Department of Business Administration
Lund University

Master Thesis
September 2009

The Managerial Approach within International Financial Reporting Standards

The decision usefulness of information disclosed in accordance with the managerial approach highlighted by IFRS 8 *Operating Segments*

Supervisor:
Sven-Arne Nilsson

Authors:
Abel Andreu Lopez
Robert Wernicke

Master Thesis in Accounting and Management Control

Title: The Managerial Approach within International Financial Reporting Standards - The decision usefulness of information in accordance with the managerial approach highlighted by IFRS 8 *Operating Segments*

Seminar date: 2nd September 2009

Authors: Abel Andreu Lopez, Robert Wernicke

Supervisor: Sven-Arne Nilsson

Keywords: Managerial Approach, Financial Reporting, IFRS 8 Operating Segments, Qualitative Characteristics, Decision Usefulness, Management Control, Profit Centre

Purpose: The thesis aims to determine the implications that the managerial approach and in particular IFRS 8 has upon the decision usefulness of financial statements. The further aim is to make a fundamental academic judgement about the need of this approach to be based on a hierarchy between the primary qualitative characteristics in order to produce decision usefulness information and thus accord with the overall objective of IFRS.

Methodology: This thesis employs a qualitative method which is based on publications and empirical studies by the academic discourse. The conclusions are supplemented by an analysis and comparison of IFRS 8 and its predecessor IAS 14 R regarding their reliance upon rules and principles.

Theoretical Frame of reference: The theoretical frame of reference is rooted in the principal agent theory. This choice mirrors the high degree of attention this theory has received in contemporary research accounting and management control.

Conclusion: According to the combined analysis of the three circles does the management approach in its application within IFRS 8 *Operating Segments* result in a substantially unequal outcome regarding the individual primary qualitative characteristics of IFRS. Therefore, the current regulatory approach is constricted in its ability to disclose financial information that is decision useful.

1 Introduction ... 1
1.1 Background ... 1
1.2 Problem outline ... 1
1.3 Objective ... 2
1.4 Delimitations ... 2
1.5 Structure ... 2
2 Internal and external reporting ... 4
2.1 Principal agent theory ... 4
2.2 Internal reporting/controlling ... 6
2.2.1 Underlying theoretical rational ... 6
2.2.2 Function of management accounting ... 6
2.3 External reporting ... 9
2.3.1 Reasoning behind external reporting ... 9
2.3.2 International financial reporting standards ... 9
3 The managerial approach ... 14
3.1 Theoretical background ... 14
3.1.1 Underlying idea ... 14
3.1.2 Shareholder-value approach ... 15
3.2 Fields of application ... 16
3.2.1 IAS 11 *Construction Contracts* ... 16
3.2.2 IAS 16 *Property, Plant and Equipment* ... 17
3.2.3 IAS 36 *Impairment of assets* ... 18
3.2.4 IAS 38 *Intangible assets* ... 19
3.3 Evaluation of the managerial approach ... 20
3.3.1 Advantages of the managerial approach ... 20
3.3.2 Shortcomings of the managerial approach ... 21
3.4 Preliminary analysis I ... 23
4 Segment reporting ... 25
4.1 Rationale behind disaggregated data disclosure ... 25
4.2 Regulatory approach upon segment reporting ... 28
4.2.1 SFAS 131 *Disclosures about Segments of an Enterprise and Related Information* ... 28
4.2.2 IAS 14 *Segment Reporting revised* ... 30
4.3 IFRS 8 *Operating Segments* ... 31
5 Profit centre controlling ... 34
5.1 Conceptual intersections between IFRS 8 and controlling for profit centre ... 34
5.2 Requirements ... 36
6 Evaluation of segment reporting based on management accounting ... 38
6.1 Advantages of the managerial approach for segment reporting ... 38
6.2 Disadvantages of the managerial approach for segment reporting ... 40
6.3 Preliminary analysis II ... 43
7 Implicit hierarchy by the standard setter ... 45
7.1 The change in the preference of the standard setter ... 45
7.2 Primary QCs within the continuum of rules and principles ... 47
7.3 Conclusive analysis ... 49
8 Conclusion ... 51
A. Bibliography ... 53
B. Appendix ... 59

1 Introduction

1.1 Background

"Accounting focuses on the conceptual constitution and operational condition of information systems within a company. Internal accounting covers all information systems that are designed for internal users (managers as decision makers in the company). External accounting on the other hand is pointed towards external users such as investors, lenders, customers, suppliers, competitors and the general public."[1]

The definition of accounting as stated above describes the common distinction between what is also known as managerial reporting for internal purposes and financial reporting that serves external information needs. The demands and expectations that are placed upon this data are as distinct as the receivers of this information. Despite these far-reaching differences, there is a growing tendency towards convergence of the two systems. This has particularly gained momentum within the last decade in the course of increasing global diffusion of international financial reporting standards (IFRS). The application of information that is generated for internal controlling purposes within the external reporting conducted in compliance to IFRS is known as the managerial approach. Most recently, with IFRS 8 Operating Segments, a standard has become mandatory that comprises the managerial approach as its core source of data.

1.2 Problem outline

Data that is conducted for internal purposes is only accountable to the respective management, and its preparation left to their discretion. Financial data that is supposed to be published to the public serves a far wider audience however, and, as such implies wider externalities. This fundamental incongruence has not yet found sufficient attention in the literature, especially regarding the reciprocity of the different information systems when converged and its influence upon the individual qualitative characteristics (hereafter QCs) of financial statements. In particular IFRS 8 deserves further notice due to its rather recent mandatory applicability, as well as its influence upon other standards within the IFRS. The

[1] Ewert & Wagenhofer (2007), p. 4, (translated from German, the author).

nature of the chosen topic permits a limitation of the analysis solely upon the regulatory approach. In order to consider both sides, which find combination within the managerial approach, it becomes mandatory to include profit centre controlling as a possible source of the data disclosed under IFRS 8. From an aggregated level, there is reason to believe that the managerial approach, with its appearance in IFRS 8, supports the primary QC of relevance at the cost of reliability and comparability. The standard setter requires professional judgment in order to determine if the relative importance of the characteristics resulting from such a trade-off accords with the objective of financial statements.[2] An answer will depend upon the degree of imbalance and whether or not this results in a significant hierarchy between the primary QCs of IFRS.

1.3 Objective

The objective is to develop some kind of academic judgement about the influence of the managerial approach upon the decision usefulness of financial reporting with a particular focus on IFRS 8 *Operating Segments*.

1.4 Delimitations

The heterogenic nature of the managerial approach demands a narrowing of the scope, which results in the focusing upon IFRS 8 and profit centre controlling as its counterpart. Any other relevant standard, as well as another management control concept as a source of information for the chosen IFRS, might have altered the findings.

1.5 Structure

The argument follows the conceptual idea of a circle or spiral of understanding. Therefore, the structure symbolises three circles - each one built with the purpose of arriving at a higher level of understanding, which serves as a departure point for the next circle.

[2] Cf. IFRS, Framework § 45.

Chapter 2 describes the particulars of internal and external reporting. The principal agent theory serves as the starting point by providing the common theoretical background for both. This leads to the reasoning behind internal and external reporting. The chapter closes by reviewing the functions and requirements of either reporting system. The third chapter focuses on the managerial approach by firstly tracing its theoretical background by outlining the underlying idea, and secondly determining its theoretical motivation within the shareholder-value approach. The heterogeneity of the concept is highlighted in the subsequent sections, which review the different fields of application of the management approach in different IFRS/IAS. A comparison of the advantages and disadvantages yields to a first analysis of the managerial approach. Based on this first analysis, the following three chapters take a narrower focus relative to the previous ones. Segment reporting from an external perspective is the focus of the fourth chapter. The rational for the disclosure of disaggregated data, and the basic concepts of segment aggregation, give the foundation for a review of the development the boards have chosen as their regulatory approach for segment reporting. A more extensive review is devoted to the most recent regulatory approach in the form of IFRS 8 *Operating Segments* at the end of the chapter. The fifth chapter firstly highlights the conceptual intersections between profit centre controlling and IFRS 8, which serve as the rational for the utilisation of such an internal controlling structure within the managerial approach. It closes with a brief outline of the requirements for a successful application and operation of profit centre as an operational structure. The sixth chapter analysis the consequences that segment reporting based on management accounting, and in particular profit centre, has on the QCs of financial statements. By doing so, the trade-offs between some of the underlying characteristics that are caused by the adoption of the managerial approach are highlighted and evaluated from a somewhat critical perspective regarding their ability to create decision useful information. The chapter ends with a second analysis regarding the trade-offs between the individual QCs caused by the managerial approach within IFRS 8. The seventh chapter analyses the current IFRS 8 and its predecessor IAS 14 R regarding their reliance upon either rules or principle. The findings are connected to different weightings that each pole devotes to the individual primary QCs of financial statements. The third and final analysis is supplemented by the results of the previous two. The final chapter contains the conclusion, delimitation and suggestions for further research.

2 Internal and external reporting

Financial reporting data is a sensitive typology of information in the sense that very diverse consequences might ensue from the way it is presented. The distinction between internal and external accounting is appropriate given the different information needs of the respective parties involved, which explains furthermore why the terms external and internal accounting are interchangeable with financial and management accounting. This must not however be regarded as a division between two independent areas of study.[3] External accounting and internal accounting use the same basic information but for different purposes. External accounting is generally a record of historical events, while internal accounting uses the same information to forecast future situations modelling the business processes. After the data is collected and processed in parallel, both perspectives of the information analysis should lead to the very same measure of created value.[4]

The main characteristics comprised within both sides of this dichotomy will be the focus of the present chapter. Principal agent theory will serve as the common point of departure by providing the theoretical reasoning behind the conduct of external and internal accounting. This is followed by a brief analysis of the functions both fields fulfil. The chapter closes with a review of IFRS in terms of its objective and the underlying QCs that are necessary to achieve it.

2.1 Principal agent theory

The initial source of the relationship between the so called principal and agent is a: `*contract under which one or more persons engage another person to perform some services on their behalf which involves delegating some decision-making authority to the agent*´[5]. The party that delegates competencies is defined as the principal where the party that performs the task is referred to as the agent. Within this contractual relationship the agent makes decisions that not only affect the agent's own welfare but also alter the level of utility the principal receives. Therefore the contract between both parties is the focal part of the analysis, and the theoretical reasoning is aimed to determine both the optimal design of the contract and the means to

[3] Cf. Lewis & Pendrill (2004), pp. 3 et seqq.
[4] Cf. Stolowy & Lebas (2006), pp. 28 et seqq.
[5] Jensen & Meckling (1976), p. 308.

control the relationship.[6] The need to consider and optimise the design and control of such contracts ultimately arises out of the acknowledgment that the individuals involved in these relationships are motivated by their own self-interest. Furthermore, the principal is faced with uncertainty or risk as a result of information inefficiencies.[7] Those information inefficiencies materialise in an information asymmetry between the agent and principal.[8] The source of that information asymmetry lies in the inability of the principal to observe all the agents actions. It therefore becomes impossible to construct perfect contractual arrangements that would erase those problems in advance. An imperfect substitute in the form of a performance indicator thus becomes the only feasible option.[9] This explains the general necessity for the principal to control and monitor the actions, i.e. performance of the agent in order to assure that the principal's objectives are achieved.[10] Out of this devotion of efforts, i.e. resources towards the optimisation and control, both before and during the contractual relationship, occur costs that are called agency costs. Those agency costs can be referred to as a criterion of efficiency.[11] Thus the instruments applied to minimize those agency costs became means to generally increase the efficiency of capital markets. The scope of the information asymmetries described above is manifest so that: `*Principal-agent relationships exist between stakeholders and management, between layers of management, and between management and employees*´[12]. Of particular interest for the subsequent analysis will be the conflict between investors and management, as well as management and employees, which will serve as the theoretical underpinning for the reasoning behind the existence of internal reporting, i.e. controlling and furthermore external reporting. By referring to the principal agent theory as the identical theoretical background for both reporting systems, but between different parties within each, it becomes possible to retrace similarities and at the same time highlight the justification for the existing differences.[13]

---

[6] Cf. Picot & Reichwald et al. (2008), p. 47.

[7] These inefficiencies can be differentiated based on the basis of their causes in `hidden characteristics´, `hidden action' and `hidden intentions´, see among others Picot & Reichwald et al. (2008), pp. 49 et seqq.

[8] Cf. Picot & Reichwald et al. (2008), p. 48.

[9] Cf. Bhimani (2006), p. 22.

[10] Hidden intention and hidden characteristics will thereby be excluded from further analysis due to their nature as being already pre-contractual existent. Thus as will be shown subsequently do these information problems contain limited relevance for internal and external accounting in particular with respect to the limited scope of this thesis.

[11] Cf. Picot & Reichwald et al. (2008), p. 47.

[12] Cataldo (2003), p. 9.

[13] However it needs to be acknowledged that the choice for the principal-agent theory as a theoretical explanation for internal and external reporting is even though the most popular, just one among several possible that are possible. Other theories also find widespread recognition depending on the level of abstraction applied. Examples for this are other forms of information economics such as game-theory or disciplines within behavioural science such as motivational theory or even the combination of both. Cf. Lange & Schaefer (2008),

2.2 Internal reporting/controlling

2.2.1 Underlying theoretical rational

The theoretical justification for the existence of a firm lies in the cost advantage of a certain transaction that is closed internally over a transaction that is carried out on the market.[14] In other words, the internal cost of using the hierarchy, i.e. agency cost, is less than the cost an identical transaction would have caused on the market, i.e. transaction cost. This in turn provides the rationale for the use of a hierarchy, i.e. firm, instead of the market for a given transaction.[15] Hence the management of a firm must minimize the agency cost that it faces when controlling the work of its subordinates. The previous section has described the problems the management is confronted with in this context as information inefficiencies and goal incongruence between the top management and the lower management. One of the main reasons for the design and application of management control techniques and systems thus must be the reduction of these hierarchical problems. More precisely, an internal control structure must: *`represent monitoring and with the objective of providing assurance and minimizing costs associated with employee performance. The costs minimized by this type of monitoring are referred to as "internal agency costs".´*[16] The following section will focus on and analyse the functions of management accounting that are most commonly discussed in the literature.

2.2.2 Function of management accounting

`Managerial accounting focuses on providing internal management with the information it needs to run the company efficiently and effectively. This information takes many forms depending on management's needs.´[17]

---

pp. 139 et seqq. That said, based on the limited scope of the present paper seems a confinement upon the chosen theory appropriate.

[14] This logical explanation behind the existence of firms and thus hierarchies can be traced back to Coase (1937), pp. 392 et seqq.

[15] See Williamson (1975), pp. 1 et seqq. However, in his later publications does Williamson supplement his theory by acknowledging that market and hierarchy are only the poles of a continuum of states a transaction can take place in. The limited focus of this paper, nevertheless seems to allow for this simplification.

[16] Cataldo (2003), p. 9.

[17] Bamber & Braun et al. (2008), p. 29.

