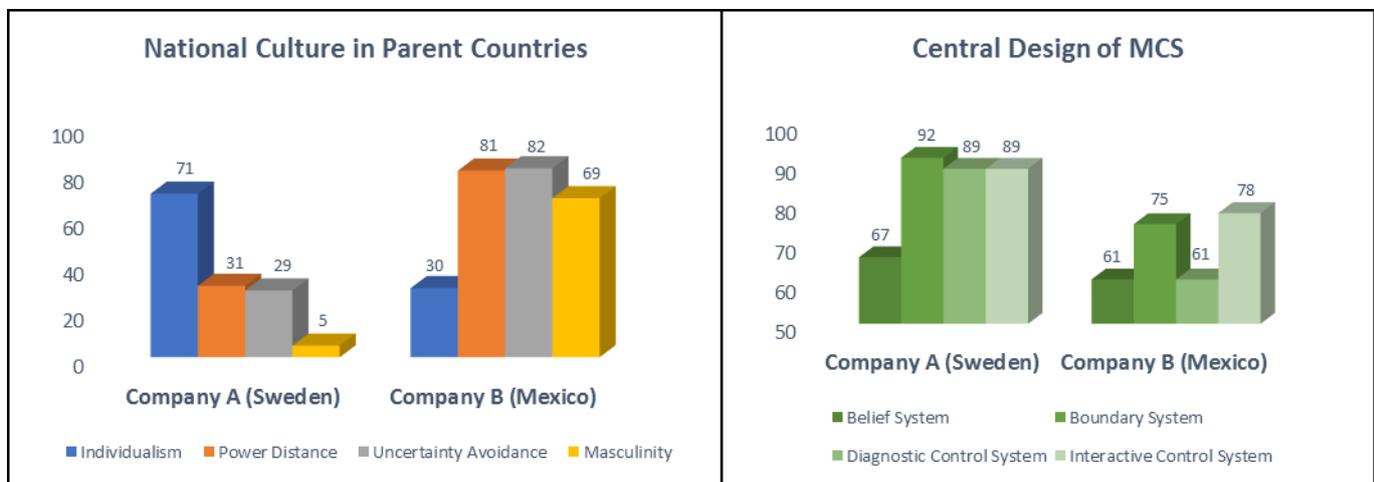


Fig. 10 – Cultural dimensions (Hofstede, 1980)

Fig. 7 – Local index for boundary system levers

The lever which is given the highest emphasis in the central design of their MCS is the boundary system lever for company A in Sweden. Sweden has the lowest power distance and uncertainty avoidance measures of the two parent companies, which would seem to run counter to the literature, since a higher power distance and higher uncertainty avoidance are expected to correlate with high boundary system use. As Merchant and Van der Stede (2003) argue “people who are high in power distance are likely to prefer, or at least more likely to accept, greater centralisation of decision authority and less participation in decision processes”, whilst a boundary system is one which provides highly centralised “limits and rules which must

be respected” (Simons, 1994). Furthermore, Kim and Kang (1991) assert that “uncertainty avoidance is correlated positively with bureaucratic control”, and they define bureaucratic controls as those with “the use of rules, regulations, policies, hierarchy of authority, and other bureaucratic mechanisms to standardise behaviour”. As such, it would be expected that the Mexican company B would design an MCS with a higher emphasis on boundary systems than Swedish company A, however this is not the case.

Testing boundary systems against the individualism and masculinity dimensions, there seems to be little literature to suggest any correlations since a boundary affects both individuals and groups in the same way; and the boundaries or rules have little to do with the “achievement, heroism, assertiveness, and material success” identified by Hofstede (1984) as the values most associated with masculinity.

The belief systems, as designed by the parent companies, are at a similar level [within 6 points] to one another. Kim et al. (1991) define a clan control as one with “the use of organisational culture (encompassing values, commitment, traditions, and shared norms and beliefs) to control behaviour” and as such we can use ‘clan’ and ‘belief’ as almost interchangeable terms when they suggest that “a clan control system will work better in societies with small power distance than in societies with large power distance” (Kim et al., 1991). This suggests that power distance should have a negative correlation with belief systems, which holds true when we observe that both company A and B conform to this in their MCS design, albeit very subtly.

Investigating further, we consider that “A clan control system will work better in a collectivist society than in an individualistic society” (Kim and Kang, 1991), and that “Collectivism [the opposite of individualism], stands for a preference for a tightly knit social framework in which individuals can expect their relatives, clan, or other in-group to look after them in exchange for unquestioning loyalty” (Hofstede, 1984). Given that a clan control is related to belief systems, we can infer that a belief system is likely to be more important or significant in a national culture with low individualism, thus a negative correlation. This is not the case in the empirical data – the belief system aspect of the MCS designed in Sweden is higher than that of Mexico, whilst individualism is significantly higher in Sweden than in Mexico.

Given that “A bureaucratic control system will work better in societies with large power distance than in societies with small power distance” (Kim and Kang, 1991), and that bureaucratic control systems make use of “rules, regulations, policies, hierarchy of authority, and other bureaucratic mechanisms to standardise behaviour”, this suggests that low power distance countries would design an MCS with a high level of diagnostic control. This correlates with the empirical data, with the parent in Sweden having the smallest power distance and largest emphasis on diagnostic controls.

In the empirical data, the Swedish parent company emphasises interactive controls throughout the organisation more than the Mexican parent does. This agrees with the literature for Sweden where Hofstede (2001) defines the “Swedish style [as one where] . . .superiors [are] accessible . . . management facilitates and empowers. Power is decentralised and managers count on the experience of their team members”, coinciding with the interactive lever of control as one whereby input is sought by management (Simons 1994).

This central design is then used throughout the multinational groups, often without much variation, since “the parent company, with the intention of promoting a similar philosophy

within the group, tends to transfer its Management Control Systems (MCSs) to the foreign subsidiary” (Schneider, 2006).

It is interesting to note that the MCS set in company A in Sweden all tend to have a uniform level (though belief systems are low), and a potential explanation for this is that “management accounting and control practices are likely to converge across nations, especially in firms that operate internationally” (e.g., Granlund and Lukka, 1998; Shields, 1998), suggesting that elements of design come from various cultures, where the central design is a mix of all of the most dominant factors. It is also true that the Swedish company A is larger and has been established longer than company B, and so it has had more time for this convergence process to take place across more national cultures.

