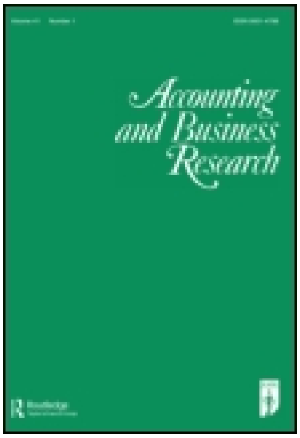

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The management of accounting numbers: Case study evidence from the 'crash' of an airline

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Ann Jorissen and David Otley*

Abstract — Financial misrepresentation has usually been analysed by large-scale empirical research. However, the generality gained from such an approach is at the cost of understanding the rich and complex nature of financial misrepresentation in real organisations. We adopt a case study approach to gain more insight into the incentives, embedded in contracts, which trigger decisions to engage in financial misrepresentation and the underlying elements of discretion in these processes. In particular, we examine whether contractual incentives should be considered as endogenous or exogenous and we take a more integrated and dynamic perspective than is typical.

Our findings demonstrate that in order to understand the decision processes of real managers it is necessary to distinguish between negotiable and non-negotiable contracts of the firm. Using a multi-theory perspective we observe that the direction of the causation assumed in the agency framework (i.e. contracts influence behaviour) is often reversed in the case of negotiable contracts (i.e. managers influence contracts). The case findings also provide insights into a number of additional variables which enlarge the discretion of a senior manager to engage in financial misrepresentation. The manipulation of accounting numbers can be achieved by many mechanisms which traditional methods based on accruals would not detect. The use of a wider range of research methods is therefore desirable.

Keywords: earnings management; financial misrepresentation; accounting choices; corporate governance; executive compensation

1. Introduction

The primary purpose of financial reporting is to convey information on a company's performance and financial situation to a wide range of people. Management communicates much of this information using accounting numbers, which are surrogates for the underlying events and transactions which affected economic performance (Revsine, 1991). There is thus an incentive for managers to misrepresent all types of accounting numbers included in the financial statements and the accompanying annual report so as to present firm performance in a favourable light. In the wake of recent corporate scandals, academic research into financial misrepresentation has intensified but it has concentrated almost exclusively on the management of earnings numbers, with most studies examining the presence of earnings management through the analysis of accrual decisions. The observation that, in cases such as Enron, Worldcom, Ahold and Parmalat, both earnings numbers and balance sheet numbers were managed, underscores the fact that financial misrepresentation is broader than just earnings management.

Studies on financial misrepresentation mainly use large scale empirical data to demonstrate that accounting numbers are, or are not, being managed. Most studies try to understand why managers manipulate earnings, how they do so and what are the influences and consequences of this behaviour (McNichols, 2000). The management of balance sheet numbers has received far less attention (Shevlin, 1987; Ely, 1995; Bauman, 2003) and the management of disclosure numbers has hardly been addressed. Despite the research effort devoted to this topic most empirical studies, usually based on agency theory, still suffer from a number of limitations.

An important feature of financial misrepresentation studies, which regard the management of accounting numbers as a reaction to incentives embedded in the contracts governing the firm, is the assumption that the contract and reporting set of the

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firm is fixed (Schipper, 1989). The advantage of this approach is that fixed sets imply rigidities or frictions which are an incentive for earnings management. It is not uncommon that most studies that use the agency paradigm consider the incentives towards financial misrepresentation of accounting numbers as exogenous variables which drive the financial misrepresentation process. This assumption permits a focus on financial misrepresentation as a response to environmental conditions, but it precludes a dynamic analysis of the evolution of contractual changes (Schipper, 1989).

More than 10 years later Fields et al. (2001) also argue that limited progress has been made in earnings management research. These authors mention two reasons for this limited progress. First, there have been few attempts to take an integrated perspective on earnings management (i.e. consideration of multiple motives and multiple methods). Second, earnings management research generally fails to distinguish appropriately between what is endogenous and what is exogenous. This latter concern is shared by Core (2001). The majority of earnings management research assumes the contractual incentives to be independent and exogenous variables explaining the presence or absence of earnings management and its magnitude. Misrepresentation studies typically do not take into account the possibility of the presence of endogeneity in the financial misrepresentation process. In case of endogeneity, financial misrepresentation targets shape the contracts governing the firm as well as the contracting inefficiencies which create managerial discretion. If endogeneity is present the error term will be correlated with the explanatory variable in ordinary least squares (OLS) regressions used to explain the management of accounting numbers and will lead to biased estimators (Chenhall and Moers, 2007).

In their review of earnings management, Dechow and Skinner (2000) conclude that measures of earnings management devised by academic researchers have not been very powerful in identifying the extent of the practice. They therefore argue that a more fruitful way to identify firms whose managers practise financial misrepresentation is to focus on managerial incentives.

This study responds to this literature by examining the process of financial misrepresentation from an integrated (multiple incentives and multiple methods) and a dynamic perspective. The overall research objective is to shed more light on the underlying processes which trigger the decision to engage in financial misrepresentation and the underlying mechanisms which support or facilitate it, yet remain unexplored by traditional earnings management research. This research objective is translated in two specific research questions. First, we investigate which variables have an exogenous character and which variables have an endogenous character in the process of financial misrepresentation. Insight on the issue of endogeneity versus exogeneity will help to refine the empirical models used in financial misrepresentation research. Second, we investigate whether additional variables supporting or facilitating earnings management can be found which provide increased explanatory power.

In order to address these two research questions, we use case data taken from two connected major European airlines, the Swiss airline Swissair and the Belgian flag carrier Sabena, which both filed for bankruptcy in the autumn of 2001. These corporate collapses, especially that of Swissair (part of SAirgroup), came as a surprise to many people. An investigation report, undertaken at the request of the administrator of the SAirgroup,[1] points to the presence of unfaithful representation of the economic performance in the accounting numbers:

> ‘The unconsolidated and consolidated financial statements for 1999 and, to a much greater degree, for 2000, did not fairly present the economic and financial situation of the SAirgroup.’

We therefore seek to analyse and explain how such mis-statements came about. This paper distinguishes itself from other studies in two respects. First, it uses a case study method in combination with internal archival company data and public information. A number of studies in the critical perspectives literature (Benston and Hartgraves, 2002; Lev, 2002; Arnold and de Lange, 2004; Baker and Hayes, 2004) and in the capital market based stream (Lys and Vincent, 1995; de Jong, et al., 2007) have also used a case study approach, although all are based only on publicly available financial data. By contrast, following Wilson and Shailer (2007), we opted for a case study based on internal company data as it provides the opportunity for a richer exploration of the interrelationships among the variables which stimulate or influence financial misrepresentation and the processes which are triggered by the decision to engage in it. These relationships are a black box in most financial misrepresentation studies.

Second, this study uses a multi-theory perspective which explicitly considers the central role of

[1] Press release on ‘The Investigation Report’ ‘Ernst & Young Bericht in Sachen Swissair’, 20 January 2003.

top management in choosing to engage in accounting numbers management. Therefore, the case data are analysed in two phases. In the first phase we analyse the data through an accounting literature perspective. Subsequently we refer back to the extant accounting literature in order to try to explain the patterns we find in the data. Not all observations of the first phase can be explained by the accounting literature. Therefore in the second phase of the case study we examine the case data through a management theory perspective in order to generate additional explanations. Based on Cyert and March's concept (1963) of bounded rationality, Hambrick and Mason (1984) elaborated their upper-echelons theory which suggests that an organisation becomes a reflection of its top executives and that the characteristics and functioning of the top management team have a great influence on organisational outcomes. The combination of this accounting perspective and management theory perspective on the data results in a multi-theory perspective on financial misrepresentation.

The results of our study extend the literature in two ways. First, by using detailed empirical documentation of the importance of each of the variables at each point in the firm's development, we gain more insight in the relationship among all variables involved in the process of financial misrepresentation. The case method allows us to observe which contractual incentives and which elements of discretion, created through inefficient contracting, have an endogenous character in the process of financial misrepresentation. We find that incentives embedded in negotiable contracts, governance characteristics and ownership characteristics, which have traditionally been regarded as exogenous in the process of financial misrepresentation, can have an endogenous character. The case results show that these variables, which are supposed to affect financial misrepresentation, themselves depend on that outcome. Simultaneity is an important cause of endogeneity (Chenhall and Moers, 2007), and arises when one or more of the explanatory variables are jointly determined with the explained variable. The above mentioned variables (incentives embedded in negotiable contracts and discretion resulting from ownership and governance characteristics) have an endogenous character within the boundaries of the implementation of the strategic choice of the Chief Executive Officer (CEO). Non-negotiable contracts and externally determined discretion (institutional variables such as investor protection, risk of litigation and often the quality of generally accepted accounting principles (GAAP)) remain exogenous to financial misrepresentation. This finding has significant implications for the conduct of large scale empirical research, as current studies suffer from both omitted variables and simultaneity.

Second, we identify a number of additional variables which are used by management to enlarge their accounting discretion. These variables include the composition of the top team of executives, organisational design, investment characteristics, and the management control system. Different aspects of the management control system can be used to facilitate financial misrepresentation (e.g. the degree of centralisation, the division of task responsibilities and the choice of the measures used in the incentive systems). Finally, the findings reveal that financial misrepresentation can involve all types of financial and management accounting information as well as strategic, investment and operating decisions.

The paper is structured as follows. In Section 2 we introduce the research method applied in order to address the two research questions of this study. In Section 3 we review the literature and derive the variables which guide the analysis of the case data. In Section 4 the research data are presented. In Section 5 the results of the first phase and the second phase of the case analysis are presented. In Section 6 the results obtained in the two phases are combined into a multi-theory perspective on financial misrepresentation. We conclude (Section 7) by suggesting that research methods need to be extended if they are to discover the different types of manipulation of accounting numbers presented in this paper.

2. Research method

We wish to examine the interrelationships among some of the variables which stimulate and enhance financial misrepresentation using a case study. We have opted for a case study approach as it allows insights into management processes which are difficult to obtain using arm's length methods alone (Gephart, 2004) and can suggest new explanations that have not been previously considered. The framework for analysis of the case data will be first provided by the extant accounting literature (first phase) and second by insights from the management literature (second phase). The combination of the two phases will result in a multi-theory perspective on financial misrepresentation. We introduce the research method in this section by presenting the case company, the case data and the research methodology. Subsequently we review the literature which suggests some variables of interest to focus on in analysing the evidence.

2.1. The case company

In order to address our two research questions, we need internal company data to study the processes and mechanisms triggered by the decision to manipulate the accounting numbers. SAirgroup (former Swissair group) as the subject of the case study was chosen for two reasons. First, the report undertaken at the request of the Administrator of the SAirgroup stated explicitly that in 1999 and 2000 the financial statements (consolidated and unconsolidated) of the SAirgroup did not fairly present the economic and financial position of the SAirgroup. This conclusion points to financial misrepresentation of the underlying economic performance through the published accounting numbers. Second, we obtained unique access to internal company data, which allowed us to study the underlying processes which triggered the decision to manage the accounting numbers and which supported and facilitated financial misrepresentation, processes which could not be observed using public data alone.

In the period of our study, we distinguish the following important events in our case company. A year after Swissair acquired 49.5% of the Belgian flag carrier Sabena (May 1995), the company, now SAirgroup, embarked on a corporate strategy, called the 'dual strategy'. This strategy was geared towards growth in both the airline business and the airline-support businesses. This growth strategy, realised mainly through acquisitions, resulted in growing financial needs.