Management or internal accounting refers to the communication of information to the managers and decision makers in positions of responsibility at all levels of a particular organisation. It satisfies the information needs of decision makers inside the organisation.[18] Management accounting is conducted primarily for internal reporting purposes. The application of the accounting will be different to financial accounting because internal users need to make different judgments and decisions than external users. Their needs are diverse. Management accounting has therefore developed as a separate discipline of financial reporting to serve the particular functions of management.[19] These management functions are planning, decision making and control. Additionally, in order to be effective, these functions require the management to apply communication and motivational skills.[20] Thus by describing the general responsibilities of the management it becomes possible to highlight the information needs, i.e. functions management control is supposed to suit. Planning involves management setting company goals and objectives as well as deciding how best to achieve them in order to increase the value of the business. This general term covers both long-term strategic planning and short-term operational planning. These plans are different regarding their level of detail. Where the short-term perspective requires a more detailed plan the long-term plan is usually based on a broader approach. A business strategy plan focuses on the industry or sector of each separate business, not only on the narrow frame of direct corporate interests'. Conversely, short-term operational planning is focused on the actions of certain functions within the business, with the aim of planning their activity over short-term periods.[21] Regardless, if a plan is of rather short or long term nature: *`if an enterprise is to move ahead, plans must lead decisions´*[22]. Decision-making might be described as the main responsibility of the management.[23] The decision-making is supposed to break the plan into objectives, which need to be accomplished in order to successfully fulfil the plan. All decisions have underlying financial implications and will at some stage involve cost considerations and possibly social issues.[24] The essential demand is the provision of appropriate information upon which plan related decisions about the allocation of productive resources can be based.[25] Such information has to be a result of a management control system. Once a plan has been developed and decisions about how to realise those objectives have been

[18] Cf. Stolowy & Lebas (2006), p.27; Lewis & Pendrill (2004), pp. 3 et seq.
[19] Cf. Weetman (2002), pp. 453 et seqq.; Bamber & Braun et al. (2008), pp. 29-30.
[20] Cf. Haller (2006), p 143.
[21] Cf. Weetman (2002), p. 454.
[22] Weetman (2009), p. 428.
[23] Cf. Weetman (2002), p. 454.
[24] Cf. Weetman (2002), p. 455.
[25] Cf. Weetman (2009), p. 428.

made, it becomes necessary to control the activity. This aims to evaluate whether or not the outcome is in accordance with the objectives that are set to accomplish the plan based on certain performance indicators.[26] This involves evaluating the results of business operations against the company's plan, and, if required, making adjustments to enable the company to pursue its goals.[27] A management control system thus has to provide the management with timely, accurate as well as relevant information regarding each individual objective.[28]

The remarks above can be subsumed based upon the principal agent theory in the following way. Firstly a plan has to be agreed upon by the upper management. Secondly the plan has to be broken down into different objectives to ensure successful delivery. Finally, these objectives are delegated to the lower management, whose performance is measured based on certain indicators. Given the conditions of incongruent utility, functions of upper and lower management and information inefficiencies resulting in the ability for hidden action, a successful management control system has to offer the following solutions. It firstly needs to minimise or even remove the incongruent utility functions, i.e. incentives between principal and agent. Secondly it is necessary to decrease the asymmetry of information, thus the risk of hidden action and possible advantages out of private information have to be made impotent i.e. unprofitable to exploit for the agent.[29] The demands on what particularities a management control system should comprise are manifold and dependent on the industry. Those that are most commonly discussed in the academic literature are:

a) ability to communicate, i.e. understandability and acceptance of the control system,
b) incentive based, i.e. through the orientation on control measures are incentives created for a goal congruent behaviour. This includes the demand for objectivity.
c) Ability to analyse, this asks for an inter and intra company comparability of the data and a
d) balance between benefits and costs.[30]

[26] Cf. Weetman (2009), p. 428.
[27] Cf. Bamber & Braun et al. (2008), pp. 29-30.
[28] Cf. Weetman (2009), p. 428.
[29] Cf. Cataldo (2003), p.11.
[30] See for an extensive review Ruhnke (2008), p. 91 and the cited sources.

2.3 External reporting

` […] Financial, or external, accounting is primarily concerned with the communication of the information about the firm to those who do not share in its management […].´[31]

2.3.1 Reasoning behind external reporting

Whereby internal agency costs were the criteria of efficiency for the internal accounting systems, the external agency costs are the result of the separation between ownership and control, and thus an indicator for the efficiency of the capital market as a whole.[32] Within this external context, it is the management of the firm that is able to exploit its information advantages for hidden action under the inability of the owner to exhaustively evaluate its performance.[33] Control is necessary in order for the capital providers to observe the managers in charge of creating wealth with the capital they were awarded. This control relies on the information provided about the performance of the agent and what results were achieved. The external reporting is the institutionalised provision of accounting information that allows assessment by the principal about what the agent has done with the resources received from the principal.[34] The most widespread set of financial reporting standards the IFRS have been established to increase the efficiency of international capital markets.

2.3.2 International financial reporting standards

The objective of financial statements stated in the Framework is to provide information about the reporting entity's financial performance and financial position that is decision useful to a broad range of users in making economic decisions.[35] It is also acknowledged that financial statements show the results of stewardship by the management, or the accountability of management for the resources it is entrusted with.[36] A contemporary interpretation of the stewardship concept includes two key aspects. On the one hand, the obligation of stewards i.e.

[31] Lewis & Pendrill (2004), pp. 3-4.
[32] Cf. Cataldo (2003), pp. 9-10.
[33] Cf. Ruhnke (2008), pp. 30-31.
[34] Cf. Stolowy & Lebas (2006), pp. 5-6. Furthermore are the enforcement of those reporting standards and their audit of major importance for the credibility the statements disclosed. Cf. Ruhnke (2008), pp. 32-33.
[35] Cf. IFRS, Framework § 12.
[36] Cf. IFRS, Framework § 14.

managers to render accounts to the owners, or provide financial statements, should in theory motivate stewards to take decisions which best serve the interests of those owners. On the other hand, the receipt of such information might help owners themselves make decisions.[37] The stated purpose of financial statements is to present fairly the financial position of an entity, its current performance and any changes in its financial position.[38] The importance of a fair presentation is even further highlighted by the standard setter due to its treatment as an override principle.[39] In doing so the IASB allows, under special and very rare circumstances, for a departure from the requirements of a particular standard or interpretation if the compliance to its requirements would result in a conflict with a fair presentation. [40] However what exactly is meant by a fair presentation or what these circumstances precisely comprise remains undefined by the IASB. It can generally be said that financial statements should reflect and be based on the facts, thus be true and not be misleading which means fair.[41] In order to achieve a fair presentation IAS 1 § 15 outline requires a compliance with the applicable IFRS as well as:

a) the selection and application of accounting policies in accordance with IAS 8;
b) the provision of accounting policies and information that result in relevant, reliable, comparable and understandable information;
c) additional disclosures to support and enhance the understanding of users regarding the impact of a certain transaction or other events and conditions on the financial position and financial performance of an entity.

The fair presentation as a legal concept is in interpretation and definition largely dependent on the background of the specific country, linguistically, philosophically and legally.[42] It seems however appropriate for the present paper to assume a fair presentation as soon as all the

[37] Cf. Lewis & Pendrill (2004), p. 4.
[38] Cf. IFRS, Framework § 46. The concept of a fair presentation does not belong originally to IASB, but to the European Directives when the UK joined as a Member State. Within the UK context is fair presentation of financial statements also known as the true and fair view.
[39] See with the notion of fair presentation as an overriding principle: Ruhnke (2008), p. 237 et seq.
[40] Cf. IAS 1 § 17 et seqq.
[41] Cf. Alexander & Nobes (2007), p. 82 et seq. However it needs to be noted that the authors have a clear emphasis on the UK as their interpretative background. To adopt this seems appropriate for the present paper due to the fact that the true and fair view did in fact evolved firstly in the UK.
[42] Cf. Elliott & Elliott (2007), pp. 211 et seqq. and on the country specific differences: Alexander & Nobes (2007), pp. 81 et seqq.

respective standards and all QCs are applied.[43] This in turn would make the financial statement decision useful since the information disclosed possesses the QCs.[44]

In the IASB Framework, there are seven identified user groups to be reported and only one set of financial statements.[45] It identifies the investor group as the primary group for whom the financial statements are being prepared. Although these financial statements are focused on the common interest of users, the prerequisite is that the information must be relevant to the investor group. The consequence is that any information needed by another user group, that might not be identical with the needs of investors, would not be met by the financial statement.[46] In order to enhance comparability across time, financial reporting information is always stated at fixed time intervals. Unlike management accounting, the frame of financial accounting records what actually occurred, founded on the past, enabling at the same time comparisons and extrapolations. The process of financial accounting involves a systematic aggregation of records to submit a fair presentation of a firm's situation at a defined date.[47] The IFRS Framework is conceived for a double function: to serve as a benchmark for the IASB when preparing accounting standards, and to aid the interpretation of those who prepare, audit and use financial statements.[48] Taking the underlying assumptions, i.e. accrual basis and going concern,[49] to prepare and present the financial statements, the framework establishes the desirable characteristics of the reported financial information. The emphasis is: the information must be *understandable* to users, *relevant*, *reliable*, and *comparable* to be useful.[50]

Understandability,

The information provided in financial statements should be readily understandable by users. However, some assumptions about users' skills should be made regarding the targeted users of financial information. They are expected to have a reasonable knowledge of business, economic activities, accounting, and a willingness to study the information provided with reasonable diligence.[51]

[43] In accordance with IFRS, Framework § 46.
[44] Cf. Benedict & Elliot (2008), p. 337.
[45] IASB (2007) Framework § 9.
[46] Cf. Elliott (2006), pp. 168 et seqq.; IFRS, Framework §10.
[47] Stolowy & Lebas (2006), p.27.
[48] Cf. Nobes & Parker, 2008, p. 118 et seq.
[49] Cf. IFRS, Framework § 22, 23.
[50] Cf. IFRS, Framework § 24.
[51] Cf. IFRS, Framework § 25.

Relevance:

Financial information is relevant if it can influence economic decisions assessing the users interpreting the past, present or future events or going over past evaluations. This leans either on the predictive value of the information, in the sense that it would help users to assess what is likely to happen in the future, or confirmatory value helping them to confirm or correct predictions previously made. These two roles of the information are naturally interrelated.[52] The information's relevance depends on its nature and in other cases also by the *materiality*[53]. The information is material if its omission or misstatement could influence the economic decisions based on the financial statements. Therefore materiality is rather a requirement of the information more than a primary qualitative characteristic.

Reliability

Reliable information must be *neutral*, free from material error or bias, and must enable the user to depend on it; otherwise the forecasting could be distorted.[54] If the information is reliable, it enjoys a *faithful representation.* [55] This occurs when the information does faithfully represent the transactions and other events it is supposed or expected to represent. This characteristic is not subject to bias, but in the application of recognition or measurements procedures that might delude the portrait. Emphasizing the *substance over form*, the information is represented by its nature rather than its legal form, two dimensions that might not be always consistent.[56] *Prudence* is required when preparing financial information. In spite of the ambiguity of the term, this is the exercise of a degree of caution in the judgements needed in the context of uncertainty.[57] The information must be *complete*. An omission can cause information to be false or misleading, and consequently unreliable and irrelevant.[58]

Comparability

Financial information has to allow comparisons over time to identify trends in the firm's financial position. Also, the relative financial position across different reporting entities must be enabled by reasonable comparisons. *Consistency* when using methods and presenting numbers is an absolute condition to permit these valid comparisons. Therefore, the disclosure

[52] Cf. IFRS, Framework § 26, 27.
[53] Cf. IFRS, Framework § 29, 30.
[54] Cf. IFRS, Framework § 31, 36.
[55] Cf. IFRS, Framework § 33, 34.
[56] Cf. IFRS, Framework § 35.
[57] Cf. IFRS, Framework § 37.
[58] Cf. IFRS, Framework § 38.

of accounting policies and of detailed changes and the effects of such changes become mandatory.[59]

The framework acknowledges that the individual QCs are not independent vectors, and trade-offs between them can arise and are often necessary to reach an appropriate balance among the characteristics to meet the objective of financial statements. The constraints of time and the balance between benefit and cost are just showing this dependency among the characteristics. The relative importance of the QCs in different cases is an issue of professional judgement in order to provide decision useful information.[60]

[59] Cf. IFRS, Framework § 39-42
[60] Cf. IFRS, Framework § 43-45.

3 The managerial approach

The managerial approach first emerged in the US in the 1990s in the course of formulating a new standard for segment reporting SFAS 131 by the Financial Accounting Standards Board (FASB). The term managerial, stems from the essence of this approach, which is to take the information directly from the internal financial reporting, also known as management reporting.[61] The objective of this approach is to disclose all information that is relevant for the management of a company to base its decision-making and performance assessment on.[62]

3.1 Theoretical background

3.1.1 Underlying idea

As chapter two has pointed out, the management of every company builds a range of internal controlling systems that produce information to support the successful governance and leadership of an enterprise. More specifically, these internal financial reports are aimed at allowing the management to fulfil their purpose as decision makers, based on performance assessments, in order to achieve optimal resource allocation.[63] The fundamental idea of the managerial approach is that if internal information is relevant for the senior decision maker, then they should be relevant for current and potential investors as well. Thus the extensive disclosure of internal information about the economic potential a company possesses should be beneficial for the investor as long as this is in line with a fair presentation.[64] By letting the users of financial reports see a business *`through management's eyes´*[65] they will be able to acquire a higher level of understanding, as well as the ability to predict the behaviour of the management, which has an influence on the future cash flows of a business. Furthermore, the managerial approach is able to comply with the demands of a unified financial language.[66] The managerial approach finds its foundation in the IFRS framework from the notion that: `[…] *published financial statements are based on the information used by management*

[61] Cf. Wagenhofer (2006), p. 4.
[62] Cf. SFAS 131 § 4 et seq.
[63] Cf. Martin (1997), p. 29.
[64] Cf. Velte (2008), p. 133.
[65] Martin (1997), p. 29.
[66] Cf. Velte (2008), p. 133.

[…]´[67]. Not included in this definition of the managerial approach is internal information that is conducted for external reporting disclosure requirements, but do not have controlling and managerial purposes as their initial fields of application.[68] Furthermore, the notion of managerial information does not include any rules regarding the information disclosed. Thus as long as they find utilisation as controlling means, they qualify for an external disclosure.[69] Subsequently it will be shown, that the managerial approach acquires its theoretical origin from the shareholder-value approach, which in turn was adopted by the IASB.

3.1.2 Shareholder-value approach

The explicit dedication of the top management toward increasing shareholder wealth as the main focus and criteria of their decision-making is known as value oriented management or the shareholder-value approach. Ultimately the approach aims to maximise the value of the company, which in turn results in an enhancement of wealth for the provider of equity, i.e. the shareholder. The shareholder value itself is defined as the value of a listed company on the stock exchange.[70] The rational behind this approach is that investors on global capital markets have various investment alternatives. Thus in order for the management of a company to focus on their interests, it has become an absolute condition in the corporate policy to attract essential equity.[71] From this point of view, every managerial action can ultimately be seen as an effort to maximise the value of the company in terms of its share price. Therefore, the internal information and controlling structures are implemented to provide the information demanded by the management in order to achieve their overall objective. If this information is crucial for the management to base their value-maximising decisions on, then the same should be the case for the investors.[72] With regard to the second chapter, this accord with the essential function of external reporting in terms of the stewardship assessment of the management by the owner. That is to decrease the information asymmetry between investors and the management and thus reduce inefficiencies on the capital markets. Ideally speaking, this is supposed to result in a decreased risk premium, demanded by the investors due to the increased transparency on which they are able to base their decisions on, and thus lower cost

[67] IFRS, Framework § 11.
[68] Cf. Ernst (2007), p. 14.
[69] Cf. Velte (2008), pp. 133 et seqq.
[70] Cf. for an extensive reasoning about the underlying rational of a shareholder-value orientation: Zimmermann (1998), pp. 2 et seqq.
[71] Cf. Pape (2000), p. 711.
[72] Cf. Weißenberger, & Maier (2006), pp. 2077 et seqq.

of capital for the respective company.[73] The implicit adoption of the shareholder-value approach within the IFRS can be observed within the framework itself. In particular two paragraphs highlight this. Firstly, it is in accordance with Framework § 15, the overall objective of financial reporting to provide the users of financial statements with information that enables them to assess the capability of a company to generate cash flow, and of the timing and certainty of this. Secondly Framework § 11 provides a definite statement regarding the superiority of the information demands placed by investors upon financial reports.