From the above analysis, it can be postulated that **the national culture of the home country of each multinational group is not a primary factor in setting the MCS for the group**, though this is dependent on factors such as how long the company has been established and decisions senior management may make in the design of MCS. In the cases investigated, the empirical data suggests **that there is a negative correlation between power distance in the home country and diagnostic control systems; and another negative correlation between power distance and interactive control systems in central MCS design.**

5.2.2 Local Application of Boundary Systems

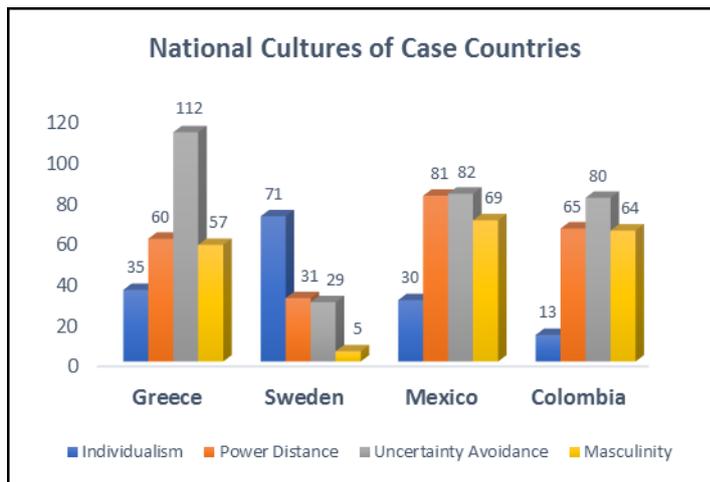


Fig. 9 - Cultural dimensions (Hofstede, 1980)

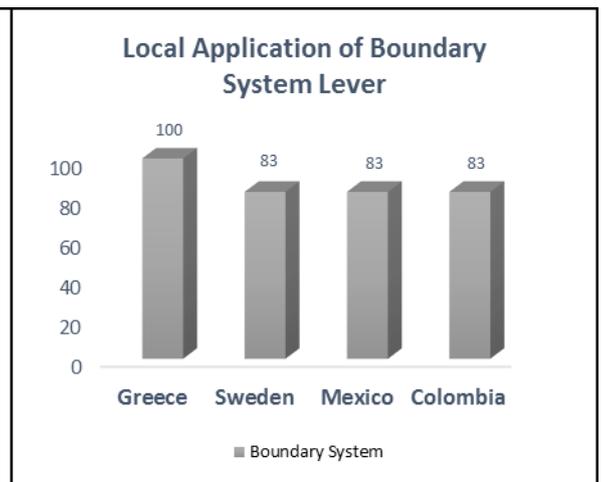


Fig. 11 - Local index for boundary system levers

The first observation we made from the empirical data is that the highest emphasis and use of all the levers of control is the boundary system in Greece. In order to see why this is the case we look at Hofstede’s (1980) cultural dimensions to see if any reasonable suppositions can be made by comparing the cultural dimensions to the empirical data, and using any other extant literature or theory to aid the interpretation of the data.

The most noticeable aspect of the cultural dimensions for Greece is the high level of uncertainty avoidance, which is the highest of all the case countries, initially suggesting that there may be a link between high use of boundary systems and a high index level for uncertainty avoidance. The level of uncertainty avoidance, however, is low in Sweden and relatively high in Mexico and Colombia, with no effect seen in the level of application of boundary systems, in fact, these three countries have the same level[83] in the application index

of empirical data, suggesting that the effect of uncertainty avoidance may not be very profound, or that it has a greater effect towards the extreme higher end of the uncertainty avoidance index.

Investigating further to see if there is any correlation between uncertainty avoidance and boundary systems, we note that Hofstede (2001) states specifically of Greece that “. . . as in all high Uncertainty Avoidance societies, bureaucracy, laws and rules are very important to make the world a safer place to live in”, this reinforces the suggestion from the data that there is likely to be a positive correlation between the two, since the very nature of a boundary system is to “establish limits and rules which must be respected” (Simons, 1994).

Comparing the individualism levels of each country we see that Sweden has the highest level of individualism, and Colombia has the lowest; the level of individualism for Greece is somewhat mid-range which is counterintuitive if boundary systems were to be dependent on individualism. As such, we can presume from this data that individualism is unlikely to have a correlation with application of boundary systems.

With regards to both the power distance and masculinity cultural dimensions, we see that these are both highest in Mexico and Colombia and lowest in Sweden, with Greece mid-range again. Since this is also counterintuitive if boundary systems were to be dependent on either power distance or masculinity, it is unlikely that there is a correlation. Furthermore the fundamental issue with power distance is “how a society handles inequalities among people when they occur” (Hofstede, 1984), which doesn’t necessarily seem to bear much relevance to the limits and boundaries enforced by a boundary system; and since masculinity is concerned primarily with “achievement, heroism, assertiveness, and material success” (Hofstede, 1984), we can make the inference that there is unlikely to be a correlation between power distance or masculinity and the application of boundary systems.

With regards to boundary systems, we can make the postulation that there may be a positive correlation between local application of boundary systems and high levels of uncertainty avoidance.