2.2. Case data

The data employed to analyse the research questions consist of archival data and interviews. Different categories of archival data were used (see Appendix A for a complete list) and this provided an opportunity for triangulation (Miles and Huberman, 1998; Yin, 2003). The internal company documents we reviewed consisted of minutes and accompanying documents of the most important committees of the Swissair/SAirgroup and the Sabena group, correspondence within and between the companies, and contracts and agreements signed between the Swissair/SAirgroup, Sabena, and the shareholders. We had access to reports requested by the Swissair/SAirgroup or Sabena from various consultants and to the auditors' reports. Besides these internal private materials, we consulted the documents released to the public by the SAirgroup and Sabena and reports and books published on these businesses. A number of interviews with some members of the ex-management team of both airlines were also held. Given the judicial enquiries around the bankruptcies of both airlines, caution must be exercised in the interpretation of these interviews. The potential bias in national press reports also requires to be recognised, but in aggregate this information can yield important insights. Insights derived from one source were always confirmed by information from other sources. Through this triangulation exercise, we report only consistent findings in our case analysis, having discarded non-consistent results.

2.3. Frameworks for analysis

The case data were analysed in two phases. In each phase an embedded design is employed (Eisenhardt, 1989). This design implies that multiple levels of analysis are undertaken in each phase. Following Miles and Huberman (1998), we arranged the data into a condensed chronological account. In the first phase of the case research the internal and external company documents were extensively reviewed in order to collect information on all the variables involved in financial misrepresentation, previously revealed by the accounting literature. The case data are analysed in the first phase according to the directionality of the relationships assumed in traditional accounting research.

Central to extracting evidence from case studies is the replication logic (Eisenhardt, 1989). In this first phase of the case analysis, we used a multiple case approach by considering each investment of the SAirgroup in a foreign airline as an individual case. Each case served to confirm or refute inferences drawn from the analysis of the choices made in relation to the SAirgroup's first investment in Sabena (Yin, 2003). Accordingly, in the first phase of the case analysis we collected data on multiple incentives, multiple choices and discretion over a period of time. Once patterns were detected, we referred back to the extant accounting literature to seek explanations for these patterns. Since the results of the accounting literature did not provide sufficient explanation for all the observed patterns, we examined the data again using insights derived from management theories. In this second phase of the case analysis, we introduced CEO characteristics and CEO-succession, top team composition and the strategic choice as potential explanatory variables. Finally, through the combination of the results obtained in the two phases of the analysis we are able to shed more light on the directionality between the variables involved in financial misrepresentation and on the variables employed to create the necessary discretion to engage in managing accounting numbers.

3. Literature review

In this section of the paper, we review the literature in order to determine the variables we will focus on to address our research questions. The findings from the accounting literature and the management literature provide a multi-theory perspective on the process of financial misrepresentation.

Central in this study is the definition of financial misrepresentation. A definition of this concept (or of accounting numbers management) is hard to find since most authors in the accounting literature narrow the scope of financial misrepresentation to earnings management. However, Revsine (1991) and Lee (2006) define the phenomenon from a broader perspective than most. According to Revsine (1991) there are incentives that motivate various parties to misrepresent financial events since a primary purpose of financial reporting is to provide a basis for contracting and decision-making. While the events that affect performance often cannot be controlled, the way that people perceive these events can be controlled. Manipulating these surrogates provides decision-makers with a means for influencing peoples' perceptions of managerial performance (Revsine, 1991: 16). Lee (2006: 423) labels the management of accounting numbers as 'reporting deceit'. Reporting deceit refers to any accounting or disclosure practice that deliberately misrepresents economic activity by enlarging or diminishing corporate assets, liabilities, equity, profits and cash flows reported in financial statements. Both authors refer to a managerial intent to mislead shareholders and other stakeholders of the firm. This element of managerial intent is also present in the widely cited definitions of Healy and Wahlen (1999) and Schipper (1989).

According to Healy and Wahlen (1999: 368) 'earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company, or to influence contractual outcomes that depend on reported accounting numbers.' Schipper (1989: 92) defines earnings management as 'a purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain (as opposed to, say, merely facilitating the neutral operation of the process).' According to Dechow and Skinner (2000: 238) the above definitions are difficult to operationalise since they centre on managerial intent, which is unobservable from public data. However, access to internal archival company data allows data on managerial intent to be gathered and assessed.

3.1. Literature review: the analysis of financial misrepresentation through an accounting lens (phase I)

Since the objective of this study is to examine the incentives towards financial misrepresentation and the underlying processes from an integrated and dynamic perspective, we review the literature on incentives, methods used and available accounting discretion. Although the impression management literature and the business ethics literature could provide additional insights as well, we do not elaborate on their findings in order keep the complexity of the case under control.

3.1.1. Incentives towards financial misrepresentation

The traditional accounting literature considers the incentives embedded in the contracts governing the firm as triggers to mislead the stakeholders. Since the accounting literature distinguishes between external and internal contracts, we first review the evidence found on incentives embedded in the external contracts of the firm and then we focus on the internal contracts.

Capital markets depend on information sources and expect corporate financial reports to represent the economic activity of the firm through the accounting numbers. Evidence is available that listed firms have an incentive to show a recurrent and increasing stream of earnings (Barth et al., 1995; DeAngelo et al., 1996) together with low earnings volatility (Hand, 1989; Bartov, 1993; Hunt et al., 1995); to avoid small losses (Burghstahler and Dichev, 1997) and to meet benchmarks or targets (Degeorge et al., 1999; Kasznik, 1999). The external contracts with shareholders stimulate management to communicate accounting numbers reflecting the above mentioned patterns. Next to contracts with shareholders, contracts with debt holders also provide stimuli to management to engage in accounting numbers management in order to avoid the violation of debt covenants and to obtain a favourable credit rating (De Fond and Jiambalvo, 1994; Sweeney, 1994; Dechow et al., 1996). Further research indicates that contracts with regulatory authorities provide an incentive to engage in accounting numbers management to avoid regulatory intervention (Key, 1997; Han and Wang, 1998) or to minimise taxation (Beatty et al., 1995; Guenther et al., 1997).

Financial misrepresentation is also stimulated by the implicit and explicit internal contracts of the firm. The threat of a performance-related CEO turnover creates incentives to match industry performance (De Fond and Park, 1997; Fudenberg and Tirole, 1995) and stimulates new CEOs to engage in big bath accounting in their first year of office (Pourciau, 1993; Murphy and Zimmerman, 1993; Godfrey et al., 2003). Further, ample evidence is available that reward and bonus plans, which represent the explicit internal contracts of the firm, can drive earnings management (Healy, 1985; Gaver et al., 1995; Holthausen et al., 1995; Guidry et al., 1999; Bartov, 2001).

A common feature of all these studies in this stream of research is to assume that the incentives embedded in the contracts are independent variables that are exogenous in the process of financial misrepresentation.

3.1.2. Methods or choices used for financial misrepresentation

In order to study financial misrepresentation, its presence first has to be observed. Apart from distributional studies, which test whether the distribution of earnings around benchmarks differs in some predicted way from what would be expected in the absence of earnings management (Burghstahler and Dichev, 1997; Degeorge et al., 1999; Beatty and Petroni, 2002) most studies rely for the detection of financial misrepresentation on the observation of the methods used to manage the accounting numbers. In the extant literature two broad categories of methods to manage accounting numbers are distinguished, namely, accounting methods and real or operating methods. A number of authors label these methods ‘choices’. Dechow and Skinner (2000) distinguish between accounting choices and real cash flow choices. These authors further subdivide the accounting choices into within GAAP choices and choices which violate GAAP. Schipper (1989) also classifies the methods in two groups, namely, accounting choices and real or operating choices. Fields et al. (2001) label all methods employed to manage accounting numbers as accounting choices. They define accounting choices as any decision whose primary purpose it is to influence (either in form or in substance) the output of the accounting system in a particular way, including not only published financial statements, but also tax returns and regulatory filings.

For the purpose of this study we distinguish, like Schipper (1989) and Dechow and Skinner (2000), between accounting choices and real choices. In order to subdivide both types of choices or decisions further we rely on Francis (2001). According to Francis, choices to convey a message or influence stakeholders, can be categorised into the following groups: choices among equally acceptable rules or methods; judgments and estimates required to implement generally accepted accounting rules or methods; disclosure decisions; timing decisions of when to adopt a required accounting rule; choices about display; aggregation decisions; classification decisions; decisions to structure transactions in certain ways to achieve a desired accounting outcome; and real production and investment decisions.

In the extant literature most research uses only one accounting choice, namely the presence of accruals, as the dependent variable in order to detect earnings management (Dechow et al., 1995; Beneish, 1997; Mc Nichols, 2000). This observation implies that only financial misrepresentation executed through accruals management is well studied. Only a few studies try to capture earnings management by examining real operating decisions (see Wayne et al., 2004; Roychowdury, 2006). However, analytical studies (Ewart and Wagenhofer, 2005) and survey research (Nelson et al., 2002, 2003; Graham et al., 2005) provide evidence that corporate management uses both real and accounting choices to influence the reported numbers. As a consequence, Nelson (2003) suggests that detailed guidance in accounting standards reduces earnings management achieved through management judgments but increases earnings management achieved through transaction structuring or real decisions.

3.1.3. Discretion to engage in financial misrepresentation

Watts and Zimmerman (1990) suggest that financial misrepresentation occurs when managers exercise discretion over the accounting numbers without or with little restriction. Prior literature (both capital market based literature focusing on inefficient contracting and the critical literature) has uncovered different variables which loosen the restrictions on top management to engage in the management of accounting numbers. This research indicates that the degree of ownership concentration affects the nature of contracting and that accounting informativeness declines as ownership concentration increases (Dempsey et al., 1993; Warfield et al., 1995; Donnelly & Lynch, 2002; Fan & Wong, 2002). Further evidence shows that institutional characteristics such as the quality of accounting standards (Pope & Walker, 1999; Ball et al., 2000; Ali & Hwang, 2000), the degree of investor protection (LaPorta et al., 1997, 1998), the risk of litigation (Ball et al., 2000; Leuz & Verrechia, 2000) and the degree of enforcement (Hope, 2003) all create opportunities for earnings management. Research which focuses on board characteristics and its relation to earnings management also provides evidence that the quality of board monitoring is impaired by the presence of CEO-duality, by the presence of interlocking CEOs and by the presence of internal or grey directors (Boyd, 1994; Beasly, 1996; Peasnell et al., 2001). The critical perspectives literature concentrates mainly on the contextual variables which facilitate or incite management to manipulate accounting numbers (e.g. Briloff, 2001; Revsine, 2002; O'Connell, 2004; Benston and Hartgraves, 2002; Lee, 2006; Williams, 2004). The results of this stream of research emphasise the importance of improved regulatory enforcement for the provision of better quality financial information to stakeholders. In the extant empirical literature these contracting inefficiencies are considered as independent and exogenous variables which explain the presence or absence of financial misrepresentation and its magnitude.

3.1.4. Framework for analysis based on the extant accounting literature (phase I)

The findings of the extant accounting literature provide the basis for the framework for analysis that will be applied in the first phase of the case study. Since we wish to study the management of accounting numbers by taking an integrated and dynamic perspective, we consider the multiple incentives which stimulate this process, the multiple choices applied to obtain the desired accounting numbers, and the available discretion which allows financial misrepresentation to happen. Figure 1 presents the relationship between the variables involved in financial misrepresentation according to the bulk of the extant accounting literature. The incentives embedded in the contracts of the firm encourage management to publish accounting numbers with specific patterns. These are the target accounting numbers. This answers the question as to why managers manipulate accounting numbers. A reporting strategy which consists of accounting and real choices will ensure that the published accounting numbers equal or almost equal the target accounting numbers. The accounting and the real choices explain how management arrives at financial misrepresentation. The available discretion has an exogenous character as well and indicates the available managerial opportunity to engage in financial misrepresentation.