Taken together, the notes above locate the theoretical basis of the managerial approach within the shareholder value approach and outline its implicit adoption within the IFRS framework. Its application within specific standards will be subject to the following section. An individual analysis of the respective standards is furthermore needed since the utilisation of managerial data for external reporting purposes has been described as an abstract idea being based on a conceptual underlying that foregoes the implementation of a dense system of rules to support its realisation. Thus, as will subsequently be shown, there is room for variety of both relevance as well as saturation of the managerial approach with respect to a particular standard. The resulting heterogeneity within the realisation of the managerial approach within certain standards therefore requires an individual analysis of the different fields the managerial approach finds application in.

3.2 Fields of application

This section essentially reviews the various standards within IFRS, in which the managerial approach finds application. Thus a short description of the respective regulation will be supplemented with a brief outline of the necessary utilised internal information.

3.2.1 IAS 11 *Construction Contracts*

The objective of IAS 11 Construction Contracts is to: *`prescribe the accounting treatment of revenue and costs associated with construction contracts. […], the primary issue in accounting for construction contracts is the allocation of contract revenue and contract costs*

[73] Cf. regarding the managerial approach as a principle within value reporting AEKU (2002), pp. 2337 et seqq.

to the accounting periods in which construction work is performed´[74]. This is necessary due to the long-term nature of this kind of contract, which often results in multi-period construction activity.[75] If it is possible to reliably determine the outcome of a construction contract, the revenue and expenses resulting of this activity should be recognised based on the percentage-of-completion method.[76] The necessity to apply information that has been initially generated for internal purposes is formulated in the refutable presumption that reliable estimates of the degree of completion, total costs and total revenues require a company among other things to have: *`an effective internal financial budgeting and reporting system´*[77] in place. The standard becomes more explicit when noting that: *`The enterprise reviews and, when necessary, revises the estimates of contract revenues and contract costs as the contract progresses.´*[78] A company that would be able to do so would normally require a revolving contract calculation based on project controlling.[79]

3.2.2 IAS 16 *Property, Plant and Equipment*

IAS 16 aims to provide the users of financial statements with: *`[…] information about an entity's investment in property, plant and equipment and the changes in such investments´*.[80] In particular the initial recognition and determination of the carrying amount, including depreciation, charges and possible impairment losses, are of principle interest.[81] The use of managerial data finds application in two instances. Firstly, the basis on which the depreciation charge of an asset is determined - its useful life.[82] The useful life of an asset in turn is defined as:

a) *`the period over which an asset is expected to be available for use by an entity; or*
b) *the number of production or similar units expected to be obtained from the asset by an entity´*.[83]

[74] IAS 11 Objective.
[75] Cf. Ruhnke (2008), p. 604.
[76] Cf. IAS 11 § 22.
[77] IAS 11 § 29.
[78] IAS 11 § 29.
[79] Cf. Velte (2006), p. 227; Ruhnke (2008), p. 605.
[80] IAS 16 Objective.
[81] Cf. IAS 16 Objective.
[82] Cf. IAS 16 § 50.
[83] IAS 16 § 6 Definitions.

Both expectations require estimates based on technical factors as well as duration of use, as intended by the management and their experiences with similar assets in that respect. This is highlighted further by the requirements the standard setter sets as mandatory requirements when estimating the useful life of an asset.[84] Another application of managerial information can be traced in the component accounting as prescribed in circumstances where part of an item of property, plant or equipment bares significant costs in relation to the total costs and a differing life span.[85] Without an internal control and a maintenance planning system, this component accounting is hardly operable. In particular the required distinction within the costs that arise subsequent to the initial recognition between replacements, inspections and so called repairs and maintenance of an asset will demand a sufficient internal control system.[86]

3.2.3 IAS 36 *Impairment of assets*

IAS 36 prescribes the procedures that a company has to apply in order to guarantee that the carrying amount of its assets equals their recoverable amount.[87] In order to determine whether there are triggering events which indicate that an asset might be impaired and thus subject to an impairment charge is, a company must consider several external as well as internal sources of information.[88] These internal sources are:

a) *`evidence available of obsolescence or physical damage of an asset.*
b) *significant changes with an adverse effect on the entity have taken place during the period, or are expected to take place in the near future, in the extent to which, or manner in which, an asset is used or is expected to be used. […]*
c) *evidence available from internal reporting that indicates that the economic performance of an asset is, or will be, worse than expected.´*[89]

Point c) in particular highlights the application of information extracted from an internal controlling system.[90] This is another important role the managerial approach plays when

[84] Cf. IAS 16 § 56.
[85] Cf. IAS 16 § 13 with 43-47.
[86] Cf. Ruhnke (2008), p. 439 et seqq. with respect to IAS 16 § 12-14.
[87] Cf. IAS 36 Objective. The recoverable amount of an asset is defined as the higher of value in use and its fair value less cost to sell. (IAS 16 § 6 Definitions)
[88] Cf. IAS 36 § 12.
[89] IAS 36 § 12 e-g.
[90] Cf. Nailor (1999), p. 80.

estimating future cash flows results from an asset in order to determine the value in use. The standard setter requires the management to use its *`best estimates´*[91] when conducting prognosis of future cash flows. These shall be sourced from the *`most recent financial budgets/forecasts approved by the management´*[92]. Therefore, an artificially created management control system which is solely utilised for the purpose of complying with the requirements of IAS 36, and thus exists outside of the normal internal control system, would not be sufficient.[93] [94]

3.2.4 IAS 38 *Intangible assets*

IAS 38 addresses the accounting treatment for intangible assets, which are not dealt with already in other standards.[95] An intangible asset is to be initially measured at cost if it complies with the rather strict definition of the standard.[96] Particularly detailed definition requirements are placed upon internally generated intangible assets in order to qualify for recognition since the value of these assets has not been objectively set by a market transaction.[97] Among other things, the generation of such an asset must be divided into a research phase and a development phase. This is of crucial importance as only expenditure that occurs during the development phase qualifies for recognition, and must otherwise be recognised as expenses.[98] Therefore all expenses that arise from activities that do not fulfil the criteria of IAS 38 § 57 will be treated as research costs. IAS 38 requires a reliable measurement of such development expenditure and acknowledges that: *`An entity's costing system can often measure reliably the cost of generating an intangible asset internally […].´*[99] Something which not only requires a project related measurement and calculation system, but

[91] IAS 36 § 33 a.
[92] IAS 36 § 33 b. The application of such internal financial plans is however restricted to a 5 year horizon.
[93] Cf. Weißenberger, & Maier (2006), p. 2080. With a similar conclusion Ruhnke (2008) p. 315 et seqq.
[94] With regards to section 3.1.1 and 3.1.2 is IAS 36 also a prominent example for the commitment toward the shareholder-value by the IASB. The underlying rational calculus of the recovering amount is that the management would sell an asset as soon as its fair value less cost to sell exceed the value in use. Thus IAS 36 impairment of assets is ultimately supposed to guarantee the optimal allocation of recourses within an enterprise. Cf. Ruhnke (2008), p. 315. Given the far reaching application of IAS 36 within IFRS (all but the standards excluded in IAS 36 § 2 Scope) does this support the authors point of view as articulated above.
[95] Cf. IAS 38 Objectives & Scope
[96] Cf. IAS 38 § 11-24.
[97] Cf. Ruhnke (2008), pp. 457 et seqq.
[98] Cf. IAS 38 § 52 et seqq.
[99] IAS 38 § 57f & § 62.

also internal controlling that is able to distinguish between the research as well as the development phase.[100]

3.3 Evaluation of the managerial approach

The analysis above has described some of the different standards the managerial approach finds its application in. It becomes evident that the managerial approach is a rather heterogenic concept in terms of its actual application. This can be exemplified in the diverse scope and objectives of the different standards as well as the different sources of relevant information such as project controlling, as utilised by IAS 11 and IAS 38. Furthermore risk management, which found relevance in IAS 36 and planning and control systems as used in IAS 38 and IAS 16. Nevertheless, the following section tries to outline advantages as well as disadvantages that result from the managerial approach within IFRS and are common among its different fields of exertion.

3.3.1 Advantages of the managerial approach

The reusing of data that was already produced for internal or managerial purposes holds the clear advantage that it reduces the cost for the extraction of data and also enables an easy and thus cheaper auditing of that data since the auditor only has to assess its conformity with the internal data.[101] Furthermore the managerial approach allows the provision of required information in a timely manner.[102] This is generally regarded as an improvement of external and internal accounting regarding their development towards the principle of the so called *`Lean Accounting´*.[103] A lean reporting system requires a high effectiveness and efficiency in terms of its output, alongside its potential for synergy and cost reduction.[104] Positive in respect to the efficiency is the enhanced communicability of internal controlling systems, which would otherwise only be of limited nature.[105] The effectiveness on the other hand can be measured in terms of ability to minimise the information asymmetry

[100] Cf. Weißenberger, & Maier (2006), p. 2081.
[101] Cf. Wagenhofer (2006), p. 4.
[102] Substitutional for many others cf. SFAS 131 § 4.
[103] Cf. Velte (2008), p. 134.
[104] Cf. Hebeler (2003),p. 42.
[105] Cf. Velte (2008),p. 134.

between shareholder and management i.e. principal and agent as discussed in the second chapter. This information asymmetry should be decreased by the reporting of data `*through the eyes of the management´* as described earlier, because it is the kind of information the management itself considers most relevant in its decision making.[106] Thus the primary QC of relevance seems to benefit from the managerial approach. This argument receives further support when placed in its initially described theoretical background of the shareholder value approach i.e. its purpose as a value reporting measure. The shareholder obtains information on the criteria which the senior management run the company and which criteria underlie the applied risk and control systems.[107] This improvement of the capital market efficiency in turn results in an investment risk that is perceived by the investor as lower than before. Thus the investor will demand a reduced risk premium for the provision of equity, i.e. lower cost of capital for the respective company.[108] Lastly the mandatory application of the managerial approach also has positive internal effects. Firstly this requires the management to implement appropriate internal systems of risk management, planning and control systems, and, where necessary, project controlling. Secondly the information disclosed by the managerial approach can be used to evaluate and coordinate the work of the general management system.[109]

3.3.2 Shortcomings of the managerial approach

Beginning with its initial guise in the form of SFAS 131 in the US, the managerial approach was accompanied by widespread voices of criticism. The most common criticism is the lack of comparability of data that is conducted under the managerial approach. The lack of comparability is not limited to inter-company comparisons, but also intra company data. This argument is based on the observation that comparability as a qualitative characteristic of reporting under IFRS requires very prescriptive and detailed rules about the information disclosed.[110] By contrast, the managerial approach is characterised by the absence of detailed rules. As described earlier in this chapter, the only requirement upon information within the managerial approach is that the management uses it. Additional doubts in terms of comparability of an identical company on a year-to-year basis are raised by the fact that it is left to the management's discretion to change the focus of certain aspects of its internal

[106] Cf. Wagenhofer (2006), p. 4; Johann (2007), p. 9.
[107] AEKU (2002),p. 2339.
[108] Cf. Velte (2008), pp. 134 et seqq.
[109] Cf. Weißenberger (2007), pp. 170 et seqq.
[110] Cf. Hunt (1996), p. 48.

reporting system, and thus the emphasis given to respective reporting issues.[111] Another aspect of the managerial approach that received negative judgments, especially by the industry, concerns the possible arising of a competitive disadvantage. The basic argument for this point of view is that companies have to disclose information that are used for internal purposes and thus contain formerly confidential data that might be sensible from a strategic perspective. This data is, under the managerial approach, subject to external reporting and hence available for competitors, and in particular such competitors that operate under a different jurisdiction and do not need to disclose the same kind of information themselves. [112] Further shortcomings of the managerial approach are based on the observation that a significant number of companies lack the internal control infrastructure that is a basic requirement in order to provide the managerial data needed.[113] A possible outcome of an information overflow, resulting from the increased amount of disclosed data with the emergence of a *`dilution effect´*[114] is another criticism of the managerial approach.

Of a rather dynamic nature are two other lines of argument. They place special attention upon the reciprocation between internal and external reporting when connected by the managerial approach. This became labelled in the academic discourse as the circulation and the manipulation effect. The first aims to reveal the potential influence on the internal reporting systems in terms of an alteration of it for external reporting reasons or goals by the management. This would destroy the very relevance the approach tried to achieve with the view through the eyes of the management. The later however takes the exact opposite perspective when analysing the harmful effects for a fair presentation when information gets manipulated by lower level managers i.e. agents. They try this in order to achieve their internal goals as assessed by the senior management, i.e. principal. Giving the purpose of external reporting from an agency theoretical perspective, this interferes with the external relationship of manager and shareholder, and thus impairs the efficiency of capital markets.[115]

[111] Cf. Velte (2008), p. 135.
[112] With an early citing on this see Hunt (1997), p. 48.
[113] Cf. Groß & Amen (2003), p .1162. This can be seen as the inversion of the positive argument stated in the previous section that the management has incentives to implement sufficient internal reporting structures. This argument however implies that these means are not yet in place. Having said that, this point needs to be put in context: firstly is it based on a rather German focus and secondly are IFRS in Europe only mandatory for listed companies. Among these companies might the standpoint taken be of rather limited relevance. However the sheer existence of an internal reporting system may not be confused with its operational effectiveness.
[114] Fama & Lafa (1971) as cited in Velte (2008), p. 135, footnote 14.
[115] For an extensive reasoning with respect to the reciprocal relationship of internal and external accounting see Weißenberger & Maier (2006), p. 2083.

3.4 Preliminary analysis I

The current analysis has outlined the theoretical reasoning of the managerial approach as being located in the shareholder value approach. An analysis of its application within IFRS has revealed its heterogeneous characteristics. On one hand this relates to the fact that the individual standards that utilise managerial information have different objectives and scope, and are thus not comparable. On the other hand, the managerial information that is used is the outcome of different internal sources such as project controlling, risk management, and planning and control systems. These systems however are in themselves not standardised nor regulated by the authorities, and thus entirely left to the discretion of the respective management. A review of the articulated advantages and shortcomings that this approach encapsulates has resulted in fairly mixed results. In particular the generalisation of the cited arguments is questionable due to the broad and unregulated nature of the managerial approach. For example, it can be argued that the approach has the potential to elicit the described cost savings among all fields of application. In contrast to this it can be viewed as rather dubious how managerial information that is disclosed for the purpose of component accounting – as currently demanded in IAS 16 – has the potential to decrease the information asymmetry between the capital market actors, and thus lower the costs of capital for the respective company. The same can be said about the analysed shortcomings. A lack of comparability is a common problem among all standards that are based on the utilisation of management data. How a competitive disadvantage could emerge from disclosure in the context of IAS 11 is however far from obvious.