5.2.3 Local Application of Belief Systems

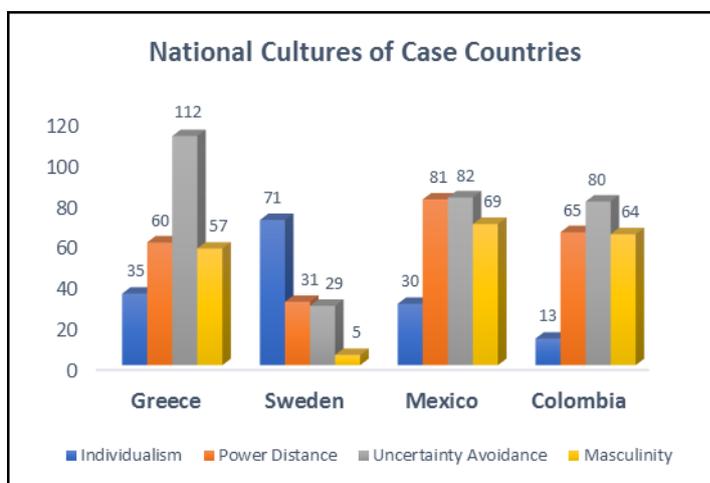


Fig. 9 - Cultural dimensions (Hofstede, 1980)

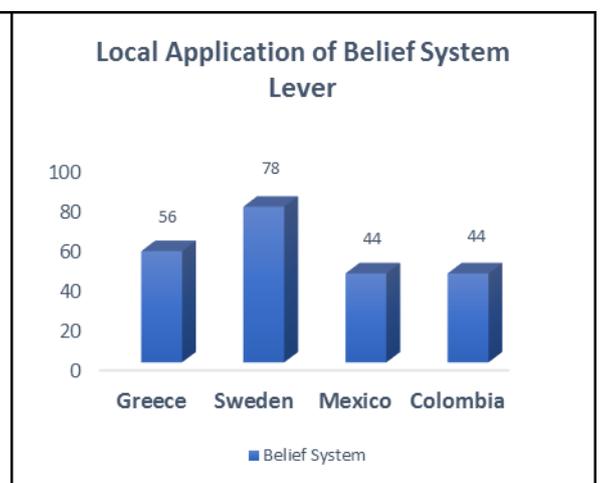


Fig. 12 - Local index for belief system levers

Another observation from the empirical data is that Mexico and Colombia have the lowest application, or give the lowest emphasis to, the belief systems levers of control. In order to discover why this may be the case we look at Hofstede's (1980) dimensions and see that Mexico and Colombia also have the lowest levels of individualism of the case countries meaning that there is the possibility of a link. Testing this further we can see that individualism is also higher in Greece, and higher still in Sweden, which corresponds to their respective use of the belief systems, with Greece making a slightly greater use of them, and Sweden making the highest use of belief systems. This suggests there may be a positive correlation between individualism and belief system use.

Looking at the power distance we see the reverse of the above case, where power distance is greatest in Mexico and Colombia, suggesting that a high power distance might correlate to low belief system use. To test this we can compare Greece and Sweden, which have lower power distance scores than Mexico and Colombia, with Sweden having the lowest of all, which makes a negative correlation likely.

The literature from Hofstede (1984) states that "people in Large Power Distance societies accept a hierarchical order in which everybody has a place which needs no further justification", which can indicate that a belief system is not needed so much since rules are accepted without need to agree with or believe in them. This can be supported with the empirical data from Colombia, where the manager from company B states of the code of conduct that "it gives clear rules which are easy to communicate to the employees and ensures they know what is unacceptable", which can be contrasted to the vision and values which are not strongly communicated to the employees of the Colombia subsidiary, illustrating that the employees may prefer precise rules over a belief system.

We can see that masculinity is the highest in Mexico and Colombia, which again might be indicative of a relation between the two. Testing this we see that masculinity is lower in Greece, and the lowest in Sweden, whilst use of belief systems is higher in Greece and highest in Sweden, suggesting a negative correlation between masculinity and use/application of belief systems in the MCS.

A further point to note regarding masculinity is that in Hofstede's (1980) index it is at similar levels for Greece, Mexico, and Colombia with them all within a range of 12 points. The application index from the empirical data also shows similar levels for belief system use amongst these countries, again within a range of 12 points. The close relationship between these two indices suggests that a correlation between belief systems and masculinity is more likely.

Given that uncertainty avoidance is higher in Greece and lower in Sweden, whilst use of belief systems is higher in both of these countries than in Mexico and Colombia would suggest that there is no correlation between the uncertainty avoidance measure and the extent to which belief systems are used.

Analysis of the empirical data suggests there is no correlation between belief systems and uncertainty avoidance, however we can make three suppositions about the use of this lever, inferring that use of, or local emphasis on, belief systems may have:

A positive correlation with individualism; a negative correlation with power distance; and a negative correlation with masculinity.

5.2.4 Local Application of Diagnostic Control Systems

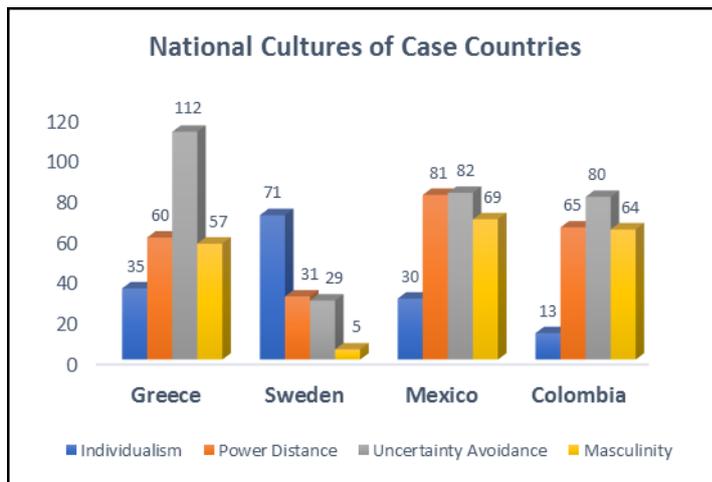


Fig. 9 - Cultural dimensions (Hofstede, 1980)

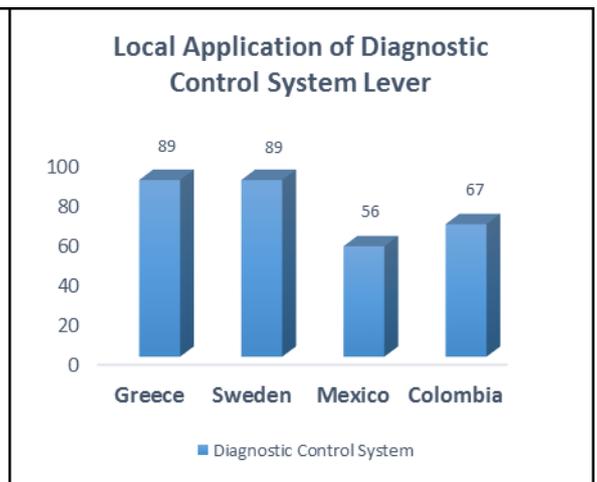


Fig. 13 - Local index for diagnostic levers

As can be seen above, the local application/emphasis of diagnostic control systems is highest in both Greece and Sweden, with the lowest level in Mexico. In order to identify possible influences for this we look first at the individualism levels, noting that they are higher in Greece and Sweden than they are in Mexico and Colombia, suggesting there may be a positive correlation between the two. However, when a comparison is made for the individualism and diagnostic control levels between Mexico and Colombia we see that the correlation doesn't hold true because Mexico has higher individualism but a lower emphasis on the diagnostic control system. The empirical data in this case suggests that there is no correlation between individualism and use of diagnostic controls.