3.2. Literature review: perspectives from the management literature (phase II)

All definitions of financial misrepresentation (including earnings management) point to the central role of top management in these decisions. However, the accounting literature has not taken into account the heterogeneity among top managers and its possible impact on financial misrepresentation. The purpose of this multi-theory perspective on the case data is to obtain a better understanding of the process of managing accounting numbers by combining insights from different perspectives (the accounting literature and the management literature).

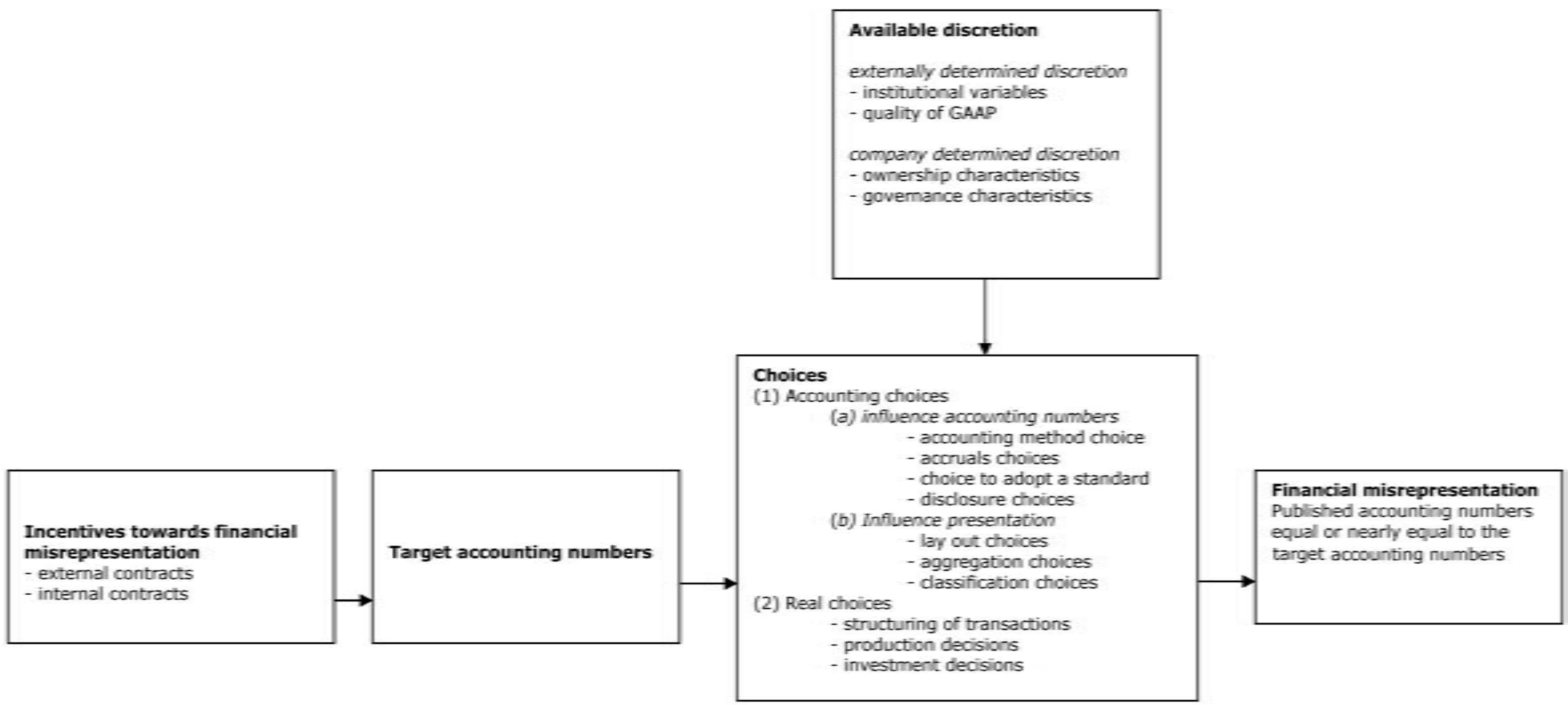
3.2.1. Upper echelons theory

Upper echelons theory suggests that executives will make decisions that are consistent with their cognitive base, including values, cognitive models and personality factors (Hambrick and Mason, 1984) and executive orientation (Finkelstein and Hambrick, 1996). A fundamental principle of upper echelons theory is that observable experiences (i.e. demographic measures such as tenure, age, functional and educational background) are systematically related to the underlying cognitive orientations and knowledge base. In these theoretical frameworks, the organisation becomes a reflection of its top executives, whereby the CEO functions as the central strategic decision-maker who is able to control the composition of the organisation's top strategy-making group (Zahra and Pearce, 1989). A large number of studies, triggered by Hambrick and Mason (1984), provide evidence that differences in CEO characteristics and top-management-team (TMT) composition (with respect to dimensions such as tenure, gender, functional and ethnic background and age) have an impact on a range of organisational outcomes such as turnover, innovation, diversification, and organisational performance (Hambrick and Fukutomi, 1991; Jensen and Zajac, 2004). This implies that a deeper knowledge of the managerial characteristics of the CEO and of the factors that determine the distribution of power among corporate managers is required to advance knowledge of the incentives which drive financial misrepresentation and how it is achieved.

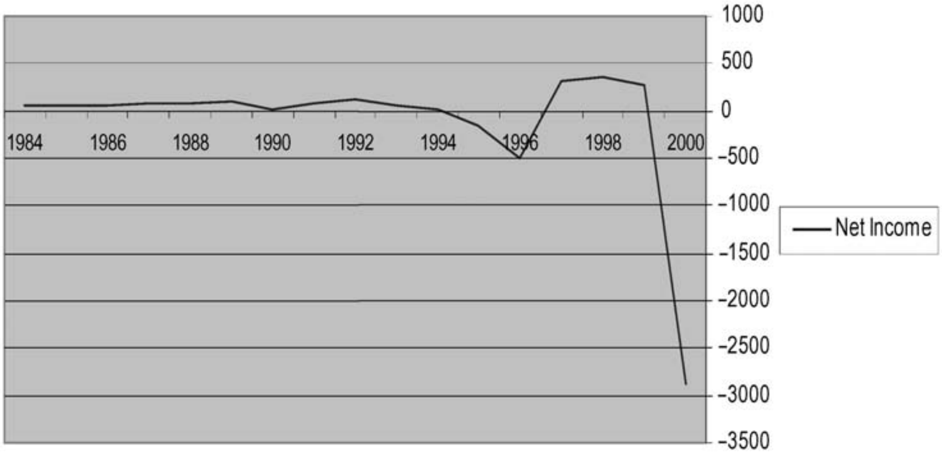
3.2.2. Power circulation theory and strategic choice theory

According to power circulation theory (Occasio, 1994; Occasio, 1999), an inside succession following a CEO dismissal reflects a successful internal power contest against the CEO, and the successor is

Figure 1
Financial misrepresentation through an accounting perspective



Graph 1
Net income Swissair/Sairgroup 1984–2000 in CHF million



a contending executive who has won the support and approval of the board of directors. Because power contestation and CEO dismissal often occur in periods of poor firm performance (Occasio, 1994; Puffer and Weintrop, 1991) contender successors will often be charged with initiating strategic change and improving firm performance. Insights from strategic choice theory reveal that CEOs often choose to initiate a strategic change which closely matches their prior pattern of strategic choice and which is consistent with their previous background.

4. The research data

To enhance the understanding of the case analysis, we now outline the main features of the company, its competitive environment and the major events that occurred during the ten-year period 1991–2001. Subsequently we explain how we collected the case information.

4.1. The Swissair/SAirgroup

The Swissair/SAirgroup was better known for its flagship subsidiary Swissair, which was active in the air transport of passengers and cargo. Its roots date back to 1919 with the establishment of the Aero-Gesellschaft Compte, Mittelholzer & Co. In 1931 this company merged with Balair and the 'Schweizerische Luftverkehrs AG – Swissair' was created. From then onwards Swissair grew and developed airline-related activities. Swissair became the Swissair Group and transformed into the SAirgroup on 1 January 2007. Swissair/SAirgroup published positive income figures year after year until the year 2000 (except for 1995 and 1996) (see Graph 1). The balance sheet numbers of the Swissair Group showed a very stable financial structure which was the basis for the company nickname 'the flying bank'. The Swissair/SAirgroup was a listed company, quoted on the Zurich stock exchange, with dispersed ownership.

From its establishment until 1991 the Swissair group only published individual company accounts, in compliance with Swiss GAAP. From 1991 onwards the Swissair Group published consolidated accounts and therefore this year is chosen for the start of the longitudinal analysis.

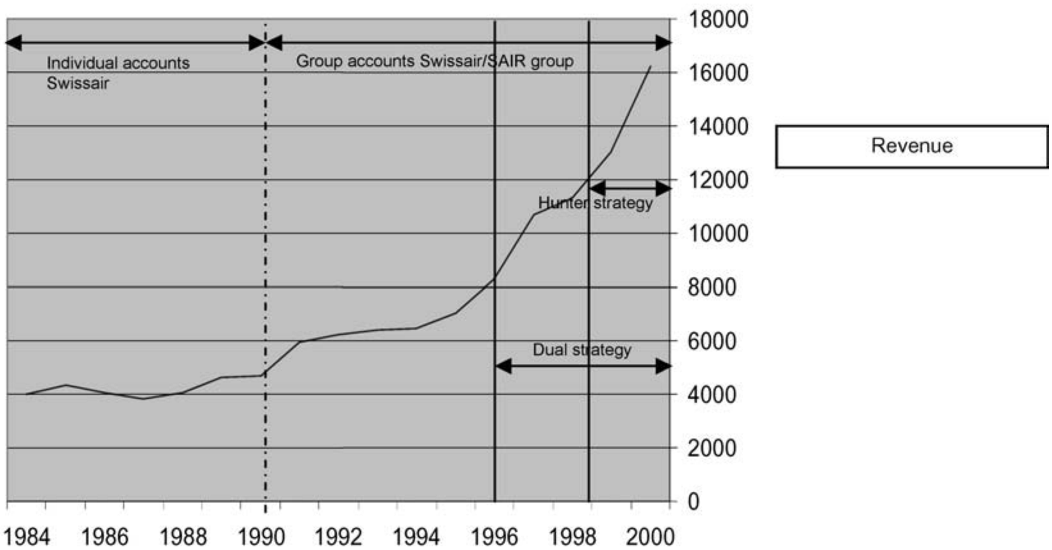
4.1.1. The competitive environment

Until the early 1990s European airline profits were secure due to a high degree of regulation and price agreements. However, from 1993 onwards European skies became open for 'community carriers'[2] with EU airlines being free to operate across any national boundaries within the EU. Switzerland was not a member of the EU and was excluded from this arrangement. In response to this change in the competitive and regulatory environment, Swissair first tried to form an alliance (under the name Alcazar) with KLM, Austrian Airlines and SAS. This project was unsuccessful and negotiations were terminated in November 1993. As a result, Swissair had to look for other means to face the stronger competition caused by the deregulation in the EU and to circumvent their 'aero political isolation'.[3] On 4 May 1995 Swissair acquired a large minority shareholding of 49.5% in the capital

[2] An airline qualifies as a 'community carrier' under the EU regulation (EC ordinance 2407/92 of 23 July 1993) when the majority of the capital is in the hands (in a direct way or an indirect way) of persons or companies belonging to the EU.