It therefore appears impossible to come to a conclusion about the effect the managerial approach has as a concept within IFRS and thus on decision usefulness of disclosed financial information. This asks for a narrowing of the analytical focus in order to establish a more accurate conclusion. This does not only mean a focus upon a certain standard but also an analysis of its counterpart in terms of managerial reporting. The need, and at the same time, potential that this departure contains is given by the described manipulation and circulation effect. Both are based on a relationship that is reciprocation i.e. one influences the other. Thus an investigation of these effects is unfeasible without a dual perspective.

On the grounds of the above reasoning, the following analysis will focus on IFRS 8 *Operating Segments* and the internal accounting source or concept that it is most closely based on;

namely profit centre controlling. This is justified partly due to the fact that the academic as well as practical literature is rather dense on both fields, and that both are well established in their conceptual outlines, but is also a fairly timely topic due to the mandatory application of IFRS 8 as recently as this year. Furthermore IFRS 8 is often regarded as the full managerial approach that offers a very direct application of the general concept. Additionally this can also be perceived as a route back to the initial concept as rooted within the US GAAP in from of SFAS 131 on which IFRS 8 is largely based.

4 Segment reporting

Segment reporting aims to provide disaggregate information about disjointed parts of an entity. These economic sub-units are called operating segments.[116] Before an assessment of the relevant regulation can be made, it is essential to determine the underlying economical rationale behind the provision of segment data.

4.1 Rationale behind disaggregated data disclosure

`The objective of segment reporting is to assist users of accounts to evaluate the different business segments and geographical regions of a group and how they affect the overall results of a group.´[117]

The notion above can be summed up by two distinct observations. To begin with, that some companies can be characterised by a diversified business structure in terms of their geographical and or sectoral engagement.[118] The nature and reciprocity of these manifold as well as diverse business activities however do not find sufficient acknowledgement within the disclosure of consolidated balance sheet, cash flow statement and income statement. Thus segment reporting is supposed to provide information about the heterogeneity within the consolidated data.[119] The diversified business nature of companies can be seen as the supply side logic behind segment reporting. Since the diverse structure of the companies itself provides a heterogeneous character of weaknesses and strengths, as well as risks and chances, it thus also discloses the criteria and means to conduct and disclose disaggregated data.[120]

Secondly if one on the other hand takes the demand side for the provision of segment information, then this finds its starting point in the heterogeneous characteristics of the users of financial accounts. This in turn results in very different information needs. Paragraph 9 in the IFRS framework identifies possible claimants as: potential investors, employees, lenders, suppliers and other trade creditors, customers, governments and their agencies and the public. Some users will find information about a particular part or division of a company more useful

[116] Cf. Taylor (1996), p. 330.
[117] Elliott & Elliott (2006), p. 208.
[118] Cf. for a definition of these criteria: Bühner (1985), pp. 1018 et seqq.
[119] Cf. Nobes & Parker (2008), p. 432, as well as Taylor (1996), p. 330 et seq. for a broader reasoning.
[120] Cf. Ruhnke (2008), p. 668.

than information regarding the business as a whole. Where employees' working conditions and prospects of employment might be directly related to the performance of a division they are employed in rather than the group as a whole. Suppliers and customers may also have reason to focus on information about the part of the company they have direct contractual relations with. Local governments will naturally be interested foremost in the operations that are located within their territory. Segmental information reporting tries to serve these divergent demands, in addition to the consolidated data, by providing disaggregated information that might otherwise be hard or very costly for the respective user to extract. Investors however invest their capital in the company as a whole and thus might not be interested in segment information per se.[121] Since the IFRS Framework in Paragraph 10 is adamant about the superiority of the investors' information claims due to their provision of risk capital, this possible incongruence deserves further attention. A focus on the connection between the supply and demand perspectives will highlight the usefulness of segment reporting. Section 2.3 explains the theoretical rationale behind the disclosure of financial reporting information as a means to solve or reduce the inefficiencies e.g. costs emerging from the underlying principal agent that are problematic between shareholders or potential investors and the management of the company. Therefore the reasoning behind a chosen diversification strategy should be in the interest of the shareholders, which in turn need disaggregated information to understand and monitor this strategy in order to build their economic decisions upon them. Section 2.3.2 highlights the provision of information that is decision useful as the overall objective of financial reporting under IFRS. In line with this objective, the standard setter acknowledges that: `*The economic decisions that are taken by users of financial statements require an evaluation of the ability of an enterprise to generate cash and cash equivalents and of the timing and certainty of their generation.*´[122] Thus segment information has to serve as a means of informing current or potential investors of the ability of a company to augment its operating efficiency, and in turn assess its prospects in terms of an increased market value, which is a result of its potential for the creation of future cash flows to justify its conduction and disclosure under IFRS. In summary that means that `*Segment data are of particular importance for revealing agency concerns because they provide information about a company's diversification strategy and its transfers of resources across divisions´*.[123] This makes it necessary to include a brief analysis of the economic

[121] Cf. Nobes & Parker (2008), p. 432 et seq.
[122] IFRS, Framework § 15.
[123] Berger & Hann (2007), p. 873.

motivation behind the establishment of a diversified business structure in order to determine whether this comprises the effects outlined above.

The portfolio theory provides extensive reasoning about the effects a diversified investment strategy has in terms of a reduction of the total risk an investor bears mainly due to the integration of complementary risk factors.[124] Since the theory furthermore predicts that this can be undertaken by every individual investor for himself or herself, this indicates that a diversified business, e.g. company strategy, is obsolete from a rational point of view. Nevertheless the theory itself is based on the perfect capital market premise, which implies the existence of complete and freely available information as well as rational behaviour by all market actors. This notion of transparency and rationality does not however mirror the economic reality. Thus the existence of transaction costs, opportunistic market actors and incomplete information offers room for the justification of a diversification strategy by a company as rational behaviour to reduce its operating risk.[125] Therefore, the agent, e.g. management of the company, acts in the interest of the principal, i.e. shareholder, in order to minimise his investment risk. This diversified business structure in turn determines the need for the disclosure of disaggregated data, which permits the shareholders to monitor the management's strategy. As previously pointed out, the provision of information that displays the heterogeneous structure of the business, i.e. segmental information, should provide a current or potential investor with the information needed in order to assess the risk of his or her investment in the company. The notion of risk avoidance though is only one of several explanations within the academic discourse for the justification of a diversification strategy. Another one is connected to the motive to maximise profitability as well as the market value of a company. [126] Profitability is supposed to benefit from a diversified business structure due to the utilisation of synergetic potential. These gains in terms of synergy are mainly identified as the outcome of two sources.[127] On one hand, the synergy effects do indeed arise from an increased market power. On the other hand, the improved efficiency in terms of resource usage results in economies of scope. [128] Economies of scope occur when for all outputs, the costs of united production are less than the expenses that occur when every output is produced

[124] Based on Markowitz (1952), pp. 77 et seqq.
[125] Cf. Alvarez (2004), p. 16 et seq. With a similar reasoning: Taylor (1996), p. 330.
[126] For an extensive review see Alvarez (2004) p. 14, Fn.5. Alvarez however points out that profitability/market value and risk as well as growth reasoning are the most frequently cited ones within the academic literature. Growth however can only be a mean and not an end in itself and thus serves ultimately the maximisation of profitability/market value. Cf. Alvarez (2004), p.15.
[127] Cf. Carter (1977), p. 279, for the following remarks.
[128] Cf. Li & Greenwood (2004), p. 1132.

on its own.[129] This cost reduction thus results `*[…] from inputs that are shared, or utilized jointly without complete congestion*´[130]. The positive effects of diversification as described above are however mutually exclusive, since the minimisation of total business risk requires the integration of complementary risk factors, e.g. business segments, where synergy reasoning requires a lateral diversification strategy.[131]

It has become evident that: `*the past performance of a company and its future prospects can usually only be understood if the user also has information about each segment of the business*´[132]. The justification behind segment reporting is related to the theoretical approach it is enrooted in. Both risk minimisation and the profitability and wealth maximisation reasoning have found materialisation in diverse results regarding the regulation decreed by different standard setters. Before reviewing these it seems necessary to outline the different concepts upon which segments are defined.

4.2 Regulatory approach upon segment reporting

Subsequently the standards issued by the (FASB) and the IASB will be of particular interest since, as its will become clear, both SFAS 131 and the abolished IAS 14 revised (IAS 14 R hereafter) were highly influential for the current IFRS 8.

4.2.1 SFAS 131 *Disclosures about Segments of an Enterprise and Related Information*

The SFAS 131, *Disclosure about Segments of an Enterprise and Related Information*, was released by the FASB during 1997. The issuing of this new standard marked a significant change in the underlying approach applied in order to determining an operating segment.[133] The former SFAS 14, which was in effect since 1976, based on the `risk and return´ approach to determine the segment on base of the LoB or by geographical area or even by a fusion of

[129] Cf. Panzar & Willig (1975) in Teece (1980), p. 224.
[130] Teece (1980), p. 226.
[131] Cf. Amit & Livnat (1988), pp. 99 et seqq. with an indebt analysis of the described trade-off.
[132] Nobes & Parker (2008), p. 433.
[133] Cf. Nobes & Parker (2008), p. 435.

both.[134] SFAS 131 however took a new route when prescribing that the segments of a company have to be disclosed: *`based upon the way that the chief operating decision maker evaluates performance and allocates resources´*[135]. This finds further materialisation in the definition of an operating segment as: *`a component of an enterprise:*

a) *That engages in business activities from which it may earn revenues and incur expenses […],*
b) *Whose operating results are regularly reviewed by the enterprise's chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance, and*
c) *For which discrete financial information is available´*[136].

According to SFAS 131 a company will disclose information about a segment based on the internal organisational structure and accounting methods internally applied, upon which basis the top management makes decisions. This means that the managerial reasoning based on that which the assessment of segmental performance and internal allocation of resources is done, is the core of information that becomes disclosed. The former orientation on LoB or geographical structures will thus only be followed if the company's internal organisational structure is indeed based upon them. Otherwise the company is free to follow any other approach as long as this one is also mirrored by its internal organisational structure.[137] It is important that the disaggregated information that will be disclosed within the segments is conducted following the same accounting principles that are used for management reporting purposes. These however do not have to be the same as under US-GAAP, and thus the consolidated account, but instead can be based on whatever the management perceives as useful.[138] According to the standard setter, the application of managerial information is supposed to assist the users of financial statements to:

a) *`Better understand the enterprise's performance*
b) *Better assess its prospects for future net cash flows*
c) *Make more informed judgments about the enterprise as a whole.´*[139]

[134] Cf. Taylor (1996), p. 330.
[135] Mitch & Koski-Grafer (1998), p. 91.
[136] SFAS 131 § 10.
[137] Cf. Nobes & Parker (2008), p. 435.
[138] Cf. SFAS 131 § 81 Appendix.
[139] SFAS 131 § 3.

The changes undertaken by the US standard setter have not gone unnoticed by the IASB. As similar to SFAS 14 and IAS 14 there was an urgent need to improve IAS 14 as well.

4.2.2 IAS 14 *Segment Reporting revised*

As distinct to the prior IAS 14, in 1997 IAS 14 R was issued requiring a company to choose either geographical areas or LoB as their primary segment, and the remaining as the secondary. This was done in order to create somewhat of a hierarchy that resulted in different disclosure requirements in terms of quantitative and qualitative coverage and thus mirroring the approach chosen by the US standard setter for the definition of a basis for the disaggregation. In accordance with SFAS 131 IAS 14 R, § 27 notes that in order to define reportable segments, a company should take the *`internal organizational and management structure and its system of internal financial reporting´* as a starting point when determining the primary segment as well as the secondary segment with regards to a particular risk and reward profile.[140] The standard however did not rely on the managerial approach as completely as its US counterpart did. This becomes apparent when § 27b makes it mandatory to disclose geographical or LoB segments and base the primary and secondary order even in a case where the internal organisation structure differed from these dimensions. In such a case, it was left to the discretion of the management to decide if either LoB or geographical disaggregation is the primary source of risks and rewards. This can be seen as a safety net in respect to the reliance on the managerial approach, which was mandatory whenever a view through the eyes of the management would not result in useful information.[141] Therefore, it might be questionable to speak of a managerial approach at all in the context of IAS 14 R, since management information is only utilized as long as they accord with the criteria of segments determination, which are meant to mirror the risk and rewards.[142] Furthermore fairly similar to SFAS 131 are the objectives of IAS 14 R to: *`Help users of financial statements:*

a) better understand the enterprise's past performance

b) better assess the enterprise's risks and returns, and

[140] Paul & Largay (2005), p. 304 et seq. Also known as two-tier segmentation approach Cf. Dove (1996), p. 65.
[141] Paul & Largay (2005), p. 304 et seq.
[142] Cf. Lopatta (2007), p. 412, with a similar conclusion: Wagenhofer (2006) p. 6.

c) *make more informed judgements about the enterprise as a whole.´*[143]

Point a) and c) appear to be nearly identical to the objectives of SFAS 131 as previously described. In point b), it becomes apparent that the assessment of the risk a respective segment faces is an explicit part of the standard's aim, as distinct to the respective US standard which solely focuses on the notion of future cash flows. Research about the effects of IAS 14 R pointed out that it generally improved reporting for segments, especially in terms of an increased number of disclosed items and information, particularly for the primary segments.[144] The consistency between consolidated disclosure and disaggregated reporting, as well as its reliability, benefited from the required application of IFRS/IAS i.e. regulated reporting and measurement criteria for the segmental reporting.[145] Nevertheless the application of IAS 14 R was accompanied by critical remarks from various sides. Several companies were holding on to their practise to disclose only on LoB even though the annual report as a whole gave reason to believe that there was more than one in reality. Similarly critically received was the continuous report of broad and poorly defined geographic segment grouping by some companies. This was something which was already identified as being problematic in the previous IAS 14.[146] Overall the shortcomings of IAS 14, which could result in inadequately or incorrectly defined segments, have been reduced within IAS 14 R but not removed.[147]

4.3 IFRS 8 *Operating Segments*

When the IASB reviewed IAS 14 R in line with their short-term convergence project in September 2002, it saw the need to change the existing standard in order to enhance the decision usefulness of segment reporting.[148] The final decision to converge with SFAS 131 was made in January 2005 and resulted in ED 8, Operating Segment, in early 2006, which led subsequently to IFRS 8 in November the same year. The compliance to IFRS 8 became

[143] IASB: IAS 14R, Objectives
[144] Cf. Prather-Kinsey & Meek (2004), p. 229.
[145] Cf. Alvarez (2004), p. 509.
[146] Cf. Street & Nichols (2002), p. 111. Something Nichols & Street (2007), p.52 also highlight in respect to shortcomings within the practical application of IAS 14R with regards to the LoB determination by some companies within their sample.
[147] Cf. Nobes & Parker (2008), p. 439.
[148] Epstein & Jermakowicz (2009), pp. 50 et seqq. In respect to the underlying reasoning of convergence and in particular the short term convergence project, see the Memorandum of Understanding (2006).

mandatory from the 1st of January 2009 but earlier adoption was encouraged.[149] IFRS 8, as was IAS 14 R, is mandatory for those companies whose debt or equity instruments are publicly traded, as well as entities that are in the process of issuing any class of instruments to be traded in public.[150] If a company is not obliged to apply IFRS 8 but chooses to do so, it has to comply with this IFRS otherwise it is not allowed to describe the information published as segment information.[151]

The core principle of IFRS 8 is that an entity discloses the kind of information that will: *`[…] enable users of its financial statements to evaluate the nature and financial effects of the business activities in which it engages and the economic environments in which it operates[152]´*. The IASB justified their convergence towards the US standard with the superiority of SFAS 131 over IAS 14 R.[153] In particular, the following consequences were identified as primary benefits resulting from an adoption of SFAS 131 i.e. the managerial approach:

a) `entities will report segments that correspond to internal management reports;

b) entities will report segment information that will be more consistent with other parts of their annual reports;

c) some entities will report a greater number of segments, and

d) *entities will report more segment information in interim financial reports´*[154].