Given that Mexico and Colombia both have higher power distance measures and lower diagnostic system measures than Greece and Sweden there may be a correlation. We can test this further by comparing only Mexico and Colombia with one another, where Mexico has the higher measure for power distance of the two, and the lowest measure for use of diagnostic controls, which suggests that there may indeed be a negative correlation.

Looking at the uncertainty avoidance measure for Greece we can see that it is the highest of all the case countries, whilst Sweden has the lowest measure of uncertainty avoidance. Given that Greece and Sweden have exactly the same result for their use of diagnostic control system lever [89], we can suppose that there may not be a link between uncertainty avoidance and the diagnostic lever. In looking at Mexico and Colombia there is also no clear link, since their levels of uncertainty avoidance are very similar to each other, as is the data for the lever. It is thus not possible to draw any conclusions from this information.

The masculinity measure is highest for Mexico and Colombia which, since the application of diagnostic controls is lowest in these countries, can suggest a negative correlation. Indeed, the measure of masculinity is slightly higher in Mexico than in Colombia, with diagnostic control use lower in Mexico than in Colombia, as would be expected with a negative correlation. Whilst the masculinity measure in Sweden is a lot lower than that of Greece, both countries have the same level of diagnostic control use, which can suggest there is either no correlation or that the correlation is weak with either higher usage of the diagnostic lever or lower levels of masculinity.

It should be borne in mind that in the empirical data both Greece and Sweden represent subsidiaries of company A, which are already identified as having a highly centralised and standardised MCS. The high standardisation of the company’s MCS may skew the results since the subsidiaries do not enjoy much freedom in setting their own controls, which may be the reason that the empirical data for the use of this lever is the same in both of these countries. If, however the MCS was designed from the parent country’s perspective, the correlation identified above may hold true.

It can thus be postulated that both power distance and masculinity may have a negative correlation with diagnostic control systems.

5.2.5 Local Application of Interactive Control Systems

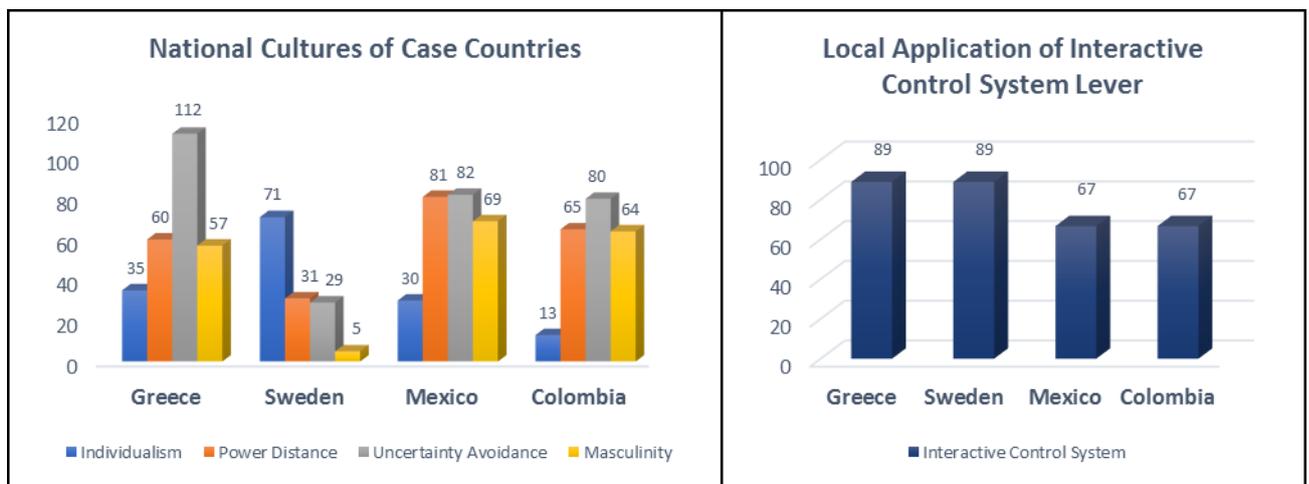


Fig. 9 – Cultural dimensions (Hofstede, 1980)

Fig. 14 – Local index for interactive levers

In the case of local application of interactive control systems, we can see that the results are similar to those for the diagnostic control systems. Greece and Sweden have the highest level of local application, both with the same result [89]; whereas the lowest level is in Mexico and Colombia who also have the same result as each other [67].

Looking at the individualism measures we see that Greece and Sweden both have higher levels of individualism than Mexico and Colombia, suggesting that a positive correlation may exist. Between Greece and Sweden, however, there is a difference of 36 points in the individualism index, and such a large difference makes it less likely that there is a correlation with application of interactive control systems because both countries have the same level of local application for interactive control systems. There is also a difference in the individualism index of 17 points between Mexico and Colombia which further illustrates this point.

The power distance measures for Mexico and Colombia are higher than those of Greece and Sweden, whilst their use of interactive control systems is lower, suggesting that there may be a negative correlation between the two. There are no differences between the local application between Greece and Sweden, or between Mexico and Colombia, though their power distance indices are different, suggesting that if there is a correlation, it is weak or affected by some other factors, such as the parent company effect.