[3] Message to the shareholders, annual report Swissair 1995.

Graph 2
Operating revenue Swissair/SAirgroup 1984–2000 in CHF million



of Sabena, the Belgian state-owned national flag carrier.

4.1.2. The different strategies of the Swissair/ SAirgroup in the 1990s

At the time of the acquisition in mid-1995 the aim of the investment in Sabena was stated to be to develop a single airline group concentrated around the two equal hubs of Zurich and Brussels. The airlines were considered to be the core business of the Swissair group although other airline-support activities were also performed. From 1996 onwards the group started to invest in the airline-support industry through majority acquisitions of companies active in the airline-support industries such as handling, catering, hotel trade, information technology, aircraft maintenance, aircraft leasing and real estate administration. This growth strategy was called the 'dual' strategy. SAirgroup management described the airline business as the first pillar and the airline support businesses as the second pillar of the group. To underscore the change in strategy the Swissair Group was renamed into the SAirgroup. Expansion in the airline business was pursued through the Hunter Strategy, whereby equity stakes in airlines were acquired in France, Germany, Italy, Poland and South Africa during 1998–2000. The revenue of the Swiss group started to increase from the launch of the dual strategy and it accelerated when the Hunter Strategy was implemented (see Graph 2).

The launch of the dual strategy was accompanied by a major change in the organisational design of the group. After the creation of a new holding structure and the organisational re-design, the legal entity of the airline Swissair remained responsible only for passenger transport and had to buy all support services from companies which now belonged to the 2nd pillar of the SAirgroup. The legal entity Swissair was only left with off-balance-sheet (but valuable) assets such as traffic rights, slots at airports and a dominant position at its hub airport, Zurich. Even ownership of the aircraft was transferred to a new legal entity, Flightlease, which also provided leasing services for other airlines from 1998 onwards.

Despite increasing revenue and earnings in the second half of the 1990s (see Graphs 1 and 2), the SAirgroup announced a large loss for 2000.

> 'In the annals of our company's history the 2000 business year will be remembered as a poor one. The SAirgroup did not meet the targets established for the airline sector. The substantial losses stemming from our airline equity holdings were responsible for a very inadequate result. The SAirLogistics, SAirServices and SAirRelations divisions, forming the second pillar of our dual strategy, have either met or surpassed their performance targets.' (Letter of the Chairman – Annual Report SAirgroup 2000 – page 4)

The problems intensified during the year 2001. In July 2001 the SAirgroup divested the two French airlines it had acquired, and in August 2001 renegotiated its relationship with Sabena. On 2 October 2001 the SAirgroup filed for bankruptcy.

The fall of 2001 was characterised by a general downturn of traffic, following the events of 9/11, which resulted in pressures on company liquidity of the airlines. Consequently the SAirgroup did not fulfill agreements it had concluded with Sabena for a capital injection intended to take place in October 2001. Sabena was declared bankrupt on 7 November 2001. The speed at which the final death spiral of the Swissair Group occurred was incomprehensible to many people as, until its 2000 accounts were released in 2001, it had a record of steady improvement.

4.2. The data collection process

In the first phase of the case study we collected information over a ten-year period on incentives for financial misrepresentation embedded in the contracts governing the firm, opportunities for discretion, and accounting and real choices. Since the collection of information on all accounting and real choices with regard to all events and transactions would involve an immense amount of data, we use a disaggregated approach. According to Francis (2001) the disaggregated approach features a focus on individual accounting items known to require substantial managerial judgment and to have a significant impact on accounting numbers. This disaggregated approach has the potential advantage of yielding precise, directional predictions based on the researchers' understanding and analysis of how decision-makers trade off the incentives associated with the accounting object of the study (Francis, 2001). This disaggregated approach implies that we will combine multiple incentives with multiple choices in relation to one individual item with a substantial impact on the financial statements of the SAirgroup. Because in spring 2001 the new management team of the SAirgroup blamed the foreign airlines in which the SAirgroup invested for the financial problems of the SAirgroup (see citation in Section 4.1.2), we use the investments in foreign airlines as the accounting item of the study.

Numerous accounting and real choices are taken by SAir management with regard to the investments in foreign airlines. For the purpose of this case study we need to single out those accounting and real choices that are pursued in order to affect the output of the accounting system. According to Fields et al. (2001) the key element to classify an accounting choice or a real choice as a method used for accounting numbers' management, is its managerial intent to affect the accounting numbers. The managerial intent in our study was derived from internal archival company data and we provide evidence of this managerial intent using extracts from company documents.

In the second phase of the case study we collected information on the CEO turnover process, CEO characteristics, top team characteristics, the strategic choice of the CEO, the internal power relations between top team members, the division of task responsibility and the performance indicators against which individual top managers are evaluated.

5. Analysis of the case data

5.1. Phase I: analysis of financial misrepresentation through an accounting perspective

In the first phase of the case study we discuss the findings with regard to the incentives, the choices and the available discretion involved in financial misrepresentation. Although the report prepared at the request of the administrator of the Swiss bankrupt airline, revealed that the financial statements of 1999 and 2000[4] did not present the underlying economic position in a fair way, we try to unravel whether the roots for this financial misrepresentation lie earlier than 1999. At the end of phase I we relate these findings to the extant accounting literature, in order to find out whether this literature is able to provide a comprehensive explanation for the observed phenomena.

5.1.1. The existence of contractual incentives towards financial misrepresentation

Reviewing the external contracts we discover strong incentives embedded in three different types of contracts. These are the contracts with the shareholders, with the debt holders and with regulatory authorities.

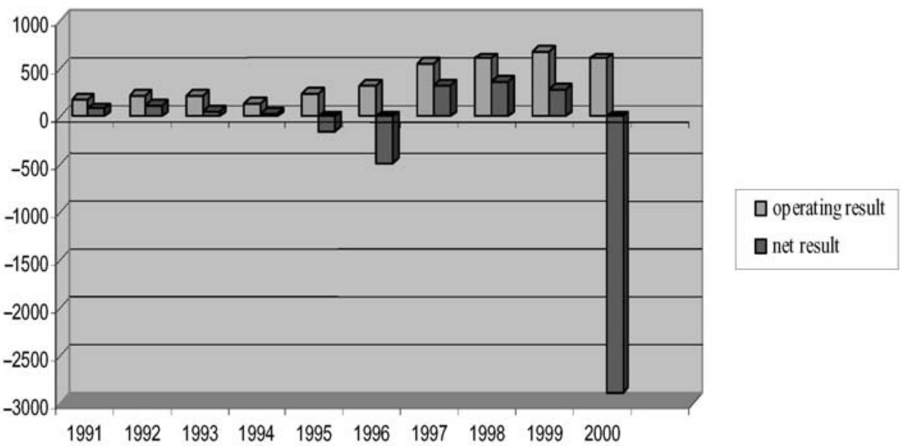
5.1.1.1. Contracts with shareholders

The Swissair/SAirgroup was a listed company. In the first half of the 1990s the communication with the shareholders concentrated mainly on operational information about the airline activities. In the second half of the 1990s the external contract with the shareholders became more important, since the growth policy of the SAirgroup was partly financed through share issues[5] and shares of the SAirgroup were used as consideration in the

[4] The administrator of the bankrupt Swiss Group had asked in the investigation report to analyse the financial years 1999 and 2000.

[5] In 1999 shares were issued for a value of CHF 325m through the exercise of conversion rights and staff bonus distribution (Annual Report 1999).

Graph 3
Swissair/SAirgroup operating result and net result in CHF million



Source: Financial Statements Swissair Group/SAirgroup.

acquisition deals.[6] From 1997 onwards the accounting numbers presented an image of value creation with increasing revenue, increasing earnings and increasing cash flows after the launch of the dual strategy (see Graphs 1 and 3). This higher level of earnings was evident over the years 1997, 1998 and 1999 (see Graphs 1, 2 and 3).

In this period the communication in the annual report underlined these characteristics of the accounting numbers (for illustrative extracts see Table 1).

5.1.1.2. Contracts with debt holders

To finance the growth strategy of the SAirgroup, debt financing[7] was also used. In 1997 the top management of the SAirgroup learned (minutes of the Finance Committee, 18 August 1997) from a report prepared by a Swiss university professor that, in order to receive a favourable credit rating on the debt market in the coming years, the SAirgroup needed to obtain an equity/total debt ratio ('eigenkapitalquote') between 25% and 35%. The finance committee was told that the current equity/total debt ratio (17.8%) was too low in comparison with competitors to obtain a favourable credit rating. The lower target ratio of 25% was almost attained in 1999 (see Table 2), and the concern to adhere to this target financial structure is found in several internal documents of the SAirgroup as well as in the external communication of the SAirgroup (see Table 2).

5.1.1.3. Contracts with regulators

Over the period of our study, the EU Regulation on air transport did not change. This meant that only EU-community carriers were allowed to operate freely across national boundaries within the EU. Sabena would loose its community carrier status if the EU were to conclude that the SAirgroup had control over Sabena. The Swiss Aviation Regulation did change during the period of study. At the end of 1998 a revision of the Swiss Federal Aviation Act abolished the need for board representation by the public institutions and paved the way for a reduction in size of the Board of Directors.[8] After this change in Swiss Regulation the Board of the SAirgroup was reduced from 20 members to 10 members.

5.1.1.4. The internal contracts of the firm

The threat of a performance-related CEO-turnover is always present during the period of our study. The explicit internal contracts with regard to remuneration changed twice over the period of the study. The contracts were changed in 1996 (to take effect from 1997 onwards) and in 2001. From 1997 until 2000, rewards were linked to the SAirgroup earnings and to the EBIT-figure of the strategic business unit within the SAirgroup to which each manager belonged. From 1997 onwards SAir top executives received stock options with very short exercise

[6] For example, for the planned increase in the shareholding of Sabena from 62.5% up to 85% (note 11 Financial Accounts SAirgroup 2000).

[7] In 1999 the SAirgroup issued new bonds for a total amount of 1400m CHF (note 24 of the financial statements 1999) and 920 m CHF bonds were placed in 2000 (note 17 of the financial statements 2000).

[8] Pursuant to Art. 762 Swiss Code of Obligations, the Company confers upon public authorities the right to nominate 10 representatives on the Board of Directors.

Table 1
CEO messages on the accounting numbers of the SAirgroup in subsequent annual reports

'1997 was a truly positive year for the SAirgroup, aided by various strategic and operational measures and having the benefit of a favorable economic environment, the Group was able to move clearly back into positive territory… Consolidated group results exceeded all expectations' (Annual Report 1997, page 8).

'Overall Group operating revenue was higher than both the previous year and budgeted expectations. The operating results and net profit were both improvements on prior-year levels' (Annual Report 1998, page 9).

'This two pillars or dual strategy is based on our desire for long-term success. The airline business with its cyclical nature and fluctuating revenue streams, has been linked with the airline-related activities to form an aviation group that provides investors with a safer and steadier earnings flow – Our goal in all these endeavors is to achieve consistently solid results that balance out cyclical tendency of the airline sector…' (Annual Report 1999, page 6–7).

Table 2
Evolution of the equity/total debt ratio over 1996–2000 and quotations on this issue

'In the medium term the Group aims to strengthen equity funds by retaining a proportion of profits, and achieve a balance sheet equity ratio of at least 25% while keeping its net debt/equity ratio below 1'(Annual Report SAirgroup 1998, page 11).
'Currently Sabena's balance sheet contains a liability of 98 Billion BEF. This is the main reason why Swissair cannot consolidate Sabena because the market capitalisation of Swissair is at the level of 1.2 billion Swiss Francs'. (Extract from a letter of the CEO of Sabena to the President of the Commercial Court in Brussels, 28 June 2001).