Additionally the board highlights the improvements in terms of a cost reduction for the provision segment information for a lot of companies. This is based on the fact that these companies are now able to use the data that has already been generated for managerial purposes, and do not need to create information for the sole purpose of external reporting i.e. compliance to IFRS anymore.[155]

[149] Cf. Lopatta (2007), p. 412 et seq., see also Nobes & Parker (2008), p. 440.
[150] Cf. IAS 14 § 3 as well as IFRS 8 § 2.
[151] Cf. IAS 14 § 5 and IFRS 8 § 3.
[152] IFRS 8 § 1.
[153] There are however some differences between IFRS 8 and SFAS 131 remaining. These are however rather minor issues and do not have any relevance in respect to the managerial approach. Thus it seems appropriate to ignored them. See for a description of these differences Nobes & Parker (2008), p. 440.
[154] ED 8 BC 8.
[155] Cf. ED 8 BC 8.

The most important changes in respect to IAS 14 R are related to two major issues. Firstly IFRS 8 requires the definition of segments to be based on the way the management sees an entity. This implies a focus upon the kind of disaggregated information about a business that the management utilizes to base their operating decision on. The former segregation, according to the particularities in the risk and reward profile of a component of the business, is therefore replaced by the managerial approach as applied in SFAS 131.[156] Instead of the previous mandatory disclosure of geographical and LoB segments, the management is now allowed to disaggregate their segments according to their operating significance. Only if the internal operational structure is identical with the LoB or geographical ones will they be disclosed.[157] The focus on operational relevance becomes dominant in the definition of the operating segment, which is identical to the one applied in SFAS 131. The second major change from IAS 14 R to IFRS 8 concerns the applied accounting rules. In accordance with the disaggregated approach IAS 14 R required these to be the same as in the consolidated reports i.e. IFRS/IAS. However under IFRS 8, it is only required to disclose those methods and rules that find application for internal decision-making.[158] On the one hand this implies that the accounting policies are not regulated and can thus differ from IFRS/IAS. On the other hand, the methods and rules applied can differ from segment to segment, even within a single entity as long as this is the case for managerial reporting purposes. This will be very likely to result in more diversity in reported segment information.[159]

Taken together the changes outlined above mark the adoption of a somewhat full managerial approach. It is therefore clear that the IASB did not require any predefined kind of accounting or evaluation method for the disclosure of segment profit or loss. This is based on the knowledge that such a requirement could result in an adjusted segment which would differ from the one that gets reported internally and thus from the managerial approach.[160]

IFRS 8 however characterises only the demand side of the management approach. In order to derive at somewhat more holistic conclusions is it necessary to outline the supply side i.e. the source of management information as well.

[156] Cf. ED 8 BC 4 in combination with IFRS 8 § 5.
[157] Cf. Lopatta (2007), p. 412 et seq. and IFRS 8 § 8.
[158] Cf. ED 8 BC 5 in combination with IFRS 8 § 25-27.
[159] Cf. Derarca (2009), p. 11.
[160] DRSC (2006), p. 5.

5 Profit centre controlling

The advent of the profit centre concept happened in the US and was initiated by major companies like GM and DuPont at the beginning of the last century. Their management were among the first to realise that their large size resulted in growing disadvantages in terms of the controllability, flexibility, governance and coordination of such a company. Thus the management reacted by disaggregating the structure in such a way that they created independent divisions based on products. In doing so the management was aiming to combine the advantages of a large business with those of a small one.[161] What exactly is meant by the term 'profit centre', or 'profit centre controlling' as a concept within managerial control, depends largely on the perspective taken. Of special interest with respect to the focus of the present analysis are the operational-controlling and the leadership-organisational perspective. By analysing these two distinct perspectives, it becomes possible to draw the reasoning for the intersection of segmental and internal reporting with the profit centre approach upon theoretical as well as technical arguments.

5.1 Conceptual intersections between IFRS 8 and controlling for profit centre

`Stated operationally, the profit centre is a division/sub-unit of an organisation in which financial performance is measured on the basis of profit, that is, revenue less cost.´[162]

Despite its briefness, the definition above contains several important features that deserve individual mention. Firstly, a profit centre is described as a disaggregated part or sub-unit of an organisation. Secondly, it seems possible to measure the performance of this sub-unit in terms of profit that it is generating. Therefore the revenues and costs this is based on must be caused by the respective profit-centre, which is thus accountable for it. The notion of performance measurement requires active control. This implies on the one hand that there is somebody held responsible for the outcome, and on the other hand that somebody on a higher hierarchical level is actively evaluating this performance and, with respect to the second chapter, using this evaluation to allocate economic resources in the most efficient way. It is because of this that the profit centre approach also received a labelling as *`Responsibility*

[161] Cf. Preißner (2007), p. 363.
[162] Kahn & Jain (1986), section 21.5.

Accounting´[163] when conceptualised from an operational-controlling perspective. If the characteristics outlined above are mirrored against the approach taken by SFAS 131 and therewith its definition of a segment, it becomes evident that profit centre controlling matches the requirements of SFAS 131 and thus IFRS 8. However, this only says that it is possible and technically feasible to use the aggregation level of the profit centre, but comes short in determining whether this results in information that are congruent with the theoretical background of the managerial approach as analysed in section 3.1.2. Thus another perspective seems necessary in order to derive a somewhat more complete picture.

`[…] managers can be expected to behave as if they were running their own business.´[164]

The quotation describes the kind of mindset that profit centre organisations are supposed to elicit among the management of the sub-units. In other words, the concept of profit centre tries to create businesses within the business and thus to confront the management of the sub-unit with the market forces.[165] This is aimed to accomplish by connecting the salary of the manager in charge at least partly with a performance indicator. An example from the praxis for an indicator for this kind of performance-related remuneration would be the concept of Economic Value Added (hereafter EVA).[166] This measure is conceptualised around the idea of a residual income.[167] EVA, among other related concepts, is often cited as highly applicable within profit centre as a performance indicator.[168] The purpose of adopting such a measure is an alignment of interests between the senior- and unit level-management.[169] This lies in the very essence of a solution for the inefficiencies resulting from the relationship between principal and agent as described earlier in section 2.1. The significance of the principal agent reasoning for both internal and external reporting has been sufficiently highlighted. When translated into a somewhat more output related description, this means that managers will be: *`motivated to take decisions about inputs and outputs in such a way that the*

[163] Preißner (2007), p. 363. See furthermore with the notion of responsibility centre Kahn & Jain (1986), section 21.6.
[164] Kahn & Jain (1986), section 21.6.
[165] Cf. Schwab (2008), p. 38.
[166] For a critical view upon the applicability of EVA among different industries see: Bouwens & Spekle (2008), p. 262.
[167] Which is defined as the amount of capital invested, multiplied by the 'performance spread'; the difference between the return achieved on invested capital and the weighted average cost of capital (cf. Fitzgerald (2007), p. 226; see Arnold (2005), for a discussion on the calculation of WACC).
[168] See for the advantages for an adoption of EVA on a segmental basis and its implications on IFRS 8: Preißner (2007), p. 374, Heintges & Urbanczik et al. (2008), pp. 2778 et seqq. with regards to its utilisation inside profit centre: Ruhnke (2008), p. 170 and Haller (2006), p. 153.
[169] Cf. Ruhnke (2008), p. 170.

profit of a profit centre is maximised'[170]. Thus, if taken, a perspective which has an organisational and leadership focus rather than profit centre controlling, can be characterised as an incentive system with motivational and control purpose.[171]

It becomes evident that the intersections between the different fields of the present analysis depend on the chosen perspective. The rather technical perspective, which takes an operational view upon the approach, indicates that the definition of profit centre complies with the requirements of IFRS 8. From a leadership viewpoint, the profit centre functions as a motivational means to overcome inefficiencies inflicted by the relationship between principal and agent within a hierarchy. Thus the application of the profit centre approach is supported from the very essence of the need for internal reporting.[172] If interpreting the profit centre concept as the combination of responsibility accounting and an incentive system guided by a focus on the maximisation of shareholder value, the overlap to the theoretical reasoning behind the managerial approach becomes obvious.

Taken combined, the adoption of the profit centre concept as the source for data that is to be reported by IFRS 8, i.e. the managerial approach, seems plausible.[173] However this depends on the proper functioning of the profit centre. The next section will outline the requirements for the successful implementation and operation of profit centre within an organisation.

5.2 Requirements

The previous sections have shown the intersections between controlling for profit centre and the managerial approach in terms of its embodiment within IFRS 8. Especially the notion of responsibility accounting, and moreover the description of profit centre as incentive systems, are based on certain organisational particularities as well requirements upon the confinement of a profit centre. These are required in order to provide the premises the means to evoke the

[170] Khan & Jain (1996), section 21.6.
[171] Cf. Preißner (2007), p. 363.
[172] For a more detailed reasoning behind the qualitative requirements of a controlling system from an agency perspective see: Haaker (2005), p. 354 et seq.
[173] See with the same opinion Haller (2006), pp. 143 et seqq. The rather extensive argumentation for an adoption of profit centre controlling as the corresponding management accounting concept is necessary based on that the standard setter does not require nor define a certain source or conceptual basis for the utilised management data. Therefore any other concept might have been adopted as well. The explained degree of overlapping however makes this concept a very rational choice.

desired managerial behaviour within the sub-unit and furthermore to enable the chief decision maker to assess the performance of the profit centre.[174]

- Firstly it needs to be possible to unambiguously determine the performance of a sub-unit. This requires the distribution of overhead costs and revenues in a way that is fair according to the allocable consumption as well as output of a profit centre. Furthermore the appropriate fixing of internal transfer pricing is needed to create the independence that the whole idea of profit centre structure is based on.[175]
- Secondly, it is crucial that the manager of the sub-unit has sufficient independence and therefore the possibility to influence the outcome of the profit centre he or she is held responsible for, i.e. any profit measure the managerial performance is assessed against.[176]
- Lastly, it is necessary that the manager have an understanding of the measure he or she is assessed with and additionally perceives this method as fair.[177]

These particularities upon the design and assessment of a profit centre are crucial to guarantee that the management acts in such a way that the residual claimant, i.e. the shareholder, benefits. If the management cannot influence the assessment measure or perceives it as unfair, or maybe even does not understand its calculation since they are too complex, the concept of profit centre controlling would be impotent in terms of its described advantages.[178]

[174] Cf. Stelling (2005),p. 255.
[175] Cf. Schiller (1999),p. 655-673.
[176] Cf. Preißner (2007), p. 367 with emphasis upon the maximisation of shareholder value: Haller (2006), p. 149.
[177] Cf. Stelling (2005), p. 255.
[178] Cf. Stelling (2005), p. 255.

6 Evaluation of segment reporting based on management accounting

This chapter aims to analyse the effect the use of management data has upon the individual QCs of financial reporting when adopted for segment reporting according to IFRS 8. Some of the findings will be limited to the previously outlined profit centre concept where others are not dependent on a specific management control concept.

6.1 Advantages of the managerial approach for segment reporting

An advantage might be identified in terms of an enhanced understanding of reporting for segments because of a higher degree of transparency in the process of defining reportable segments.[179] This is mainly due to the sheer reliance on the internal organisational structure as described in section 4.4.3. The former IAS 14 R lacked such a clear and transparent approach, which as described caused rather mixed disclosure results in terms of scope, size and definition of a segment. An improved traceability might also be justified based on the clear conceptual idea behind the creation of a profit centre. Furthermore, performance measures like EVA are adopted, which further enhance transparency about the management objectives and thus aim to improve understandability from the investor point of view.[180] Empirical research about transparency, when included in an agency theoretical setting, provides additional support for this argument. The findings indicate a higher importance of transparency for larger firms compared to their smaller peers, which leads to decreasing external agency costs.[181] With reference the fifth chapter, this indicates that the rationale behind the use of profit centre does indeed expand into the external agency relation as intended by the IASB.

The analysis in the previous sections has described the advantages and the rationale behind the implementation of profit centre controlling. This has highlighted that the decision whether

[179] Cf. Alexander & Britton et al. (2007), p. 593. Though it needs to be acknowledged that transparency is not an articulated characteristic of decision useful information under the framework of IFRSs. Having said that, in the course of composing the conceptual framework does the IASB consider an explicit mentioning of transparency as redundant since it is already included inside the other characteristics. This leads the board to conclude in DP, BC2.45, that: `*Enhancing understandability [...] also improves transparency*.´ The reasoning above is thus nothing more than the reversal of the quoted relationship.

[180] Cf. Stern & Shiely et al. (2003), pp. 183 et seq. and generally about the disclosure of management objectives for an enhanced transparency: Grottke & Krammer (2008), p. 673.

[181] Cf. Aggarwal & Kyaw (2009), pp. 1 et seqq.

or not to adopt such an approach is initially not affected by external reporting needs. Thus the costs for its set-up and maintenance, as well as for possible licensing and consulting fees for connected concepts like EVA, do not have to be taken into account when evaluating the cost-effectiveness. Since the evaluation of costs and benefits is `*substantially a judgmental process*´[182], some kind of relative measure might be useful to base this judgement on. So the question arises: balanced relative to what? As described in section 4.3.3 the predecessor of the current standard, IAS 14 R, required disclosure of geographical or LoB segments even in a case were the internal organisation structure differed from these dimensions. Under IFRS 8, no segment has to be created solely for external purposes; thus, these cost savings improve the balance between cost and benefit relative to the earlier standard.[183] Since this data is already available and does not need to be created, the requirement of timeliness is enhanced as well. These factors indicate that the principle of lean accounting as mentioned in section 3.3.1 is in fact achieved by IFRS 8.

Relevance itself, as highlighted by section 3.3.1, is the main argument for an adoption of the managerial approach when taken in a general perspective. Relevance has already been described as the potential of certain information to alter or confirm the economic decisions of users. The conceptual idea behind an organisational disaggregation of the business into profit centre had motivational and control aims. On the senior management level, it was supposed to support their task of optimising the allocation of productive resources in order to maximise the shareholder value. In correspondence to this, it was the function of performance indicators to bring the incentives of the manager responsible for the individual segment in line with this overall objective. Based on the already highlighted implicit embracement of the shareholder-value approach by the IASB, a disclosure of internal reporting information, whose underlying rationale is the increase of shareholder wealth by minimizing the internal agency costs, can only be described as relevant from a theoretical, and conceptual, point of view.