Literature on power distance states that “people in small power distance societies strive for power equalisation and demand justification for power inequalities” (Hofstede, 1984). This opens the possibility that the nature of an interactive control, where the “managers regularly and personally involve themselves in the decision activities of subordinates” (Simons, 1994), is to demonstrate and effect the ‘equalisation’ and ‘justification’ that a low power distance culture desires. Since the parent for company A is Swedish, it is more likely that this mindset is more prevalent and the high use of interactive controls is a result of this, thus making it more likely that there is, indeed, a negative correlation between power distance and interactive control systems.

With regards to uncertainty avoidance a link cannot be made between Greece and Sweden since their measures are the highest and lowest, respectively, of the case countries yet they have the same level of local application. Mexico and Colombia also the same level of local application and they have similar levels of uncertainty avoidance, so this may suggest a correlation, though it is difficult to see with current data in which direction the correlation would travel.

Masculinity is higher in Mexico and Colombia than in Greece and Sweden, whereas use of interactive controls is higher in Greece and Sweden than in Mexico and Colombia. Therefore, the data suggests that lower masculinity cultures make greater use of interactive control systems, thus a negative correlation. The difference in masculinity between Greece and Sweden stands out, with that of Sweden much lower than that of Greece, yet the data suggests that they both make the same use of interactive controls, which could weaken any potential correlation.

It is worth noting that whilst the local application levels are exactly the same for Greece and Sweden at 89, and also for Mexico and Colombia at 67, it is very likely that this is a result of a centralised management control style in both companies. The subsidiaries of company A from which we collected data are those in Greece and Sweden, and the subsidiaries of company B from which we collected data are those in Mexico and Colombia, and since both case companies have highly centralised management control styles it can be presumed that in this case the interactive control system levers, as set by the central management, are adhered to more strictly on a local level than any of the other controls. This is supported by Van der Stede (2003) who states that “significant influences of the parent company on the MCSs observed in the business units indicate that the management practices of foreign business units converge with those of the parent company”.

5.2.6 Summary and Discussion of Analysis

The observations which stand out most from this study are summarised below.

With regards to the central design of MCS:

1. National culture in the home country is not a primary factor in setting the MCS for the group, this is contingent on many factors, and over time the global MCS will probably converge.
2. The analysis suggests a negative correlation between power distance in the home country and diagnostic control system use in the global MCS
3. The analysis suggests a negative correlation between power distance in the home country and interactive control system use in the global MCS

With regards to the local adaptation and use of the centrally-set MCS:

1. For local use of boundary systems, the analysis suggests a positive correlation with uncertainty avoidance
2. For local use of belief systems, the analysis suggests a positive correlation with individualism; a negative correlation with power distance; and a negative correlation with masculinity
3. For local use of diagnostic control systems, the analysis suggests a negative correlation with power distance; and a negative correlation with masculinity
4. For interactive control systems, the analysis suggests a negative correlation with power distance; and a negative correlation with masculinity
5. In general, MCS practices in the foreign subsidiaries converges somewhat with the central MCS

Van der Stede (2003) states that there are “weak effects of national culture at the business-unit level”, which is consistent with our findings because the links identified may be weak, not act as expected, or are easily overridden by other factors. An explanation for this may be that “there also may be other business-unit effects beyond national culture, such as size, strategy, past performance and degree of functional integration” (O’Connor et al, 2002). The observations we have made concern MCS and large multinational companies which have many factors acting upon them, it is thus difficult to isolate the influences of culture whilst controlling for all other existing and dynamic factors. Further adding to this, Chow et al. (1994) argue that “. . . the four cultural dimensions operate simultaneously and may create reinforcing or opposing effects on an individual's preferences for MCISs”.

6 Conclusion

This study aims to contribute to the literature on how MCS are designed and implemented within multinational companies, and to identify whether national-cultural factors affect either the design or implementation of them.

The findings in the analysis and investigation of extant literature identify that national culture is not the most important factor in the design of an MCS which is to be used by a multinational company in various locations, and that an MCS are likely to converge over time contingent on a multitude of factors.

At the local, or business-unit, level national culture effects are presumed to be weak, counterintuitive, or affected by other factors so as to conceal any actual effect that culture may have had. Whilst correlations were identified between certain levers of control and cultural aspects, the findings are, at times, inconclusive and further research would be required in order to control for the many factors which act upon the MCS in a multinational company.

With regards to the research questions, we were able to identify how centrally-set MCS are designed by the parent company, by the creation of a simple index which allows for comparison between different companies. The question of why the MCS are set in any particular way however is inconclusive, since no clear links could be found which would allow a general rule to be inductively supposed from the results.

Our specific findings with regards to the first two research questions, in addition to identifying and representing the central design of the MCS, are that national culture in the home country is not a primary factor in setting the MCS for the group; however parent companies may conform to cultural expectations with regards to power distance which is the most significant cultural dimension with regards to the extent to which both diagnostic and interactive controls are used, with a negative correlation for both. We found that no conscious effort is made by either of the case companies to tailor MCS by national culture, instead both prefer a centralised MCS design.

We were able to identify how different subsidiaries in in different national cultures implement the centrally-set MCS locally, and this was done by creation of a simple index which allows for comparison of the implementation between different countries. With regards to the question of why the local implementation is different, the findings are largely inconclusive. Some correlations were identified, however, particularly for the link between power distance and interactive control systems, which reinforces the extant literature which also makes this link.

Our specific findings with regards to the final two research questions are the identification and representation of the local application/emphasis on centrally-set MCS. Furthermore, we found that local use of, or emphasis on, boundary systems is likely to have a positive correlation with uncertainty avoidance. Local use of, or emphasis on, belief systems is likely to have a positive correlation with individualism; a negative correlation with power distance; and a negative correlation with masculinity. Local use of, or emphasis on, diagnostic control systems is likely to have a negative correlation with power distance; and a negative correlation with masculinity. Local use of, or emphasis on, interactive control systems is likely to have a negative correlation with power distance; and a negative correlation with masculinity.

6.1 Contributions to the Research

This study contributes to the research on management control and how it is affected by cultural factors. It provides a means of clearly representing qualitative data in an index and visual format for ease of comparison.