	1996	*1997*	*1998*	*1999*	*2000*
Equity/total debt	17.8 %	19.3%	20.3%	24.1%	5.7%

Source: Financial Statements of the SAirgroup 1996, 1997, 1998, 1999 and 2000.

periods (three years). From 1999 onwards Sabena top management joined the SAirgroup top management reward system and received stock options in SAir shares as well as bonuses partly determined on the basis of SAirgroup earnings.

The analysis of these contracts reveals the presence of multiple incentives to influence a variety of accounting numbers in a number of ways, such as reporting steadily increasing earnings, achieving a target equity structure and the preservation of the impression that the Swissair/SAirgroup did not control Sabena. The accounting numbers published by the SAirgroup, especially in 1997, 1998 and 1999, appeared to respond to these multiple incentives, 1996 and 2000 seemed to be different. In the next section we will argue which accounting and real choices with regard to the airline investments contributed to the management of these communicated accounting numbers.

5.1.2. Choices employed to influence the accounting numbers of the SAirgroup

Following the directionality assumed in the extant accounting literature (see Figure 1), we now compile from our archival data, the accounting and real choices in relation to the investment in Sabena. We will present the choices with regard to the Sabena investment in a matrix format classified by chronological order and by the type of choice using the classification of Francis (2001). Subsequently we will execute a cross-case analysis of the choices taken in relation to all the EU-Hunter airlines.

5.1.2.1. The choices with regard to the investment in Sabena

Table 3 presents the accounting choices with regard to the Sabena investment. Two types of accounting choices (namely an accounting method choice and accruals choices) with a major impact on the financial statements will be discussed in depth as they will allow us to observe the directionality between some of the variables involved in financial misrepresentation.

a. The accounting method choice

The essence of the investment in Sabena in mid-1995 was to foresee through several contracts a

Table 3
Accounting choices in relation to the investment in Sabena

A. Influence on accounting numbers

	1995	1996	1997	1998	1999	2000
Accounting method choice	Equity method	Equity method	Equity method	Equity method	Equity method	Equity method
Accruals choice		- Write-down of investment - Creation of provisions				-Creation of provisions for future losses and future commitments
Adoption standard	7th EU Directive and Swiss GAAP	IAS	IAS	IAS	IAS	IAS
Disclosure choice	Emphasis on airline statistics		Disappearance of the detailed statistics on passenger transport. Creative segment reporting : results from passenger transport combined with results from leasing activities			Split between passenger transport results and leasing results

B. Influence on presentation

	1995	1996	1997	1998	1999	2000
Classification choice -With regard to the results from airline investments	Results from associated companies	Operating results	Operating results	Operating results	Operating results	Results from associated companies
Aggregation choice - Write-down of the airline investments (1996) - Provision for future losses (2000)		Single line item				Single line item
Lay-out choice - Write-down of the airline investments (1996) - Provision for future losses (2000)		Extra-ordinary results				Extra-ordinary results

framework which made it possible for Swissair to take control over Sabena, while it apparently remained an EU airline. The consulting report 'Flair', prepared by a well-known consulting firm at the request of Swissair in relation to this acquisition, pointed out this critical element in making the acquisition successful. On 4 May 1995 Swissair acquired not only a large minority shareholding of 49.5% in the capital of Sabena, but in addition granted a loan of 151m Swiss francs (CHF) to the Belgian government which held the remaining 50.5% of the share capital. This loan entitled Swissair to raise its equity holding in Sabena from 49.5% to 62.25% when the bilateral agreements between Switzerland and the EU changed at a future date, and Sabena would no longer lose its 'community carrier' status by having a Swiss majority owner. So in 1995 SAirgroup had already prepaid its expected future capital investment in Sabena.

Further, through the terms of the different agreements (the Shareholders' and Management Agreement (SMA) and the Cooperation Agreement (CA), Swissair was able both to draft documents to formally comply with the EU Regulation on transport and also to obtain a substantial amount of management power and control in substance over Sabena. The SMA[9] signed between Swissair and the Belgian State on 4 May 1995, obtained EU approval on 18 July 1995. Meanwhile, after the Swiss directors had taken their seats on the Board of Sabena in May 1995, negotiations on the Cooperation Agreement between Swissair and

[9] The SMA stipulated that the Board of Directors of Sabena consisted of 12 members from which at least seven had to be EU citizens. Six out of those 12 directors were chosen by the Belgian government, five were appointed by the Swissair/SAirgroup and one director namely the Chairman of the Board had to be chosen in consensus by the Belgian government and the Swissair/SAirgroup. If no consensus could be reached the Swiss shareholder could appoint a candidate (art. 7 of the SMA). For the removal of the directors a special majority was needed, this implied that a Belgian director representing the Belgian government could not be removed without the approval of the Swiss shareholder. The addendum of 12 June 1995 to the SMA stated further that the appointment of a CEO had to be approved by the majority of the members of the Board of directors. The CFO and the middle management of Sabena could be proposed by Swissair (addendum 7 to the SMA). Further, according to the SMA, the decision to hire and fire top managers in the Sabena Group was in the hands of the CEO of Sabena, who needed the approval of the Board to execute these decisions.

Sabena started among the Board members of Sabena. On 24 July 1995, a couple of days after the EU approval of the SMA agreement, the Cooperation Agreement was finally negotiated and signed by the members of the Board of Sabena. The Cooperation Agreement foresaw the establishment of a Steering Committee, which would negotiate and take operating and strategic decisions for both airlines.

In 1995 the Swissair Group prepared its group accounts according to Swiss GAAP and the Seventh Directive. Swissair, based on the legal form of the SMA, chose to account for Sabena using the equity method as it formally held only a 49.5% minority stake. In 1996 the SAirgroup switched to IAS standards for the preparation of its group accounts. The IAS standards are principles-based standards and define the principle of control in general as 'the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities' (IAS 27, para. 4). Guidance on this principle of control is included in IAS 27, para. 13 (see Appendix B). Further the conceptual framework of the International Accounting Standards Committee states explicitly that transactions should be accounted for in compliance with their economic substance rather than with their legal form (IASC, 1989: para. 35). Despite the emphasis on economic substance in the international accounting standards, the SAirgroup continued to account for Sabena using the equity method in the second half of the 1990s. Even when in the late 1990s, due to the centralisation of decision-making of Sabena's passenger and cargo transport in SAir hands and the integration of Sabena's airline-support activities within the SAirgroup (see section real choices), the equity method was no longer appropriate for presenting a true and fair view of the underlying economic situation, the SAirgroup continued to use it. The investigator appointed by the Administrator of the bankrupt airline, came to the same conclusion.[10]

Full consolidation of Sabena in the books of Swissair could have been interpreted by the EU as evidence that Swissair was controlling Sabena, so it appears that the equity method continued to be used to avoid such a risk. The choice of the equity method instead of full consolidation does not create any difference with regard to the published earnings of the Swissair Group and the equity of the Swissair Group (see also Appendix C: illustration of the impact of the accounting choices of the Swissair/SAirgroup on the accounting numbers – Examples 1 and 2). Only the debt structure of the Swissair Group benefited from this choice, since it enabled the Swissair Group to keep the liabilities of Sabena off their own balance sheet (see Appendix C).[11] This debt structure however was crucial to obtain a favourable credit rating from rating agencies (see Section 5.1.1.2).

b. Accruals choices with regard to the Sabena investment

Both companies (the Swissair Group and Sabena) showed a net loss in 1995, the year of the acquisition. Graphs 3 and 4 (Sabena group) indicate that both groups realised an operating profit and that the net losses were mainly the result of accruals decisions (provision for restructuring – Swissairgroup, Annual Report 1995, page 10, note 9 and exceptional provision for fleet renewal – Sabena Group Annual Report 1995, page 5).

In 1996 two major accrual choices were taken by SAir management in relation to the airline investments. The first accrual choice was the creation of a large provision for future airline restructurings. The second accrual choice consisted of a complete write-down of the value of the investment in Sabena in the books of the SAirgroup. From 1997 onwards a situation 'technically similar' to IAS 28 (para. 22) was created through this prior write-down, which allowed for an investor's share of losses of an associate no longer to be recognised on its annual accounts if they equal or exceed the carrying amount of that investment. Although the loss made by Sabena in 1996 was indeed substantial (see Graph 4), the recognition of the SAirgroup's share in the loss of Sabena would not have reduced the investment in Sabena in the books of the SAirgroup to zero in 1996.[12] Further this loss in Sabena for 1996 resulted to a large extent from accruals choices, namely the creation of provisions and the recording of large amounts of extraordinary depreciation. The communication around these accruals by the Sabena Board of Directors was as follows:.

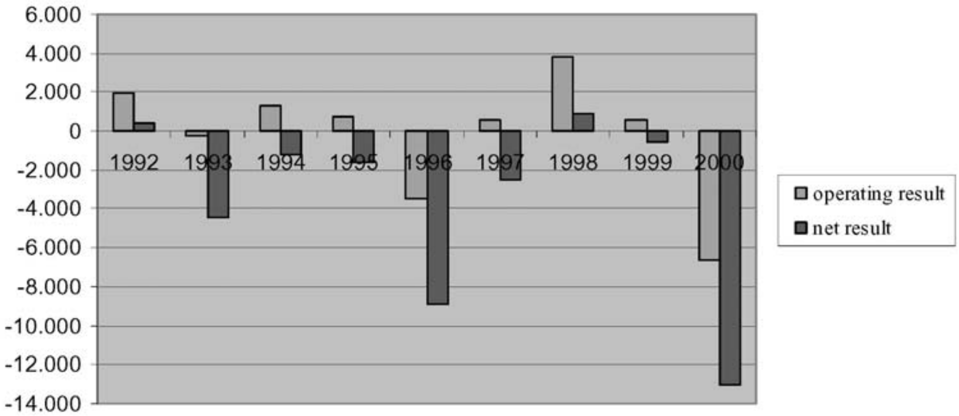
> 'In order to smooth the return to profitability the Board of Directors has decided to introduce some major one-off charges in 1996 to cover restructuring costs in the Horizon '98 plan and further

[10] 'The investigation report' Ernst & Young Bericht in Sachen Swissair, January 2003.

[11] Full consolidation would have weakened the 'eigenkapital ratio' or equity/debt ratio of the SAirgroup, since the equity/debt structure of Sabena was much weaker (12.9% in 1997; 12.9% in 1998; 9.9% in 1999 and −0.03% in 2000 – source: annual accounts of Sabena).

[12] 49.5% of the loss of Sabena was an amount of 177m CHF. The carrying value of the investment in Sabena in the books of the SAirgroup during 1996 was CHF 267m.

Graph 4
Overview of the operating result and the net result of the Sabena Group in BEF million



Source: Financial Statements of the Sabena Group.

depreciation for the long-distance fleet. – The Horizon '98 plan points the way to a return to profitability in 1998' (Annual Report Sabena Group, 1996: 5, message of the Board of Directors).

The SAirgroup's accounting choice, to write down completely the investment in Sabena, was accompanied with press releases (in Switzerland and in Belgium) stating that the write-off did not imply that the SAirgroup would terminate its co-operation with the Sabena Group, but rather that further integration was planned. The consequence of the write-down was that losses of Sabena would no longer influence SAirgroup earnings. This managerial intent of shielding the earnings of the SAirgroup from the losses of Sabena in the future was revealed in company documents (see Appendix D for the English translation as well as the original French version of the text).