Taking the positive effects described above into a combined perspective highlights further advantages. Firstly section 2.3.2 has outlined the timeliness, as well as the balance between cost and benefit, as constraints upon relevant and reliable information. Thus the timelier reporting of segment information under reduced costs can be beneficial for the relevance of disclosed information. Secondly, the increased transparency about the management objectives as well as internal efficiency of internal profit centre organisation can stimulate users to place

[182] IFRS, Framework § 44.
[183] Cf. Alexander & Britton et al. (2007), p. 582.

demands upon the management to implement sufficient structures for their overall objective of shareholder value maximisation. This elicits incentives among the senior management to correspond to these demands and have an efficient internal reporting system in place in case this has not been implemented before. As a result, the information provided will be more relevant.[184] Besides, the management is more directly accountable for the performance of the individual segments, which creates pressure to disinvest under performing segments. This theoretical reasoning has found verification out of empirical research conducted following the adoption of SFAS 131 in the US.[185] As a background, the assumption that managers face potential costs when disclosing under performing segments builds upon the existence of agency problems, thus the management avoids their disclosure if possible. The findings point out that a shift from the industry approach of SFAS 14 to the managerial approach in SFAS 131 has resulted in the disclosure of an increased number of segments with lower abnormal profits. Since the change from IAS 14 R to IFRS 8 comprises a similar change in approaches, this might allow for an empirical confirmation of the theoretical argumentation for an improved relevance as outlined above.[186]

6.2 Disadvantages of the managerial approach for segment reporting

The relevance of segment disclosure as perceived by users has received attention from numerous scholars and resulted in some empirical research which will be discussed below. On the contrary to the cited findings above, other results indicate that the former `risk and reward´ approach as used in IAS 14 R was in fact superior in providing relevant information for users. This seems especially valid in respect to the predictive value of segment disclosure.[187] Other doubts regarding the relevance of management data for external users is based upon practical reasoning. As previously described, a particular goal of a profit centre is to account the alignment of interests between the senior and lower level management. This purpose is often accomplished by integrating calculative costs and intersegment transfer pricing. These measures might be relevant from an internal perspective so as to show the full

[184] Cf. Grottke & Krammer (2008), p. 678.
[185] See for the following remarks: Berger & Hann (2007), pp. 869 et seqq. and their sources.
[186] Of interest from an European perspective might be a recent study about the effects of an early adoption of IFRS 8 among German DAX companies which failed to identify significant difference compared to the prior segment disclosure. Cf. Blase & Müller (2009), p. 544. This might be interpreted as a sign of relevance enforcement already realised by IAS 14R or the logic that only companies that had a high quality in terms of disclosed segments in place would be among the early adopters. However due to the limited size of the sample are these findings of rather small value for broader conclusions.
[187] Cf. Salter & Swanson (1996), pp. 120 et seq., Fey & Mujkanovic (1999), p. 262.

economic effects of decisions on a segment level or be used to set up ambitious plans and budgets to motivate the responsible manager. Additionally, certain external risks can be excluded from the performance indicators – like EVA – with the intention of increasing the desired responsibility, and thus motivational effect from the lower level management. Section 5.2 has highlighted the importance of such fair and influenceable measures. How the outcome of such an adjustment is supposed to increase the relevance of information for users to place their economic predictions on remains dubious. This shows that adopting the managerial approach, and thus reporting information coming from behavioural control within a profit centre, does not necessarily provide users with relevant information.[188] Another remark could concern the incoherency between the characteristic of prudence and the reporting of calculative measures.

Most commonly cited amongst the critical remarks expressed about the general reliance upon managerial data is the lack of comparability. Comparability as defined by the IASB can be separated into inter- and intra-company, as well as temporal comparability. The analysis above has shown that performance indicators within profit centres are influenced by reasons not identical to the needs of external users. Furthermore the adoption of EVA as an example of such a measure is completely left to the discretion of the management and is just one option among many. The individuality among different companies results in different needs and thus different internal organisational structures. Faced with this, an inter-company comparison is hardly feasible.[189] An identical degree of flexibility or individuality is permitted under IFRS 8, even between different segments. The requirements of the profit centre concept have shown that there is in fact a rationale and need for an individual structure of profit centre. Thus even intra-company comparisons seem difficult. Temporal as the last kind of comparability defined as desirable by external users might be impaired by the possibility for the senior management to change the internal reporting structure. The harmful effect on temporal comparability is however limited by IFRS 8 § 29-30.[190] Overall, the comparability of segment information can be evaluated as significantly impaired compared to the former IAS 14 R which allowed for LoB or geographical comparison.

[188] Cf. Weißenberger & Maier (2006), pp. 2080 et seqq.
[189] Already with this observation for SFAS 131: Fey & Mujkanovic (1999), p. 267.
[190] Cf. Fink & Ulbricht (2007), p. 984.

Assessment of the effect on reliability, as the remaining primary qualitative characteristic, requires a broader approach already briefly introduced in section 3.4, namely the circulation and manipulation effect.

The starting point for the logic behind the circulation effect is that the management has the incentives to report a certain predetermined result or effect. The reason for the management to disclose such information might on the one hand be related to their fear of providing their competitors with sensitive data about segments that generate abnormal profits, for example. This would result in a competitive disadvantage since competitors might enter into those markets.[191] For the characteristic of completeness, this could be harmful. The circulation effect predicts that, based on these incentives, the management acts opportunistically and alters the internal reporting system in order to change the result reported externally.[192] In doing so the characteristic of neutrality is violated. Placed inside the present scenario, that means that the requirements of an operational profit centre will be ignored when changing its composition, and its advantages dissolve.[193]

Unlike the circulation effect, the manipulation effect has its starting point on the level of the lower management. The agency theoretical thoughts elaborated in chapter two show the rationale behind this and the possibility of a moral hazard with the lower level manager. Placed once more in the chosen setting, a lower level manager manipulates the outcome of the EVA measure in his/her favour by certain dysfunctional short-term behaviour.[194] If the agency problem is not solved completely, which might actually be only possible in an ideal model, the formally internal problem is then expanded to the external user. The reported information may then be correctly submitted by the senior management but falsely conducted by responsible on a lower level. The fact that an external auditor can then only audit the reliance of the disclosed information upon the internal source and not its quality might lead to negative effects on the assessed accuracy of segment reporting.

Combining the reasoning above, the reliance on profit centre for segment reporting data has potentially negative effects on the characteristics of prudence, completeness, faithfulness and

[191] Cf. Lopatta (2007), pp. 414 et seqq.
[192] Cf. Weißenberger & Maier (2006), pp. 2079 et seqq.
[193] Cf. Grottke & Krammer (2008), pp. 675 et seqq.
[194] Which is according to Otley (1999), p. 373, the nature of this measure.

neutrality. Based on the importance of those characteristics for the reliability of information, it seems at least disputable if users perceive the reporting for segments as such.

6.3 Preliminary analysis II

The previous analysis has resulted in rather mixed findings regarding the effect that segment reporting based on management data has on the individual QCs of financial statements. Clearly beneficial, there is enhanced understandability, which is indentified as a result of improved transparency and traceability. The main reason for this is the clear conceptual idea behind profit centre and the adoption of performance measures like EVA. Additionally, an improved relevance is achieved by the realisation of lean accounting and the embracement of a shareholder-value focus by the utilised profit centre concept. Further support for a higher degree of relevance comes from empirical findings based on the nearly identical US counterpart. The findings confirm the theoretical reasoning behind reporting for segments under IFRS 8, at least with respect to relevance and understandability. Thus the conclusions of section 3.3.1 can be confirmed at least within the chosen focus.

However the findings regarding relevance are not consistent. Reason to believe that relevance is in fact impaired, compared to the prior standard, comes from empirical studies with particular interest on the predictive value of information disclosed under IFRS 8. Further doubts are raised when some particularities of profit centre controlling and applied performance measure are taken into account, especially for the prudence and motivational purpose of such data. IFRS 8 has been negatively perceived in view of comparability. The circulation effect outlines the potentially harmful effects upon neutrality and completeness for reasons of opportunistic behaviour and fear of competitors. Moreover, the manipulation effect illustrates potential impairments of reliability. Correspondently to the above-confirmed findings, the advantages are now and some, if not most, of the disadvantages described in section 3.2.2, confirmed with regards to the analysed scenario.

It becomes apparent that the IFRS 8, and a utilisation of profit centre as its managerial counterpart, results in a different emphasis upon the individual primary QCs of financial statements under IFRS. The overall question however remains how this affects the objective of decision usefulness. Since there is no hierarchy between comparability, understandability,

relevance and reliability included in the framework, a clear answer is hardly unambiguous. The next chapter tries to establish an academic judgment when trying to trace a hierarchy between the primary QCs, implicitly implemented by the IASB within IFRS 8.

7 Implicit hierarchy by the standard setter

The previous chapter has pointed out that the managerial approach, in its application in IFRS 8, results in very different consequences regarding the individual QCs. Under the overall objective that information disclosed under IFRS have to be decision useful, the outcome of the 6th chapter indicates an implicit hierarchy between the primary QCs. In order to turn this notion into a more tangible argument, the present chapter applies a more aggregated perspective. Both IFRS 8 and IAS 14 R will firstly be analysed and secondly compared regarding their dependency on either rules or principles. The outcome should reveal whether or not the development from IAS 14 R to IFRS 8 displays a change or shift in the preferences of the standard setter in terms the reliance of segment reporting upon rules or principles. By supplementing this with a review of the current academic discourse about the effect of rules and principles upon the primary QCs will additional arguments for the existence of an implicit hierarchy be provided.

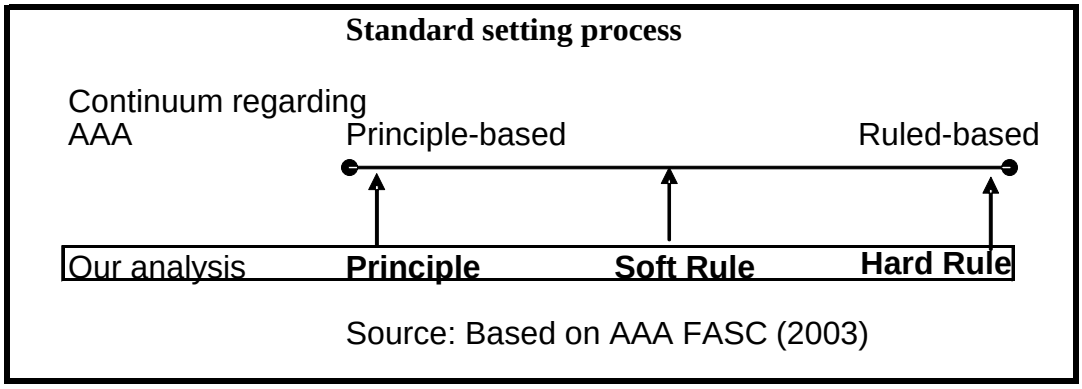
7.1 The change in the preference of the standard setter

The outcome of the standard setting process can generally be interpreted as located on a continuum between a pole of rigid rules and another of economic concepts that require the application of judgments i.e. principles.[195] Further research concludes that this categorisation in rules-based versus principles-based standards is not meaningful by itself, unless these characteristics are taken in relative terms.[196] Thus an analysis needs to conduct a comparison between at least two standards to derive meaningful results. Furthermore, it needs to be acknowledged that a purely principles-based standard would not exist; otherwise there would be no need for any standard and only a framework in place. Hence, the existence of some rules in the standards is necessary to clarify the framework and to prevent potential accounting misuse. Following the same reasoning, rules must be based on principles otherwise there would be no common basis.[197] The current academic debate concerning rule and principle reliance of accounting standard will provide the background for the following

[195] Cf. AAA FASC (2003[0]), p. 74 et seq.
[196] Cf. Bennett & Bradbury et al. (2006), p. 191.
[197] Cf. Bennett & Bradbury et al. (2006), p. 198.

analysis.[198] Within each standard the smallest unit of analysis is a paragraph which is categorised as being either a *principle* or a *rule,* further either a *hard rule* or a *soft rule*.[199] Whereby a *principle* is defined as a statement in which a purpose is set with little if any operational guidance, or the overall criteria and conventions. It may be also pictured as the general prevailing requirement or an integrated coherent framework.[200] A *hard rule* labels a statement that advances determination of what conduct is permissible with a concrete level of detail.[201] A *soft rule* is defined as a rule that requires the preparer's judgment in the application of the rule. [202] In the initially mentioned continuum between principle and rule reliance of a standard, the soft rule would be somewhere in between the severity of a hard rule and the laxity of a principle.[203] Graph 1 shows the three items that provide the categories upon which IAS 14 R and IFRS 8 will be analysed and subsequently compared by.[204]

Graph 1



[198] Bennett & Bradbury et al. provide a comparative analysis of the standards on R&D in the U.S., New Zealand and in IFRS. Cf. Bennett & Bradbury et al. (2006). Besides this, the analysis of Bennett & Bradbury et al. was applied in standards based on measurement, while the present analysis is focused on standards that deal with disclosure. Benston & Bromwich et al. notice the possible inconsistence between principles and guidance in the standards. Cf. Benston & Bromwich et al. (2006).

[199] Bennett & Bradbury et al. (2006) based their analysis unit choice in Mason & Gibbins (1991) in which the analysis determines the unit as a 'phrase'. In Bennett & Bradbury et al. analysis, in many cases a 'phrase' or analysis unit is a paragraph of the standard. Occasionally, few related paragraphs were grouped into a single phrase and also a paragraph was subdivided into several phrases. For this reason we maintained the purpose of taking one paragraph as the smallest analysis unit. The clauses related to the entry-into-force date in the three standards are not considered in this analysis. Cf Bennett & Bradbury et al. (2006), p. 193.

[200] Alexander's types A and B. Cf. Alexander (1999); Nobes (2005) p.26.

[201] For Kaplow, a rule may require an advance determination of what conduct is permissible, leaving only factual issues for the adjudicator, whereas the principle may entail leaving both the specification of what conduct is allowable and factual issues for the adjudicator (Kaplow, 1992, pp. 559-60). Similarly see Alexander (1999) and his Type C and further Nobes (2005), p 26, as based in Nelson (2003).

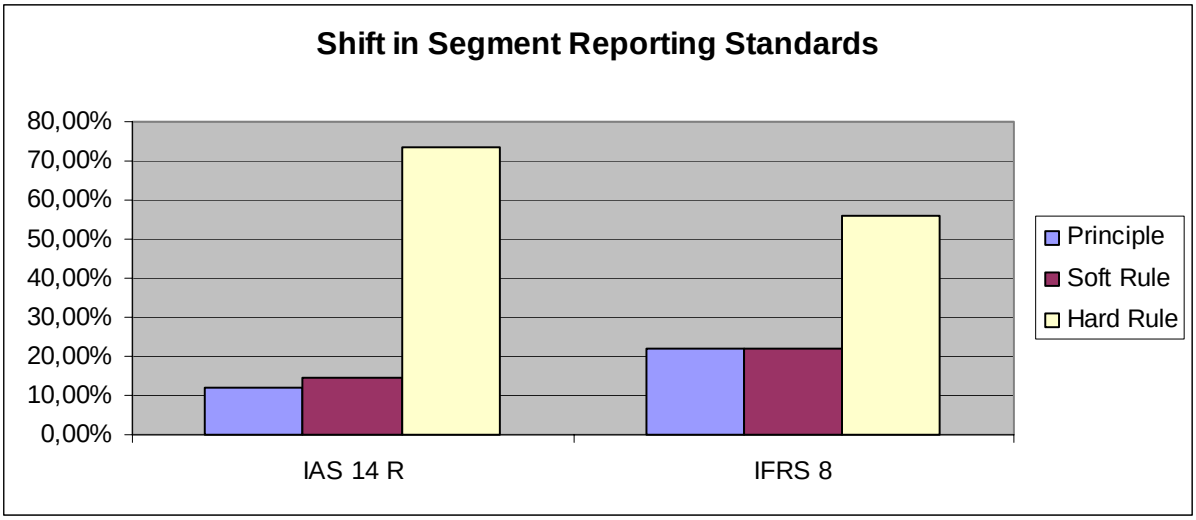
[202] Bennett & Bradbury et al. enabled the category of "judgment" in their category even though they differentiated between *hard rules* (that determine in advance what conduct is permissible) and *soft rules* (which require judgment). Cf. Bennett & Bradbury et al. (2006) p. 199.