The study is innovative in that it combines two frameworks, namely Simons' (1994) levers of control, and Hofstede's (1980) cultural dimensions, as a way to improve the extant literature and research methods. With regards to power distance, this paper identifies that for both the central and local level, there is a negative correlation between power distance and use of both diagnostic and interactive MCS. Given that there is a lot of literature on the perceived importance of Hofstede's (1980) individualism dimension, and as discussed in section 3.3.1 (with regards to Triandis 2004; Trompenaars & Woolliams, 2003; Triandis & Suh 2002; Bond, Leung, & Wan 1982; Gudykunst et al., 1992), this paper shows that power distance may well, in this study at least, be the most significant cultural dimension for central design and local adoption of MCS within a multinational organisation. Thus this paper identifies a research opportunity for a lesser-studied aspect which would benefit from further and more detailed research.

6.2 Limitations

There are limitations regarding case studies in general which are likely to have affected this study as it belongs to this specific research area. To start with, the data collection based on semi-structured interviews allows subjective interpretation from two sides. The interviewees can interpret the questions in a different manner from their point of view and put emphasis on aspects that are especially relevant from their perspective (Bryman & Bell, 2015). Thus affecting the reliability of the given answers from different respondents. According to Bryman et al. (2011) and their critique on the qualitative research strategy, and since the present study is a qualitative one, we can identify relevant critique points which can be perceived as limitations. As Bryman, et al. (2011: 413) maintain, the findings of a qualitative research "*rely too much on the researcher's often unsystematic views about what is significant and important*", a fact which contributes to the study being subjective. Therefore, because of the open and semi-structured interviews a distortion could have been provoked into both our view and the information obtained from the respondents. So, despite the fact that we have used a specific theoretical framework as guidance for the interviews to be objective, it can still be an implication of subjectivity and thus a limitation.

Furthermore, with regards to the chosen framework for analyses purposes (Hofstede's cultural dimensions), we understand that regardless of his work being cited considerably and having had a colossal impact on cross-cultural studies and international business research, it has also received much criticism (Kirkman, Lowe, & Gibson, 2006; Earley, 2006; Javidan, House, Dorfman, Hanges, & Sully de Luque, 2006; Orr, & Hauser, 2008; Smith, 2006). Triandis (1982) for instance has criticised his method of collecting the data as only one measurement tool was used and not a multi-method research design. In addition Chiang (2005) criticises the fact that Hofstede generalised his findings as survey results were collected from only one large multinational corporation, namely IBM. Chenhall (2003) argues that cultures change in response to globalisation; therefore, the values assigned by Hofstede may not be currently applicable to the country. As globalisation becomes the norm it also carries additional elements/variables to be considered as the environmental reporting and control.

Because culture is so dissimilar and has various and divergent aspects it is hard to form a structure precisely which will equally apply to all countries. In that sense, Hofstede's cultural dimensions should merely be used as a basic guideline to evaluate similarities and differences between nations, something we have tried to adhere to in this thesis.

Apart from the critique points mentioned by Bryman et al. (2011) and Chenhall (2003) we propose other limitations to this thesis.

The sample size for this study was relatively small, which places a limitation upon it. Only two case companies in four countries were studied, and as such many differing national cultures were excluded from the study. A larger sample size would provide better empirical data, from which it may be possible to draw more reliable findings and conclusions with a greater probability of being true. The case companies are also from different industries and so it limits the possibility to generalise the outcomes, since organisational culture may vary between industries, even if other variables are controlled for. It would, indeed, make for a more reliable study to use only one case company in many national cultures, as did Hofstede in his own study of IBM.

During the collection of empirical data, it was difficult to find interviewees who were willing to disclose much information about their company's MCS, and for us to gain sufficient access to the case companies. As such, the information provided by the interviewees would be likely to yield more reliable results if greater access and more in-depth information were provided.

The interviews undertaken during the data collection were subjective in nature and thus subject to personal perceptions and prejudices. Another method of data collection may be devised in order to collect more consistent and objective data.

There is not much extant literature in which specifically addresses the problems set out in the paper, and no studies could be found which address links between the levers of control and cultural dimensions. As such there is not much theory upon which to build, and thus the study is heavily reliant on analysis of the empirical data, with little theory to assist in its interpretation.

6.3 Research Opportunities

We believe that the effect of national culture on MCS is an important and relevant topic, and that a thorough understanding of national culture allows a deeper understanding of the idiosyncrasies of business practices, norms, and individual behaviour in different locations.

Future research on the links between various control mechanisms and cultural dimensions will contribute nicely to the existing literature. More specifically, further research into links between levers of control and cultural dimensions will allow for a better understanding of this topic to be achieved.

Similar studies to this one, with larger sample sizes would improve the reliability of the findings, especially if the samples were taken from similar industries or even the same company in order to control for differing organisational culture which may skew results.

References

- Ahrens, T. and Chapman, C. (2004) '*Accounting for Flexibility and Efficiency: A Field Study of Management Control Systems in a Restaurant Chain*' Contemporary Accounting Research, Vol. 21, No. 2 (Summer), pp. 271-301
- Albaum, G. (2003). Exploring the impact of cultural dimensions on management style of marketing decision makers. Marketing in International and Cross-Cultural Environments Track.
- Bhimani, A. (1999) '*Mapping Methodological Frontiers in Cross-National Management Control Research*' Accounting, Organisations, and Society, 24, pp. 413-440
- Bryman and Bell (2008) '*Business Research Methods*' Dr. Sue Greener & Ventus Publishing ApS
- Bryman, A. & Bell, E. (2015). Business research methods. Oxford: Oxford University Press.
- Chenhall, R. H. 2003. Management control system design within its organisational context: Findings from contingency-based research and directions for the future. Accounting, Organisations and Society 28(2-3): 127-168.
- Chow C., Kato Y., Merchant K. (1996), '*The Use of Organisational Controls and Their Effects on Data Manipulation and Management Myopia: A Japan vs. US Comparison*', Accounting, Organisations and Society, Vol. 21, Nos. 2-3, pp. 175-192.
- Chow, C., Kato, Y., Shields, M. (1994) '*National Culture and the Preference for Management Controls: An Exploratory Study of the Firm-Labour Market Interface*' Accounting, Organisations, and Society, Vol. 19, No. 45, pp. 381-400
- Chow, C., Shields, M., Wu, A. (1999) '*The Importance of National Culture in the Design of and Preference for Management Controls for Multi-National Operations*' Accounting, Organisations, and Society, 24, pp. 441-461
- Collier, P.M., (2005) '*Entrepreneurial control and the construction of a relevant accounting*' Management Accounting Research 16, 321
- Falk, A. and Kosfeld, M. (2006) '*The Hidden Costs of Control*' The American Economic Review, 12/1/2006, Vol. 96, Issue 5, pp. 1611-1630
- Fening, F. and Beyer, H. (2014) '*Cultural Value Dimensions and Implications for International Management*' The International Journal Of Business & Management (ISSN 2321 - 8916)
- Ferreira, A. and Otley, D. (2009) '*The Design and Use of Performance Management Systems: An Extended Framework for Analysis*' Management Accounting Research, 20, pp. 263-282
- Franco-Santos, M., Lucianetti, L., Bourne, M. (2012) '*Contemporary Performance Measurement Systems: A Review of Their Consequences and a Framework for Research*' Management Accounting Research, 23, pp. 79-119