In 2000 we observe again a major accruals choice with regard to the investment in Sabena. These accruals consisted of a provision for future losses and future commitments with regard to all the foreign airline investments, despite the fact that the investment in Sabena was already reduced to zero. A provision for future losses is both surprising and unnecessary, since the write-down in 1996 ensured that future losses of Sabena would no longer influence the SAirgroup's earnings in a negative way.

c. Real choices with regard to the Sabena investment: 1996–2000

In 1996 the SAirgroup started to use the possibilities foreseen in the SMA and CA for taking control in substance over Sabena, despite having only a minority stake (49.5%). In February 1996 new subcommittees of the Board of Directors of Sabena were created. In the finance subcommittee SAir employees held 50% of the votes and in the remuneration committee SAir employees held the majority of the votes. From early 1996 onwards the positions of CEO and CFO of Sabena were occupied by employees of the SAirgroup who had their incentive and reward contracts tied to the earnings of the SAirgroup. Following these appointments (CEO and CFO), the majority of the members of the Swissair/Sabena Steering Committee consisted of SAirgroup employees. This Steering Committee was in charge of the operating decisions of both airlines.

The activities of Sabena, like the activities of the SAirgroup, consisted of airline activities (passenger and cargo transport) and airline-support activities. As soon as SAirGroup employees held the majority in the Steering Committee and the Swiss CEO of Sabena, together with a number of SAir employees, occupied executive management positions in the Sabena group,[13] Sabena's airline-support activities (e.g. IT-services, catering services, ground handling services, maintenance of the new-generation engines, D-Checks on the Sabena Airbus fleet) were gradually outsourced over the years to the 2nd

[13] An e-mail request of the Secretary General of the SAirgroup to the Secretary General of the Sabena group on 10 April 2001 with regard to which SAirGroup employees did serve on the Board of Sabena or on the Executive Management of Sabena or on lower but important management functions revealed the following information. Besides the CEO and CFO, the project leader for the business development plan 1998–2000 of Sabena and the Vice President Marketing and Product were also SAirGroup employees.

Table 4
Real choices with regard to the the investment in Sabena

	1995	1996	1997	1998	1999	2000
Structuring of investment deal	- 49% ownership - Control through other contracts				AMP internal creation	AMP legal creation (50%/50%)
Centralisation of airline activities under SAir top management						
- cargo transport (Swiss cargo)			X	X	X	X
- passenger transport (AMP)					X	X
Outsourcing of airline-support activities to SAir group						
- IT services (SAir Services)		X	X	X	X	X
- Catering (SAir Relations)						
- technical assistance			X	X	X	X
- outstations				X	X	X
- Handling (SAir Services)						
- outstations				X	X	X
- Fleet maintenance (SR Technics)						
- heavy maintenance Sabena airbus fleet (C&D-checks)					X	X
- new-generation engines						X

pillar or the airline-support strategic business units of the SAirgroup (see Table 4 and contracts in Appendix A). The operating decisions with regard to Sabena's airline activities (cargo and passenger transport) were gradually centralised in the hands of SAir management (see Table 4 and the contracts in Appendix A).

The first outsourcing related to the IT-activities of Sabena to the SAirgroup:

> 'Atraxis' first year as an independent information technology company of the SAirgroup was very challenging . . . Several reservations and handling systems were delivered to third party customers and made operational, including the complete migration of the Sabena booking and handling system.'
> (Annual Report SAirgroup 1996, page 18)

If this outsourcing of activities had taken place using arm's-length transfer prices, these decisions could be seen as normal operating decisions. However, due to the use of not-at-arm's-length transfer pricing, benefits were transferred from Sabena to the airline-support strategic business units of the SAirgroup. The managerial intent of transferring benefits through this outsourcing process is admitted, in the agreement signed on 2 August 2001 between the SAirgroup, the Belgian State and Sabena in point (ii) of article 6.3 (see Appendix E).

In addition to the outsourcing mechanism, the SAirgroup obtained further benefits from the centralisation of the operating decisions on Sabena's cargo and passenger transport in the hands of SAir top management. As a result of the centralisation, SAirgroup management obtained control over Sabena's revenue from cargo and passenger transport. This mechanism has been referred to in point (iii) of the agreement of 2001 (see Appendix E).

From 1997 onwards, decisions with regard to Sabena's cargo transport were made solely by SAir management.

> 'On December 16th 1996, Swisscargo and Sabena signed an agreement whereby Swisscargo's distribution network would market the entire freight capacity of Sabena's fleet of aircraft as of January 1, 1997. Swisscargo thereby enlarged its freight capacity by almost one quarter and is taking full advantage of the chance to create a cargo hub in Brussels'.
> (Annual Report SAirgroup 1997, page 20)

In practice this meant that Swisscargo, being part of SAirlogistics, earned revenue from transporting the cargo in the 'belly-space' of Sabena aircraft.[14] Sabena received a reimbursement which did not even cover the direct costs of transporting the cargo. In 1997 the revenue earned from this cargo assumption represented 13% of the revenue of SAirlogistics.[15]

The centralisation of Sabena's passenger transport business in the hands of SAir management followed in 1999. We explain this centralisation in more detail as it will be used later to illustrate the

[14] 'Results for 1997 also include the assumption by Swisscargo of Sabena's cargo business, which increased the relevant operating revenue item by CHF 160m (Annual Accounts SAirgroup 1997, page 16, note 1).

[15] The total revenue reported by SAirlogistics in 1997 was CHF 1,221m (Annual Accounts SAirgroup 1997, page 14).

variables used to create the necessary financial reporting discretion in order to record accounting numbers in line with the target accounting numbers. Together with the investments in other airlines, the Hunter Strategy (developed during the winter 1997–1998) also foresaw a change of the hub concept. Instead of organising passenger transport around two hubs (Zurich and Brussels, whereby inter-continental travel was organised from the two hubs onwards), the Hunter strategy foresaw only one central hub for the whole group, namely Zurich. The purpose of this single, central hub was to increase inter-continental travel from the Zurich hub (implying use of the Swissair fleet and increasing Swissair's passenger revenue). A consulting report, prepared in October 1997, stated that passengers could be persuaded to take less obvious choices through, for example, price advantages or loyalty schemes and passengers could be re-routed through the Zurich hub by such mechanisms.[16]

In order to execute this idea, the important decisions in relation to passenger transport (i.e marketing, sales, network planning and revenue management) of the airlines Swissair and Sabena were centralised in the newly created Airline Management Partnership (AMP) from mid-1999 onwards. The top management of AMP consisted of three SAirgroup employees namely the CEO of the SAirgroup, the CEO of Swissair and the CEO of Sabena. The CEO of the SAirgroup had the ultimate decision-making power in the AMP. The underlying legal form of the AMP was created mid-2000 and took the form of a partnership whereby the shares were held 50% by Swissair and 50% by Sabena. This legal contract was referred to the EU authorities. By pricing decisions (changes in the fare structure of tickets), promotion decisions (the awarding of miles) and by network decisions for both airlines (a rescheduling of the timetables), AMP top management was able to influence the buying behaviour of customers (i.e. many passengers, especially business passengers, now boarded Swissair inter-continental flights instead of Sabena inter-continental flights). These mechanisms caused a passenger revenue shift from Sabena to Swissair, while the direct operating costs for flying to the destinations remained with the individual airlines. The impact of this mechanism on the results of the airlines can be derived from SAirgroup's information provided on the cost structure of the airlines in their prospectuses.[17] Through centralisation of passenger transport decisions SAir top management now controlled 80% of revenue of the Sabena Group through AMP.[18] It is therefore no surprise that in the prospectus issued by the SAirgroup for placements of public debt (11 November 1999 US$350,000,000 – 7.5% guaranteed notes due 2004, page 24) SAir management described the vehicle of AMP (referred to as 'project Diamond') as 'a virtual merger of Swissair and Sabena'. The losses to Sabena as a result of these real choices (outsourcing and centralisation) would not show in the SAir group earnings because of the write-down of the investment in 1996.

By considering the time-ordered presentation of choices (see Tables 3 and 4) with regard to the investment in Sabena, we distinguish an underlying pattern. At acquisition, real choices (contract structuring) in combination with accounting choices were used to ensure that the investment formally complied with the EU Regulation, while allowing control in substance to be taken. Next the investment was written down and the restructuring of activities started, whereby benefits were transferred from Sabena to the SAirgroup. However, the provisions for future losses in 2000, do not seem to fit into the pattern. It is surprising that a provision for future losses is recorded, since the write-down of 1996 ensured that future losses of Sabena would no longer influence the SAirgoup's earnings in a negative way. In order to find out whether these observed patterns are a coherent set of choices, we compare them with the choices made in relation to the EU-Hunter airline investments.

5.1.2.2. Choices in relation to the investments in other EU airlines – the Hunter strategy

The 'Hunter Strategy,' also foresaw alliances with other European national airlines:

> 'The intended expansion of Swissair was focused on countries, airports and markets with large growth potential (Belgium, Austria, Finland, Hungary, Portugal and Ireland), and not on the

[16] This element is also included in the minutes of the Executive Board of the SAirgroup, 19 January 1998.

[17] Prospectus SAirgroup 5 October 2000, €400,000,000 – 6.625% guaranteed bonds due 2010 – page 43: The very nature of the airline business is such that a carrier's operations are highly leveraged. Each flight has fixed costs such as fuel, fees and labour, while revenue from the flight depends entirely on the number of passengers or cargo carried and the fares paid. This means that any decrease in the number of passengers or cargo carried and/or fares paid results in a disproportionately greater decrease in profits. On the other hand, any increase of customer demand which significantly exceeds planning may, in connection with a limited extension of capacity, lead to substantially higher average proceeds per flight.

[18] Total revenue of the Sabena Group in 1999 is €2,370m, whereby revenue from flight operations in 1999 is €1,929m (note C to the consolidated profit and loss account of Sabena, Annual Report 1999, page 18).

Table 5
Overview of the investments made under the Hunter Strategy

Year	*Country*	*Company*	*% of shareholdings*
1998	Germany	LTU	49.90
1998	France	Air Litoral	49.00
1998	Italy	Air Europe	49.90
1998	Italy	Volare	34.00
1999	France	AOM	49.50
1999	Poland	LOT	37.60
1999	South Africa	SAA	20.00
2000	Italy	Volare Group out of Air Europe and Volare	49.79

Source: Annual Reports of the SAirgroup 1998–2000.

mature markets such as Germany, France and Italy. In addition, the Zurich airport was to be used as a central hub and expanded. The Hunter strategy was conceived as a moderate investment strategy with clearly minority investments (10%–30%) and defined capital requirements (CHF 300 million).'[19]

The first acquisitions following adoption of this strategy took place in autumn of 1998 and were followed by further acquisitions in 1999. However, the type of companies acquired and the terms of acquisition did not match the originally conceived strategy (see citation above), as shown in Table 5.

In a similar way to the Sabena investment deal, the SAirgroup in fact controlled these airlines through agreements.

> 'The starting point led Swissair to formally comply with the EU ordinance, but de facto to circumvent this regulation. In order to obtain direct management control immediately as well as to formally insure the subsequent takeover of a majority interest, the Group had to resort to complex and difficult management structures, call/put options, portage solutions, guarantee commitments, as well as multiple tiered and non-transparent intermediate financing'.
> (Investigation undertaken at the request of the Administrator of the SAirgroup regarding Swissair, press release).

[19] See press release accompanying the report 'Results of the investigation regarding Swissair'.

As well as the similar structuring of contracts we discovered many other similarities (see Table 6).