[203] Similar AAA FASC (2003[0]), p. 74 et seq.

[204] Additional to the these three categories include Bennett & Bradbury et al.-item of assistance for judgments- as a fourth one. That said, since this category enables guidance in the application of any of the other categories and has thus been excluded due to its complementary nature and dependence the other categories. Cf. Bennett & Bradbury et al. (2006), p. 199.

The results show a significant shift from rules to a higher dependence upon principles in the change from IAS 14 R to IFRS 8. A rise in proportion of articles categorized as *principles* (12% to 22%) and *soft rules* (15% to 22%) becomes evident, accompanied with a decrease in the proportion of *hard rules* (73% to 56%). Also the drop in the number of articles (84 to 34 articles) provides a tangible support for the argument of an increased importance of principles.[205] Graph 2 illustrates the loosen reliance on *hard-rules* for the IASB; and instead the shifting focus towards a more framework based i.e. principle based approach when introducing IFRS 8.

Graph 2



Source: the authors. See appendix

The following section will show the impact of rules and principles upon the individual primary QCs of IFRS. In doing so it becomes possible to link the above articulated findings with the overall question concerning the existence of an implicit hierarchy.

7.2 Primary QCs within the continuum of rules and principles

While formulating a new standard the standard setter is faced with a trade-off between including too few rules / vague communication and too many rules / high complexity of the standard.[206] This trade-off comprises additional consequences for the primary QCs of IFRS.

[205] Cf. Schipper (2003), p. 67 and similar Nobes (2005), p. 32.
[206] Cf. Nelson (2003), p. 96.

The effects of detailed implementation guidance or rules-based standards are the increased comparability and increased verifiability.[207] The specific guidance on how to apply a standard should reduce the effects of differences that could result from the application of a professional judgment. Detailed guidance increases the verifiability in the sense of consensus about measurements by the preparers and auditors providing them with a common knowledge base and a common set of assumptions, reducing the differences in measurements.[208] Furthermore, rules which do not include room for judgment assure the comparability and consistency across firms and through time. That said, such a rather rules-based standard would be deficient in for reliability in terms of its ability to reflect the underlying economic substance of a reported entity that might differ across firms and through time.

At the opposite end of the continuum, a rather principles-based standard would require the application of a judgment and expertise by the preparer of statements, which would be more costly to implement and which would lead to results that are neither comparable nor consistent through time, however would improve "*the usefulness of financial reporting by focusing on the primary characteristics of relevance and reliability*".[209] This deserves further attention since it can be argued that the original rationale behind the very existence of accounting standards is comparability and consistency.[210] Thus, relevance and reliability would enter in the standard setting process once comparability is achieved. In contrast to this,(something is missing here) indicates the secondary QC of substance over form that economic substance, rather than the form of any given transaction, should be of importance in order to increase reliability. Based on this a principles-based standard focuses on the primary characteristics of relevance and reliability and view uniformity as secondary.[211] In particular the effect of a shift into rather principles-based standards with regards to reliability seems controversial. Namely, would a rather principle-based standard require a rising expertise to be exercised by the preparers? This would increase the volatility of the financial information reported. Thereby, it decreases comparability and neutrality as well as prudence of reported information which in turn impairs reliability.[212]

---

[207] Cf. Schipper (2003), p. 67.; Benston & Bromwich et al. (2006), p. 168.
[208] Cf. Schipper (2003), pp. 67-69.
[209] AAA FASC (2003[0]), p. 74.[0]
[210] Schipper (2003), pp.67-69.
[211] Bennett & Bradbury et al. (2006), p.200.; AAA FASC (2003), p. 74.
[212] Schipper expressed her doubts–in case of the adoption of principles-based standards- in the way the transition would be performed to a lower level of detail standards by the FASB and their effects in the volatility of the income. Cf. Schipper (2003), pp. 69 et seqq. Which Nelson (2003), p. 100, takes as the departure point when arguing for a strong enforcement activity to guarantee accurate and conservative reporting.

7.3 Conclusive analysis

The findings above show that a shift from *hard rules* in the standard i.e. IAS 14 R to an increased inclusion of *principles* and *soft rules* in IFRS 8 has indeed taken place. However the following review of the academic debate regarding the influence of such a shift within the described continuum has upon the individual primary QCs resulted in partly mixed findings. *Hard rules* have been identified as being beneficial for the comparability of disclosed financial information both over time and between companies. The increase of *soft rules* and *principles* seem to be able to generate standards that disclose information which are more relevant and reliable. Reliability however might be impaired due to an increased application of judgment which has the potential to increase volatility within the disclosed financial information. To sum up, a shift from a rather rules-based towards a more principle-based standard indicates a change in the weighting or importance the standard setter attributes to the individual primary QCs in the achievement of decision usefulness. [213] Concrete does (something is missing here) this mean that the standard setter appraises the primary QC of relevance as more important rather than comparability for the provision of decision useful information. The findings are not clear regarding the effect such a shift comprises for the primary QC of reliability. Therefore, it at least seems doubtful if reliability is of equally importance relative to the primary QC of relevance.

In accord with section 3.4 does section 6.3 derive at the conclusion that IFRS 8 based on a utilization of profit centre information is beneficial mainly for relevance. Clearly negative is the outcome of the analysis regarding the effect upon comparability and at least critical regarding the reliability of financial information disclosed within the outlined scenario (rework). If taken combined do the analysis at all three stages within this academic judgment point towards the same conclusion. It seems appropriate to argue that the IASB has with the managerial approach in IFRS 8 in fact introduced an implicit hierarchy between the primary QCs. This hierarchy is characterised by an emphasis on relevance over reliability and comparability in the provision of financial information that are aimed to be decision useful.

Paragraph 45 of the IFRS Framework signifies that: *`Generally the aim is to achieve an appropriate balance among the characteristics in order to meet the objective of financial statements.´* On ground of the results above, is it not feasible how the managerial approach in

[213] Cf. Bennett & Bradbury et al. (2006), p. 200.

IFRS 8 should be able to achieve this balance. The same paragraph requires a professional judgment in order to determine the relative importance of the characteristics in a specific case. As an academic analogue, the present judgment identifies an inequality between the primary QCs that result in an implicit hierarchy. Such a weighting does not seem justified by the present framework, which contains no alteration of the importance between the individual primary QCs. Thus, as long as there is no such hierarchy made explicit and as such implemented in the framework it seems questionable if the management approach within IFRS 8 is able to lead to segment statements that are decision useful.

The reason for this might be explained by the origin, of the managerial approach in its application within segment reporting, in the US GAAP. In fact the US GAAP framework has an explicit hierarchy between relevance, reliability, comparability and understandability in place, though these QCs are not defined identically. As initially described was the adoption of IFRS 8 and with it, the full managerial approach, done in the course of the short-term convergence project. Hence the highlighted inconsistency might vanish as soon as the converged framework is in place.

The problem might be considered of minor importance since IFRS 8 solely covers the disclosure of segment information and no measurement issues. An affect upon the financial result of the economic entity thus the dividends to the shareholders seem unlikely. In coherence with the orientation towards shareholder value, might the subject as a whole appear to be less of concern. Having said that, IFRS 3 *Business Combination* requires in § 55 that the goodwill acquired in a business combination has to be tested at least annually for impairment. This has to be done in accordance with IAS 36 *Impairment of Assets*. IAS 36 § 80b defines the maximal size of a cash generating unit (CGU hereafter) to: *`not be larger than an operating segment determined in accordance with IFRS 8 Operating Segments´*.[214] An extensive reasoning around this topic is not permitted with regards to the present focus, the influence of the impairment-only approach within the profit and loss statement can be significant and incentives for the avoidance of an impairment charge well documented.[215] Thus, IFRS 8 affects a range of other standards, and with it the outlines problems i.e. negligence of comparability and reliability.

[214] Which is in fact the criterion most commonly applied in annual reports. Cf. Deloitte & TT (2005), p. 4.
[215] See exemplary with the notion of *`big bath accounting´*: Ruhnke (2008), p. 478.

8 Conclusion

The present thesis addresses the implication the managerial approach has upon the decision usefulness of financial information disclosed under IFRS 8. By outlining the common theoretical foundation of external and internal accounting it becomes possible to highlight the particularities, functions and intersections of both. This provides the starting point to analyse the theoretical background the managerial approach is based upon. A descriptive review of the standards the managerial approach the finds application in, is followed by a first analysis concerning the advantages and disadvantages of the approach. The results indicate that an application of the management approach has an unequal effect on the individual QCs of IFRS. Namely relevance seems to be improved on cost of reliability and comparability. It becomes furthermore apparent that the findings are rather inconsistent due to the heterogeneous nature of the management approach and the relevant IFRS/IAS.

Hence the subsequent focus is narrowed upon segment reporting. The rational and basic concept behind the reporting of segments leads to a review of the regulatory approach. It becomes evident that the current IFRS 8 mirrors its US counterpart SFAS 131 in most aspects, and in doing so adopts a somewhat full management approach. Profit centre controlling is introduced as a management control system with significant conceptual intersections to IFRS 8 in order to justify its function in providing the management information needed by the management approach. By that it becomes possible to draw conclusions about the effect that could result from such a blending of external and internal accounting means has. On ground of the previous findings is a second analysis conducted which findings support the conclusions of the first. In particular an improvement of relevance at the expense of impaired comparability and reliability can be observed.

The following chapter takes a more aggregated perspective when trying to trace further evidence about the existence of a hierarchy between the primary QCs of IFRS. An analysis is conducted regarding the degree IFRS 8 and its predecessor IAS 14 R are either rather rules or principle based. The following comparison reveals a shift towards a more principles based approach in the present IFRS 8. The results are subsequently placed within the current academic debate. That way it becomes feasible to conclude that the IASB has in fact implemented an implicit hierarchy between the primary QCs of IFRS and thus confirms the findings of the previous analysis.

In conclusion the ability of the managerial approach to deliver decision useful information requires a certain weighting between the primary QCs of IFRS in terms of their importance. The present analysis is able to outline the resulting hierarchy from three different perspectives. However this hierarchy is implicit and has not yet found its explicit embedding in the current framework. Therefore, from a perspective that takes the existing framework as a benchmark, the academic judgment is that the ability of the managerial approaches within IFRS 8 to disclose financial information that are decision useful is limited to the degree its application results in a substantially unequal treatment between the primary QCs of IFRS.

However the conclusion as drawn above is limited in its ability to be generalised. The term of an academic judgment includes a notion of subjectivity within a particular case. This makes the findings unsuitable for a transfer to other situations. Furthermore is the choice of the agency theory as the theoretical framework just one amongst several options. The same applies to profit centre controlling as being the source of management data. Every other choice might have altered the findings. A further constraint acknowledges the fact that the conclusion as a whole is based on the present framework. Giving that the conduction of a conceptual framework as part of the convergence project is underway, the highlighted problem might be of rather temporary nature and likely to vanish.

The ongoing convergence project will continue to produce alterations of accounting standards based on a given framework or the change of a framework while serving as the background for existing standards. The interdependency of both standards and framework and the effect changes have upon the objective of financial reporting is likely to continue providing a promising field for future research.

A. Bibliography

- American Accounting Association (2003), `Financial Accounting Standards Committee, Evaluating Concepts-Based vs. Rules-Based Approaches to Standard Setting´ in: *Accounting Horizons*, Vol. 17, No. 1, pp. 73-89.

- AEKU- Arbeitskreis Externe Unternehmensrechnung der Schmalenbach-Gesellschaft (2002), `Grundsätze für das Value Reporting´, in: *Der Betrieb*, Vol. 55, No. 45, pp. 2337-2340.

- Aggarwal, R. & Kyan, N. (2009), `International Variation in Transparency and Capital Structure: Evidence from European Firms´, in: *Journal of International Financial Management & Accounting*, Vol. 20, No. 1. pp. 1-34.

- Alexander, D. (1999), `A benchmark for the adequacy of published financial statements´, in: *Accounting & Business Research*, Vol. 29, No. 3, pp. 239-253.

- Alexander, D. & Britton, A. et al. (2007), `International Financial Reporting and Analysis´, 3rd Ed., Cengage Learning Service.

- Alexander, D. & Nobes, C. (2007), `Financial Accounting: An International Introduction´, 3rd Ed., Prentice Hall.

- Alvarez, M. (2004), `Segmentsberichterstattung und Segmentanalyse´, Gabler.

- Amit, R. & Livnat, J. (1988), `Diversification Strategies, Business Cycles and Economic Performance´, in: *Strategic Management Journal*, Vol. 9, No.2, pp. 99-110.

- Arnold, G. (2005), `Corporate Financial Management´, Harlow.

- Bamber, L. Braun, K. et al. (2008), `Managerial Accounting: International Edition´, Pearson Education.

- Benedict, A. & Elliott, B. (2008), `Financial Accounting´, Prentice Hall.

- Bennett, B. & Bradbury, M. et al. (2006), `Rules, Principles and Judgments in Accounting Standards´, in: *Abacus*, Vol. 42, No. 2, pp. 189-204.

- Benston, G. J. & Bromwich, M. et al. (2006), `Principles- Versus Rules-Based Accounting Standards: The FASB's Standard Setting Strategy´, in: *Abacus*, Vol. 42 No. 2, 65-188.

- Berger, P. & Hann, R. (2007), `Segment Profitability and the Proprietary and Agency costs of Disclosure´, in: *The Accounting Review*, Vol. 82, No. 4, pp. 869-906.

- Bhimani, A. (2006), `Contemporary Issues in Management Accounting´, Oxford University Press.

- Blase, S. & Müller, S. (2009), `Empirische Analyse der vorzeitigen IFRS-8-Erstanwendung´, in: *Die Wirtschaftsprüfung*, Vol. 10/2009, pp. 537-544.

- Bouwens, J. & Spekle, R. (2007), `Does EVA add value?´, in: T. Hopper & D. Northcott, et al. (Eds.), Issues in Management Accounting, 3rd Ed., pp. 245-268, Prentice Hall.

- Bühner, R. (1985), `Strategie und Organisation, Analyse und Planung der Unternehmensdiversifikation mit Fallbeispielen.´, Gabler.

- Carter, J. (1977), `In Search of Synergy: A Structure-Performance Test´, in: *The Review of Economics and Statistics*, Vol. 59, No. 3, pp. 279-289.

- Cataldo, A. (2003), `Information Asymmetry´, Vol. 13: A Unifying Concept for Financial & Managerial Accounting Theories, JAI Press.

- Coase, R. (1937), `The Nature of the Firm', in: *Economica*, New Series, Vol. 4, No. 16, pp. 386-405.