- Frey, B. (1997) '*On the Relationship Between Intrinsic and Extrinsic Work Motivation*' International Journal of Industrial Organisation, 15, pp. 427-439
- Gatley, S., Lessem, R., and Altam, Y. (1996) '*Comparative Management - a Transcultural Odyssey*' McGraw Hill Book Company Europe, Berkshire
- Groen, B., Wouters, M., Wilderom, C. (2012) '*Why do Employees Take More Initiatives to Improve Their Performance After Co-Developing Performance Measures? A Field Study*' Management Accounting Research, 23, pp. 120-141
- Harrison, G. and McKinnon, J. (1999) '*Cross-Cultural Research in Management Control Systems Design: A Review of the Current State*' Accounting, Organisations, and Society, 24, pp. 483-506
- Hofstede, G. (1980) '*Culture's Consequences: National Differences in Thinking and Organisation*', Beverley Hills
- Hofstede, G. (1984) '*Cultural Dimensions in Management and Planning*', Asia Pacific Journal of Management, January 1984
- Hofstede, G. (2001), '*Culture's Consequences: Comparing Values, Behaviours, Institutions, and Organisations Across Nations*' Second Edition, Thousand Oaks CA: Sage Publications
- Ittner, C., Larcker, D., Meyer, M. (2003) '*Subjectivity and the Weighting of Performance Measures: Evidence from a Balanced Scorecard*' The Accounting Review, Vol. 78, No. 3 (July), pp. 725-758
- Kagitcibasi, C. (Ed.) (1987) '*Individualism and Collectivism: A Universal Dimension?*' In Growth and Progress in Cross-Cultural Psychology (p. 76). Lisse, South Holland: Swets and Zeitlinger.
- Kanagaretnam, K., Lobo, G., Ma, C., Zhou, J. (2016) '*National Culture and Internal Control Material Weaknesses Around the World*' Journal of Accounting, Audit, and Finance, Vol. 31(1), pp. 28-50
- Kerr, S. (1995) '*On the Folly of rewarding A, while hoping for B*' Academy of Management Executive, 1995 Vol. 9, No. 1
- Kim, K. and Kang, K. (1991) '*National Culture and Management Control Systems*' Pacific Focus, Vol. VI, No. 1 (Spring), pp. 123-139
- Lachman, R., Nedd, A., Hinings, B. (1994) '*Analysing Cross-National Management and Organisations: A Theoretical Framework*' Management Science, Vol. 40, No. 1, January 1994, pp. 40-55
- Lere, J. C., and Portz, K. (2005) '*Management Control Systems in a Global Economy*' The CPA Journal, pp. 62-64.

- Malmi, T., and Brown, D. A. (2008) '*Management control systems as a package — Opportunities, challenges, and research directions*' *Management Accounting Research*, 19(4), pp. 287-300
- Mason, J. (2002). *Qualitative Researching*. 2nd ed. London: SAGE Publications.
- Merchant, K. and Van der Stede, W. (2003) '*Management Control Systems: Performance Measurement, Evaluation, and Incentives*' Prentice Hall, Harlow. pp. 723-780
- Morgan, G. (1986) '*Images of Organisation*' Sage Publications, London
- Neely, A., Gregory, M., Platts, K. (1995) '*Performance Measurement System Design: A Literature Review and Research Agenda*' *International Journal of Operations and Production Management*, Vol. 15, No. 4, pp. 80-116
- O'Connor, N. G., Chow, C. W. and Wu, A. (2002) 'The diffusion of "Western" management accounting/controls among China's state-owned enterprises: an exploration of the forces, barriers, and facilitators'. Working Paper, City University of Hong Kong, San Diego State University and National Chengchi University
- Otley, D. (1999) '*Performance management: a framework for management control systems research*' *Management Accounting Research* 10, pp. 363-382.
- Pakdil, F. and Leonard, K. M. (2016) '*Implementing and sustaining lean processes: the dilemma of societal culture effects*' *International Journal of Production Research*, 55(3), pp. 700-717.
- Ryan, R. and Deci, E. (2000) '*Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions*' *Contemporary Educational Psychology*, 25, pp. 54-67
- Schneider, S. (2006) '*National vs. Corporate Culture; Implications for Human Resources Management*', *Human Resource Management*, Vol. 27, No. 2, pp. 231-246.
- Simons, R. (1994) '*How New Top Managers use Control Systems as Levers of Strategic Renewal*' *Strategic Management Journal*, Vol. 15, pp. 169-189
- Şliburytė, L. (2005) '*The Impact of Differences in National Cultures on Mergers and Acquisitions*' *Management of Organisations: Systematic Research*, (33), 197-211.
- Stringer, C. (2007) '*Empirical performance management research: observations from AOS and MAR*' *Qualitative Research in Accounting & Management* 4, 92-114
- Tallaki, M., and Bracci, E. (2015) '*The Importance of National Culture in the Design of Management Control Systems: Evidence from Morocco and Italy*' *The IUP Journal of Management Research*, 14 (1).
- Tayeb, M. (1998) '*The Management of a Multicultural Workforce*' England: John Wiley & Sons.