The data in Table 6 show an almost identical pattern of accounting and real choices in relation to all the nearly-majority acquisitions in EU-airlines except for the presentation choice of the write-downs of the EU Hunter airlines (see Tables 3 and 5). We interpret this as a repeated application of a pattern of choices that had been shown to be useful to date in attaining the desired accounting numbers. In the next section we examine the discretion that was available to management to pursue the publication of the target accounting numbers.

5.1.3. Analysis of the available accounting discretion

Management can only make choices when they have the discretion to do so. Following our framework for analysis (see Figure 1), we look for variables which influence the available discretion through an analysis of the institutional environment and company characteristics (ownership and board characteristics). Regarding institutional elements we note that the Sabena investment and the EU Hunter investments were made in countries which are characterised by lower quality accounting standards (Ball et al., 2000; Ali and Hwang, 2000), a lower degree of investor protection, a lower risk of litigation and a lower degree of enforcement (La Porta et al., 2007, 2008; Hope, 2003). So all EU airline investments were made in countries where the institutional environment allowed more accounting discretion.

Regarding company characteristics, we observe that all the EU airline investments were made in non-listed companies. After the investment deal with the SAirgroup, the ownership structure of each of the EU Hunter airlines was changed into a concentrated ownership structure with two major shareholders. Sabena already had this ownership structure at the time the investment was taken. Agency research shows that the degree of ownership concentration affects the nature of contracting. Research results are available that demonstrate that accounting informativeness tends to decline as ownership concentration increases (Dempsey et al., 1993; Warfield et al., 1995; Donnelly and Lynch, 2002; Fan and Wong, 2002) . We conclude that we not only observe a pattern of identical real and accounting choices (see Tables 3, 4 and 6) with regard to Sabena and the EU Hunter airline investments (except for the presentation choice with regard to the write-down) but also that the company characteristics and the institutional environments of these airlines are similar.

Table 6
Choices with regard to the EU Hunter airlines

Accounting choices
Influence on accounting numbers

	1998	1999	2000
Accounting method choice	Cost method (LTU and Air Europe) Equity method (Air Litoral and Volare)	Equity method all airlines	Equity method
Accruals choice	Write-down Air Litoral	Write-down other EU-Hunter airlines	Provisions for future costs and future commitments

Influence on presentation

	1998	1999	2000
Classification choice - Results from airline investments	Operating results	Operating results	Results from associated companies
Aggregation choice - The write-downs (1998 and 1999) - Creation of provision for future losses (2000)	Aggregated with positive accruals from the release of a provision created in 1996 (see Table 3)	Aggregated with positive accruals from the release of a provision created in 1996 (see Table 3)	Single-line item
Lay-out choice - Write-down of airlines - Provision for future losses and commitments	Not visible on income statement, low quality of disclosure in notes	Not visible on income statement, low quality of disclosure in notes	Extra-ordinary item

Real choices

	1998	1999	2000
Investment decisions in airlines	49% shareholding and drafting of contracts	49% shareholding and drafting of contracts	
Outsourcing of support activities to SAir group (see citation *)		X	X
Centralisation of cargo and passenger transport under SAir management (see citation **)		X	X Planned to join AMP in the future

* '*The SAir has amalgamated the charter activities of Balair, Sobelair, LTU, Air Europe and Volare into the European Leisure Group.*'
(Annual Report 1999, page 15)

If we analyse the board characteristics of the SAirgroup (size, composition) we observe changes over the time span analysed (1991–2000). At the end of 1998 a revision of the Swiss Federal Aviation Act abolished the need for board representation by the public institutions and paved the way for a reduction of the Board of Directors. Most of the Board members saw their directorship come to an end early in 1999. This implies that when Hunter investments had to be approved by the Board, many of the members were at the end of their mandate. The short-term horizon problem, which is studied in relation to CEOs, might also be an issue in the governance process by boards. 'Short term horizon' in relation to boards might not imply an extra incentive to manage earnings, but could point to the conclusion that their desire to monitor might be less.

Many Board members of the SAirgroup held identical multiple directorships. After the Board reform, the majority of the Board members of the SAirgroup were also directors of a financial institution which financed not only the SAirgroup, but also other companies in the airline value chain, namely aircraft manufacturers (the manufacturer of Airbus) and the Zurich Airport. If the same identical inter-corporate directorships are present in the composition of the Board of Directors independence might suffer, since it is an open question which company's interests would have priority in case of conflict.

5.1.4. An accounting perspective on financial misrepresentation

Analysing the multiple incentives, multiple choices and available discretion through an accounting literature perspective (see Figure 1) we find a number of items which cannot be adequately explained by this accounting literature. We observe unexplained elements with regard to incentives, the accounting choices and the available discretion. According to this literature, incentives embedded in contracts are explanatory variables and exogenous in relation to the presence of financial misrepresentation. The remuneration contract however was rewritten twice and it seems that the contract was rewritten in such a way to allow the choices which were necessary to facilitate the financial presentation of the target accounting numbers. The bonuses available from 1997 onwards benefited from accounting choices made in 1996. The new CFO of the SAirgroup, appointed in July 2001, was surprised that the favourable impact of the not arm's length transfer prices was not eliminated from the airline-related SBU figures for evaluation and bonus determination purposes (see investigation prepared at the request of the Administrator of the bankrupt Swissair Group). Further we notice that the change in Swiss Aviation Regulation (change in external contract) had an impact on Board characteristics. This impact coincided with the time period that Board members were asked to approve the Hunter Strategy.

Concerning the accounting choices, two elements are difficult to understand. First the question arises why the write-down of Sabena (1996) is presented in a different manner than the write-down of the EU Hunter airlines in 1998 and 1999 (see Tables 3 and 6). Second it is difficult to understand, from an accounting point of view, why a provision for future losses is created in the 2000 annual accounts for investments already fully written down (Sabena – 1996; Air Litoral – 1998; other EU airlines in 1999).

Finally, the CEO of the SAirgroup needed discretion to transfer benefits from one unit of the group to another unit. This discretion is not explained by the variables uncovered by traditional accounting research. Other mechanisms must be used to allow such transfers to happen. As all definitions of financial misrepresentation and earnings management point to the central role of top management in the decision to engage in the management of accounting numbers, we now borrow insights from management theories in order to find explanations for the elements listed in this section.

5.2. Phase 2: A management theory perspective on financial misrepresentation

In this second phase of the case study we introduce insights from upper-echelons theory, strategic choice theory and power circulation theory. We collect data on CEO characteristics, CEO succession, the composition of top management teams, the strategic choice of the CEO and the distribution of responsibilities among top teams. These elements are presented in Table 7 below.

Consistent with power circulation theory, in 1996 the new CEO started a strategic change which closely matched his prior pattern of strategic choice, which is consistent with his previous background and which brought him to the top of the SAirgroup. In the early 1990s this CEO had successfully implemented a growth strategy in the legally independent division of the Swissair Group, Swissair Associated Companies (SAC) which was active in the catering and the hotel business. That growth strategy was characterised by acquisitions and by outsourcing the catering activities of Swissair to the SAC from 1993 onwards. These strategies are consistent with his financial background as, before running the SAC, he had worked for a Swiss bank in the 1980s. Research in the management literature suggests that people with a financial background typically regard firms as a collection of assets that need not be associated with a single line of business (Jensen and Zajac, 2004). The CEO diversified the corporate strategy of the Swissair/SAirgroup by launching his 'dual' strategy. This event can be interpreted as supporting a variant of the ability-matching model which suggests that a CEO may attempt to increase his value to the firm by changing the business mix of the firm to one for which his managerial skills are uniquely well suited (Shleifer and Vishny, 1989). The dual strategy was a

Table 7
Events related to the CEO based on the management literature

	Pre-1995	1996–2000	2001
CEO succession	Internal	Internal	External
CEO-turnover	Unplanned - performance related (1995)	Unplanned - performance related (January 2001)	
CEO-background	Airline industry	Financial	Financial
Strategic choice	Airline focused	Dual strategy : Expansion & diversification in airline and airline-support business	Return to airline focus with divestments of foreign airlines
Organisational design	Swissair is core of the Swissair group	Holding structure, different activities in different SBUs which are separate legal entities	Merging the support SBU into the airline again (SAir Relations, SAir Services and SAir Logistics)
Change in top team		New CFO, new CEO of Swissair and other important positions, most of them were external appointments	New CFO (external appointment) further change in top management team
Change in responsibility structure		Change in responsibilities of top managers in such a way that choices needed for financial misrepresentation could be executed	Change in responsibilities again
Change in reward structure		Adaptation of remuneration system in line with choices to be made	Adaptation of remuneration system again

copy of his prior strategy when he was leading the SAC. However, this time a combination of accounting and real choices was needed to present his strategy as a successful one. This CEO had planned an initial public offering (IPO) on a number of airline-support strategic business units (SBUs) for 2001. The financial resources generated by these future IPOs were needed to finance the dual strategy. These IPO decisions however entailed incentives towards financial misrepresentation at segmental reporting level. The accounting choices in combination with the not arm's length transfer pricing for the activities outsourced to the 2nd pillar of the SAirgroup, made these airline-support SBUs also look more profitable.

When the CEO of the SAirgroup wanted to pursue the policy of re-routing the passengers through the Zurich hub, he centralised all operational decisions with regard to the airlines Sabena and Swissair (see 5.1.2.1.b) into his own hands. This centralisation changed drastically the task responsibilities of the CEOs of the individual airlines. When the American CEO of Swissair resigned in mid-2000, his complaint was that he never received the authority and responsibility to run the airline as he wished:

> 'Find the best person in the world to replace me. But give him the necessary authority so that he can run the airline as he wants. Do not underestimate the importance of this point. The fact that I was not able to stay in the company was due to the fact that this leadership question was not taken care of.'
> (Translated from Luchinger, page 260, extract from the resignation letter of J. Katz).

The CEO of the SAirgroup appointed in 2001 again changed the strategy of the group. The focus came back to the airline industry. However, the new CEO and his team now opted to divest from the EU airlines which they blamed for the financial turmoil the SAir Group was facing (see citation in Section 4.2). Both CEOs not only changed the strategy of the SAir Group shortly after they took the leading position in the company, they also both changed the organisational structure of the company and the composition of the top management group. In particular, they removed internal management with long tenure from important functions and replaced them with external managers. To avoid resistance to those choices which were necessary to attain the target accounting numbers, centralisation decisions were taken together with changes to the reward structure.

If we combine the pattern detected in the first phase of the case analysis with the results of the second phase of the case analysis, we are able to shed light on the unexplained items left after the first phase (see Section 5.1.4).

6. A multi-theory perspective on financial misrepresentation

The combination of case findings from the first phase of the case analysis with the case data from the second phase results in a multi-theory perspective on the process of financial misrepresentation. This multi-theory perspective provides additional insights on the incentives which trigger financial misrepresentation, the choices employed to arrive at the target accounting numbers and the variables managed to obtain the necessary discretion to do so.

6.1. The role of incentives embedded in contracts governing the firm in the process of financial misrepresentation

Incentives are traditionally regarded in theory-based quantitative research as exogenous variables to the process of financial misrepresentation. In the literature, there is a theoretically proposed relationship between the incentives embedded in the contracts and the presence and the magnitude of financial misrepresentation (see Figure 1). However, in the first phase of the case study we observed that the remuneration contracts were rewritten twice over the period of study. It appears that the contracts were rewritten in such a way to allow the necessary accounting and real choices to be implemented in order to attain the target accounting numbers. The necessary choices seem to be explanatory variables and the incentives embedded in the contracts the explained variables. Combining these observations with the results of the second phase of the case analysis, we find that these contracts are rewritten each time a new CEO enters the company and embarks on a new strategy. Accounting numbers have to represent the successful implementation of the CEO's strategy from the second year that the CEO is in office. The contracts and the choices interact in order to arrive at the target accounting numbers, which are aligned with the strategic choice of the CEO. Consequently there is simultaneity between the remuneration contracts and the choices needed to attain the target accounting numbers.