- Deloitte & TT, (2005), `Goodwill bilanzieren und steuern´.

- Derarca, D. (2009), `Operating Segments: Through Management's Eyes´, in: *Accountancy Ireland*, Vol. 41, No. 1, pp. 7-12.

- Dove, R. (1996), `A Two-Tier Slice For Segments´, in: *Accountancy International*, Vol. 117, No. 1232, pp. 65-67.

- DRSC (Deutsches Rechnungslegungs Standards Committee e.V.) (2006), `Veröffentlichte Diskussion zu ED IFRS-8: Operating Segments-21.03.2006´, pp. 1-9.

- Elliott, B. & Elliott, J. (2006), `Financial Accounting and Reporting´, 11th Ed., Pearson.

- Elliott, B. & Elliott, J. (2007), `Financial Accounting and Reporting´, 12th Ed., Prentice Hall.

- Epstein, B. & Jermakowicz, E. (2009), `IFRS Converges to U.S. GAAP on Segment Reporting´, in: *Journal of Accountancy*, Vol. 207, No. 4, pp. 50-52.

- Ernst, S. (2007), `Die Auswirkungen der IFRS-Rechnungslegung auf das Controlling´, GRIN.

- Ewert, R. & Wagenhofer, A. (2005), `Interne Unternehmensrechnung´, 6th Ed., Springer.

- FASB, SFAS 131: http://www.fasb.org/pdf/fas131.pdf last opened 10/04/2009.

- Fey, G. & Mujkanovic, R. (1999), `Segmentberichterstattung im internationalen Umfeld´, in: *Die Betriebswirtschaft*, Vol. 59, No. 2, pp. 261-275.

- Fink, C. & Ulbricht, P. (2007), `IFRS 8: Paradigmenwechsel in der Segmentberichterstattung´, in: *Der Betrieb*, Vol. 18/2007, pp. 981-985.

- Fitzgerald, L. (2007), `Performance measurement´, in: T. Hopper & D. Northcott, et al. (Eds.), Issues in Management Accounting, 3rd Ed pp. 223-241, Prentice Hall.

- Grottke, M. & Krammer, S. (2008), `Was bringt der management approach des IFRS 8 den Jahresabschlussadressaten? – Eine kritische Analyse´, in: *Zeitschrift für internationale und kapitalmarktorientierte Rechnungslegung*, Vol. 11. No. 2008, pp. 670-679.

- Groß, P. & Amen, M. (2003), `Rechtspflicht zur Unternehmensplanung?´, in: *Die Wirtschaftprüfung*, Vol. 56, No. 21, pp. 1161-1180.

- Haaker, A. (2005), `IFRS und wertorientiertes Controlling´, in: *Zeitschrift für internationale und kapitalmarktorientierte Rechnungslegung*, Vol. 5, No. 9, pp. 351-357.

- Haller, A. (2006), `Segmentberichterstattung – Schnittstelle zwischen Controlling und Rechnungslegung´, in: Wagenhofer, Alfred, (Eds.) Controlling und IFRS-Rechnungslegung : Konzepte, Schnittstellen, Umsetzung, pp. 143-168, Erich Schmidt.

- Hebeler, C. (2003), `Harmonisierung des internen und externen Rechnungswesens. US-amerikanische Accounting- Systeme als konzeptionelle Grundlage für deutsche Unternehmen?´, Deutscher Universitäts-Verlag.

- Heintges, S. & Urbanczik, P. et al. (2008), `Regelungen, Fallstricke und Überraschungen der Segmentberichterstattung nach IFRS 8´, in: *Der Betrieb*, Vol. 51/52, No.12, pp. 2773-2780.

- Hunt, C. (1996), `Through management's eyes´, in: *CA Magazine*, Vol. 129, No. 4, pp. 47-48.

- IASB (2007), 'International financial reporting standards (IFRSs) 2007: including International accounting standards (IASs) and interpretations as at 1 January 2007', Kluwer.

- IASB, ED 8 Basis for conclusions http://www.hkicpa.org.hk/professionaltechnical/accounting/exposuredraft/2006/ed8bc.pdf ; last opened 15/04/2009.

- IASB, IAS 14 R: http://www.ax-net.de/inhalt/standards/ias_14/ias14_2002.pdf ;last opened 11/04/2009.

- IASB, IFRS 8: http://www.ifrs-portal.com/Texte_englisch/Standards/Standards_aktuell/IFRS_8/IFRS_8_index.html ;last opened 12/04/2009.

- IASB, Memorandum of Understanding (2006): http://www.iasb.org/NR/rdonlyres/874B63FB-56DB-4B78-B7AF-49BBA18C98D9/0/MoU.pdf ;last opened 15/04/2009.

- Jensen, M. & Meckling, W. (1976), `Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure´, in: *Journal of Financial Economics*, Vol. 3, No. 4, pp. 305-360.

- Johann, R. (2007), `Eine ökonomische Analyse der Segmentberichterstattung nach IFRS 8´, GRIN.

- Kahn, M. & Jain, K. (1986), `Management Accounting´, McGraw-Hill Education.

- Kaplow, L. (1992), `Rules Versus Standards: An Economic Analysis´, Duke Law Journal, Vol. 42, No. 3, pp. 557-629.

- Lange, C. & Schäfer, S. (2008), `Verhaltensorientierung im Controlling: Forschungsstand und Entwicklungsperspektiven´, in: Freidank, C-C. & Müller, S. et al. (Eds.:), Controlling und Rechnungslegung, pp. 141-157, Gabler.

- Lewis, R. & Pendrill, D. (2004), `Advanced Financial Accounting´, Pearson Education, 7th Ed.

- Li, S. & Greenwood, R. (2004), `The Effect of Within-Industry Diversification on Firm Performance: Synergy Creation, Multi-Market Contact and Market Structuration´, in: *Strategic Management Journal*, Vol. 25, No. 12, pp. 1131-1153.

- Lopatta, K. (2007), `IFRS und Controlling – Die Segmentberichterstattung als Schnittstelle zwischen externer und interner Unternehmensrechnung´, in: Funk, W. & Rossmanith, J. (Eds.:), Internationale Rechnungslegung und Internationales Controlling, pp. 405-424, Gabler.

- Markowitz, H. (1952), `Portfolio Selection´, in: *The Journal of Finance*, Vol. 7, No. 1, pp. 77-91.

- Martin, P. (1997), `The management approach´, in: *CA Magazine*, Vol. 130, No. 9, pp. 29-30.

- Mitch, D. & Koski-Grafer, S. (1998), `Segment Reporting under FAS 131: Key Issues, Tough Decisions´, in: *The Journal of Corporate Accounting and Finance*, Vol. 10, No. 1, pp. 91-97.

- Nailor, H. (1999), `Reasons for write-downs´, in: *Accountancy International*, Vol. 124, No. 1276, pp. 80-81.

- Nelson, M. (2003), `Behavioral Evidence of the Effects of Principles- and Rules-Based Standards´, in: *Accounting Horizons*, Vol. 17, No.1, pp. 91-104.

- Nichols, N. & Street, D. (2007), `The relationship between competition and business segment reporting decisions under the management approach of IAS 14 Revised´, in: *Journal of International Accounting, Auditing and Taxation*, Vol. 16, No.1, pp. 51-68.

- Nobes, C. W. (2005), `Rules-Based Standards and the Lack of Principles in Accounting´, in: *Accounting Horizons*, Vol. 19, No. 1, pp. 25-34.

- Nobes, C. & Parker, R. (2008), `Comparative International Accounting´, 10th Ed., Pearson.

- Otley, D. (1999), 'Performance management: a framework for management control systems research', in: *Management Accounting Research*, Vol. 10, No. 4, pp. 363-82.

- Pape, U. (2000), `Theoretische Grundlagen und praktische Umsetzung wertorientierter Unternehmensführung´, in: *Betriebs-Berater*, Vol. 55, No. 14, pp. 711-717.

- Paul, J. & Largay, J. (2005), `Does the "management approach" contribute to segment reporting transparency?´, in: *Business Horizons*, Vol. 48, No. 4, pp. 303-310.

- Picot, A. & Reichwald, R. et al. (2008), `Information, Organization and Management´, Springer.

- Prather-Kinsey, J. & Meek, G. (2004), `The effect of revised IAS 14 on segment reporting by IAS companies´, in: *European Accounting Review*, Vol. 13, No. 2, pp. 213-234.

- Preißner, A. (2007), `Praxiswissen Controlling´, Hanser Wirtschaft, 7th Ed.

- Ruhnke, K. (2008), `Rechnungslegung nach IFRS und HGB´, 2nd Ed., Schäffer-Poeschel.

- Salter, S. & Swanson, E. (1996), `Reporting Financial Information by Segment: A Comment of the American Accounting Association on the IASC Draft Statement of Principles´, in: *Accounting Horizons*, Vol. 10, No. 1. pp. 118-123.

- Schiller, U. (1999), `Information management and transfer pricing´, in: *The European Accounting Review*, Vol. 8, No. 4, pp. 655-673.

- Schipper, K. (2003), `Principle-Based Accounting Standards´, in: *Accounting Horizons*, Vol. 17, No. 1, pp. 61-72.

- Schwab, A. (2008), `Managementwissen für Ingenieure´, 4th Ed., Springer.

- Securities and Exchange Commission (2003): `Study Pursuant to Section 108(D) of the Sarbanes-Oxley Act of 2002 on the Adoption by the United States Financial Reporting System of a Principles-Based Accounting System´. On-line: http://www.sec.gov/news/studies/principlesbasedstand.htm

- Stelling, J. (2005), `Kostenmanagement und Controlling´, 2nd Ed., Oldenbourg

- Stern, J. & Shiely, J. et al.(2003), `The EVA Challenge: Implementing Value-Added Change in an Organization´, Wiley.

- Stolowy, H. & Lebas, M. (2006), `Financial Accounting and Reporting: A Global Perspective´, 2nd Ed., Cengage Learning EMEA.

- Street, D. & Nichols, N. (2002), `LoB and geographic segment disclosures: an analysis of the impact of IAS 14 revised´, in: *Journal of International Accounting, Auditing & Taxation*, Vol. 11, No. 2, pp. 91-113.

- Taylor, P. (1996), `Consolidated Financial Reporting´, 2nd Ed., SAGE.

- Teece, D. (1980), `Economics of Scope, and the Scope of the Enterprise´, in: *Journal of Economic Behaviour and Organization*, Vol. 1, No. 3, pp. 223-247.

- Velte, P. (2006), `ZP-Stichwort: Percentage-of-Completion-Methode´, in: *Zeitschrift für Planung und Unternehmenssteuerung*, Vol. 17, No. 2, pp. 223-228.

- Velte, P. (2008), `ZP-Stichwort: Management Approach´, in: *Zeitschrift für Planung und Unternehmenssteuerung*, Vol. 19, No. 1, pp. 133-138.

- Wagenhofer, A. (2006), `Controlling und IFRS-Rechnungslegung: Konzepte, Schnittstellen, Umsetzung´, Erich Schmidt.

- Weetman, P. (2002), `Management accounting´, Pearson Education.

- Weetman, P. (2009), Financial and Management Accounting, 4th Ed., Prentice Hall.

- Weißenberger, B. & Maier, M. (2006), `Der Management Approach in der IFRS-Rechnungslegung. Fundierung der Finanzbericherstattung durch Informationen aus dem Controlling´, in: *Der Betrieb*, Vol . 59, No. 1, pp. 2077-2083.

- Weißenberger, B. (2007), `IFRS für Controller´, Haufe.

- Williamson, O. (1975), `Markets and Hierarchies: Analysis and Antitrust Implications. A Study in the Economics of Internal Organization´, Free Press.

- Zimmermann, T. (1998), `Shareholder Value und Stakeholder Value: Alternative Unternehmensführungskonzepte?´, source: http://www.zimmermann-thomas.de/publikationen/PDFshareholder.pdf
  ;last opened; 10/07/2009.

B. Appendix

Results of the analysis:

IAS 14 R	
Number of Article	**Category**
1	Hard rule
3	Hard rule
4	Soft rule
5	Hard rule
6	Hard rule
7	Hard rule
8	Principle
9	Principle
16	Principle
24	Hard rule
26	Principle
27	Principle
30	Soft rule
31	Principle
32	Hard rule
34	Soft rule
35	Hard rule
36	Hard rule
37	Hard rule
40	Soft rule
41	Hard rule
42	Soft rule
43	Hard rule
44	Hard rule
47	Hard rule
50	Hard rule
51	Hard rule
52	Hard rule
52A	Hard rule
55	Hard rule
56	Hard rule
57	Hard rule
58	Hard rule
59	Soft rule
61	Hard rule
63	Hard rule
64	Hard rule
66	Hard rule
67	Hard rule
69	Hard rule
70	Hard rule
71	Hard rule
72	Hard rule
74	Hard rule
75	Hard rule
76	Hard rule

IFRS 8	
Number of Article	**Category**
1	Principle
2	Hard Rule
3	Hard Rule
4	Hard Rule
5	Principle
7	Principle
9	Principle
10	Soft Rule
11	Hard Rule
12	Soft Rule
13	Hard Rule
14	Hard Rule
15	Hard Rule
16	Hard Rule
17	Soft Rule
18	Hard Rule
19	Principle
20	Principle
21	Hard Rule
22	Hard Rule
23	Hard Rule
24	Hard Rule
25	Hard Rule
26	Hard Rule
27	Principle
28	Hard Rule
29	Soft Rule
30	Soft Rule
31	Hard Rule
32	Soft Rule
33	Soft Rule
34	Hard Rule

77	Soft rule
78	Hard rule
81	Hard rule

Source: the authors

	Principe	Soft Rule	Hard Rule	Articles
IAS 14 R	12.24%	14.29%	73.47%	84
IFRS 8	21.88%	21.88%	56.25%	34

Source: the authors.

Samples of Coding IFRS 8

A. Principle

" Article 20
An entity shall disclose information to enable users of its financial statements to evaluate the nature and financial effects of the business activities in which it engages and the economic environments in which it operates. "

The disclosure part of the standard starts with this article. Notice there is only the purpose or the main goal stated, there is no operational guidance described. It does not lead the way to how to achieve the goal, and the professional judgment is not explicitly called. It is a statement of an overall criterion.

B. Soft Rule

" Article 29
If an entity changes the structure of its internal organization in a manner that causes the composition of its reportable segments to change, the corresponding information for earlier periods, including interim periods, shall be restated unless the information is not available and the cost to develop it would be excessive. The determination of whether the information is not available and the cost to develop it would be excessive shall be made for each individual item of disclosure. Following a change in the composition of its reportable segments, an entity shall disclose whether it has restated the corresponding items of segment information for earlier periods. "

Notice that in this article, there happen to be more detailed circumstances and some components of enforcement are included. However, a calling for the professional expertise of the preparer is the key for the output of this article.

C. Hard Rule

" Article 15
If the total external revenue reported by operating segments constitutes less than 75 per cent of the entity's revenue, additional operating segments shall be identified as reportable segments (even if they do not meet the criteria in paragraph 13) until at least 75 per cent of the entity's revenue is included in reportable segments. "

In this article there is no room for judgments and the level of detail is more concrete than in the prior case. Notice that the percentage is stated and it is no delegated to the preparer's expertise. This is an item in which it is clear to identify whether the article is accomplished, stating which conduct of the firm is permissible and which not. The detailed guidance is also shaped in the level of determination in the item.