Tylor, E. (1871) '*Primitive Culture: researches into the development of mythology, philosophy, religion, language, art, and custom*' Vol. 1, John Murray, London

Van der Stede, W. (2003) '*The Effect of National Culture on Management Control and Incentive System Design in Multi-Business Firms: Evidence of Intracorporate Isomorphism*' *European Accounting Review*, 12:2, pp. 263-285

Yin, R.K. (2014). *Case Study Research: Design and Methods*. 5th ed. Thousand Oaks, CA: SAGE Publications.

Appendix 1 - Cultural Dimensions Table (Hofstede, G., 1984)

Value of the four indices for fifty countries
(with rank numbers) and three regions.

Country	Abbreviation	Individualism		Power distance		Uncertainty avoidance		Masculinity	
		Index (IDV)	Rank	Index (PDI)	Rank	Index (UAI)	Rank	Index (MAS)	Rank
Argentina	ARG	46	28-29	49	18-19	86	36-41	56	30-31
Australia	AUL	90	49	36	13	51	17	61	35
Austria	AUT	55	33	11	1	70	26-27	79	49
Belgium	BEL	75	43	65	33	94	45-46	54	29
Brazil	BRA	38	25	69	39	76	29-30	49	25
Canada	CAN	80	46-47	39	15	48	12-13	52	28
Chile	CHL	23	15	63	29-30	86	36-41	28	8
Colombia	COL	13	5	67	36	80	31	64	39-40
Costa Rica	COS	15	8	35	10-12	86	36-41	21	5-6
Denmark	DEN	74	42	18	3	23	3	16	4
Equador	EQA	8	2	78	43-44	67	24	63	37-38
Finland	FIN	63	34	33	8	59	20-21	26	7
France	FRA	71	40-41	68	37-38	86	36-41	43	17-18
Germany (F.R.)	GER	67	36	35	10-12	65	23	66	41-42
Great Britain	GBR	89	48	35	10-12	35	6-7	66	41-42
Greece	GRE	35	22	60	26-27	112	50	57	32-33
Guatemala	GUA	6	1	95	48-49	101	48	37	11
Hong Kong	HOK	25	16	68	37-38	29	4-5	57	32-33
Indonesia	IDO	14	6-7	78	43-44	48	12-13	46	22
India	IND	48	30	77	42	40	9	56	30-31
Iran	IRA	41	27	58	24-25	59	20-21	43	17-18
Ireland	IRE	70	39	28	5	35	6-7	68	43-44
Israel	ISR	54	32	13	2	81	32	47	23
Italy	ITA	76	44	50	20	75	28	70	46-47
Jamaica	JAM	39	26	45	17	13	2	68	43-44
Japan	JPN	46	28-29	54	21	92	44	95	50
Korea (S)	KOR	18	11	60	26-27	85	34-35	39	13
Malaysia	MAL	26	17	104	50	36	8	50	26-27
Mexico	MEX	30	20	81	45-46	82	33	69	45
Netherlands	NET	80	46-47	38	14	53	18	14	3
Norway	NOR	69	38	31	6-7	50	16	8	2
New Zealand	NZL	79	45	22	4	49	14-15	58	34
Pakistan	PAK	14	6-7	55	22	70	26-27	50	26-27
Panama	PAN	11	3	95	48-49	86	36-41	44	19
Peru	PER	16	9	64	31-32	87	42	42	15-16
Philippines	PHI	32	21	94	47	44	10	64	39-40
Portugal	POR	27	18-19	63	29-30	104	49	31	9
South Africa	SAF	65	35	49	18-19	49	14-15	63	37-38
Salvador	SAL	19	12	66	34-35	94	45-46	40	14
Singapore	SIN	20	13-14	74	40	8	1	48	24
Spain	SPA	51	31	57	23	86	36-41	42	15-16
Sweden	SWE	71	40-41	31	6-7	29	4-5	5	1
Switzerland	SWI	68	37	34	9	58	19	70	46-47
Taiwan	TAI	17	10	58	24-25	69	25	45	20-21
Thailand	THA	20	13-14	64	31-32	64	22	34	10
Turkey	TUR	37	24	66	34-35	85	34-35	45	20-21
Uruguay	URU	36	23	61	28	100	47	38	12
U.S.A.	USA	91	50	40	16	46	11	62	36
Venezuela	VEN	12	4	81	45-46	76	29-30	73	48
Yugoslavia	YUG	27	18-19	76	41	88	43	21	5-6
Regions:									
East Africa 1)	EAF	27	(18-19)	64	(31-32)	52	(17-18)	41	(14-15)
West Africa 2)	WAF	20	(13-14)	77	(42)	54	(18-19)	46	(22)
Arab Ctrs. 3)	ARA	38	(25)	80	(44-45)	68	(24-25)	53	(28-29)

1) Ethiopia, Kenya, Tanzania, Zambia

2) Ghana, Nigeria, Sierra Leone

3) Egypt, Iraq, Kuwait, Lebanon, Lybia, Saudi-Arabia, U.A.E

Appendix 2 - Questions from Ferreira and Otley (2009)

The six questions from the framework which are used in this study are addressed below.

1. Vision and mission

What is the vision and mission of the organisation and how is this brought to the attention of managers and employees? What mechanisms, processes, and networks are used to convey the organisation's overarching purposes and objectives to its members?

2. Organisation structure

What is the organisation structure and what impact does it have on the design and use of performance management systems (PMSs)? How does it influence and how is it influenced by the strategic management process?

3. Key performance measures

What are the organisation's key performance measures deriving from its objectives, key success factors, and strategies and plans? How are these specified and communicated and what role do they play in performance evaluation? Are there significant omissions?

4. Target setting

What level of performance does the organisation need to achieve for each of its key performance measures (identified in the above question), how does it go about setting appropriate performance targets for them, and how challenging are those performance targets?

5. Performance evaluation

What processes, if any, does the organisation follow for evaluating individual, group, and organisational performance? Are performance evaluations primarily objective, subjective or mixed and how important are formal and informal information and controls in these processes?

6. Reward systems

What rewards – financial and/or non-financial – will managers and other employees gain by achieving performance targets or other assessed aspects of performance (or, conversely, what penalties will they suffer by failing to achieve them)?