We can extend the observation on the remuneration contracts to other contracts of the firm.

Internal explicit contracts (such as remuneration contracts) are easier to renegotiate than external contracts. Whether or not an external contract can be renegotiated depends on the power relationship between the firm and the external party. With regard to debt covenants it is possible that for small firms, the covenants are imposed to them. Larger firms may be able to negotiate the contracts with debt holders. Concerning regulation, large companies can be more influential than small companies with regard to shaping regulation or codes issued by regulatory authorities. As such, regulation might be endogenous for large firms in the industry, whereas the same regulation could have an exogenous character for the smaller firms in the same industry. The external contracts with shareholders cannot usually be renegotiated.

These results of the multi-theory perspective on the case data provide evidence that the direction of the causation assumed in the agency framework is often reversed. The incentive embedded in a negotiable contract of the firm becomes dependent on the target accounting numbers to be reported and the accompanying accounting and real choices to be made in order to arrive at the target accounting numbers. The case results allow us to conclude that incentives in negotiated contracts are endogenous in the process of financial misrepresentation.

6.2. Multiple choices employed in financial misrepresentation

The multi-theory perspective provides explanations with regard to a number of accounting choices discovered in the first phase of the case analysis and which could not be adequately explained by the accounting literature perspective. The analysis of the managerial background and career path of the CEO provided us with a deeper understanding of the origin of the CEO's strategic choices and the interplay with accounting and real choices that were necessary to present his strategy as successful. If we relate the accounting and real choices to the respective CEO tenures, the difference in the presentation and classification of the write-downs of the airline investments can now be explained (see Tables 3, 4 and 6 in combination with Table 7). The write-downs in 1998 and 1999 related to the CEO's own investment decisions, whereas the investment in Sabena was the responsibility of the predecessor CEO. An explicit presentation of this write-down of Sabena could not harm the position of the current CEO. This write-down of 1996, which could be blamed on the predecessor CEO, was income enhancing for the future, especially in combination with the real choices to come. One could wonder whether the CEO of the SAirgroup had this in mind when writing in the Annual Report of 1996:

> 'The measures that we have introduced form the basis for a stronger and healthier SAirgroup. We believe that we have the foundation in place that will enable us to achieve substantially better results in the coming years, providing an appropriate return on invested capital and allowing our

staff to take advantage of the profit-related bonus scheme that we have created.'
(Annual Report 1996, page 6)

The provision for future losses and future commitments recorded in the annual accounts of 2000 could also be blamed on a predecessor CEO and therefore a visible presentation was no problem. This accruals decision of the CEO coming on board of the SAirgroup in 2001 before the authorisation for issue of the annual accounts of 2000, would also enhance the future income of the SAirgroup through its reversal effect later.

'The realignment of our Group's overall business thrust requires corrective action in balance-sheet terms, with the charging of extensive depreciation and provisions to the 2000 results. This will enable the Swissair Group to focus on its new corporate objectives free of the financial burdens of the past.'
(Annual Report 2000, page 5)

We observe that choices are influenced by the incentive to communicate the CEO's strategic choice as successful, while hiding away the current CEO's negative actions and emphasising the negative actions of predecessor CEOs.

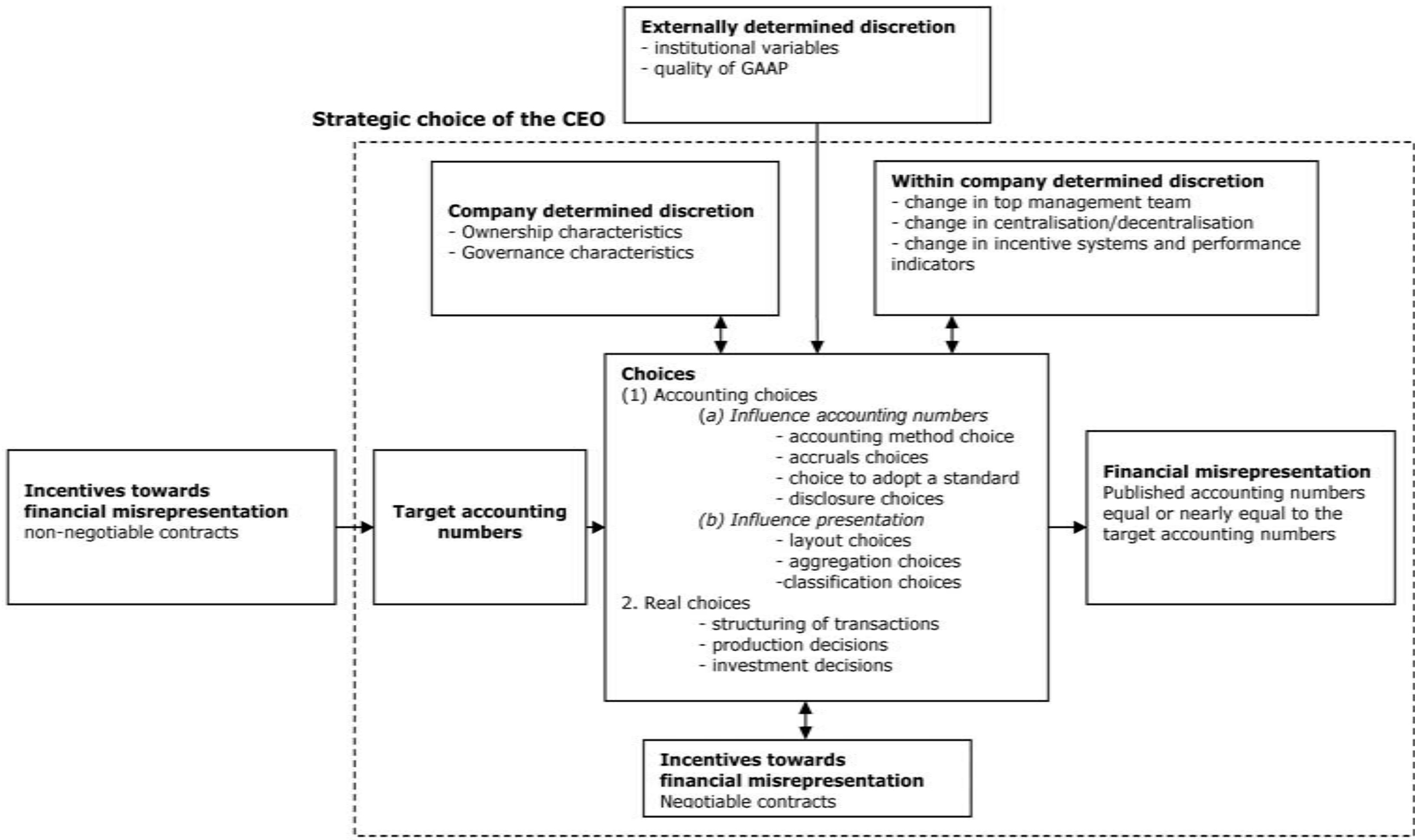
6.3. Discretion to manage accounting numbers

The multi-theory perspective also allows us to uncover additional mechanisms which provide discretion to the CEO and the top management team to engage in financial misrepresentation. The analysis of the case data in the first phase could not explain how it was possible to structure transactions and applying a transfer pricing policy, not determined on an arm's length basis, which had an impact on the results of the individual SBUs. According to the accounting literature, opportunities for discretion arise from external environmental sources (such as the quality of GAAP and the institutional characteristics) and company characteristics (such as governance and ownership). However, in order to transfer benefits between the different entities of a group, other mechanisms than those discovered by the extant literature were needed.

The insights derived from the second phase of the case analysis indicate that the CEO used first of all his power to change the top team composition. A change in the executive team enlarges the information asymmetry between the CEO and his new top team members (because of external recruitment). However, merely changing the top team composition was not sufficient to obtain discretion. The need for accounting discretion over a business unit also shaped the degree of centralisation, the division of task responsibilities between top team executives and the choice of the performance indicator in the bonus plan of the executive of the business unit (see creation of AMP). The incentive schemes for the individual top team members were constructed in such a way that the CEOs of the SBUs would not oppose the earnings management policy of the corporate CEO. In case of a detrimental impact of a choice necessary to pursue the overall strategy (reporting strategy inclusive) on their business unit results, the CEOs of the SBUs were shielded to a certain degree (which could vary) from this negative impact (e.g. a part of the bonus plan of the top executives of Sabena was tied to the net result of the SAirgroup and the top executives of Sabena took also part in the share option plan of the SAirgroup, in common with the SAir executives). When the accounting choices were beneficial for the units, the top team members benefited from both the real decisions and from the 'pure' accounting decisions through their bonus plan. This adaptation of the bonus and incentive plan in line with the financial reporting strategy, implies a renegotiation of internal contracts with the SBU managers. This multi-theory lens provides evidence that within-firm relations (namely the organisational design, the centralisation/decentralisation decisions, top team composition, task responsibility and performance indicators for evaluation and reward purposes) need to be managed as well in order to obtain managerial discretion to pursue financial misrepresentation.

Traditional earnings management research usually regards the available discretion as an exogenous opportunity to engage in financial misrepresentation. The case data however reveal that a number of opportunities for discretion are created simultaneously with the renegotiation of contracts and the decision on the accounting and real choices needed to attain the target accounting numbers. The variables used to create within-firm discretion have an endogenous character and are determined in line with the strategic choice of the CEO. The opportunities for discretion created by ownership characteristics (concentrated vs non-concentrated and listed vs non-listed) and governance characteristics can have an endogenous character when the CEO is able to influence these characteristics (e.g. change of the ownership structure of a number of EU airlines after the investment of the SAirgroup – see Section 5.1.3). Discretion stemming from the external environment such as the institutional variables (investor protection, risk of litigation) and the quality of GAAP are

Figure 2
Financial misrepresentation through a multi-theory perspective



exogenous to financial misrepresentation. However, with regard to the quality of GAAP it is possible to distinguish circumstances where the GAAP used is an endogenous variable. One such circumstance is when GAAP can be applied on a voluntary basis instead of a mandatory basis. Another circumstance is when companies are able to influence the standard-setter through lobbying when standards which affect their financial situation are on the agenda. The GAAP applied will then have an endogenous character in the process of financial misrepresentation. The second circumstance applies to large companies. So we notice that whether or not a variable is endogenous in the process of financial misrepresentation is also influenced by the size of the company.

These additional insights on the role of incentives, choices and discretion in financial misrepresentation allow us to adapt Figure 1 (financial misrepresentation through an accounting perspective) in line with the case results obtained through the multi-theory perspective. The findings obtained through this multi-theory perspective are presented graphically and concisely in Figure 2.

Within the boundaries of the strategic choice of the CEO a number of variables, traditionally regarded as exogenous to the presence or absence of financial misrepresentation, might have an endogenous character. This finding applies to incentives embedded in negotiable contracts and a number of opportunities for discretion. According to the case data only incentives embedded in non-negotiable contracts and discretion influenced by the institutional environment have an exogenous character in the process of earnings management.

6.4. Consequences of this financial misrepresentation

A renegotiation of contracts together with the creation and use of existing opportunities for discretion, made it possible for the CEO to embark on a process which led to a misrepresentation of the economic situation of the SAirgroup. We notice that in this process extensive use was made of unobservable choices. Choices whereby the user of the accounts can adjust for their influence do not necessarily mislead the reader of the financial statements (e.g. an accruals decision disclosed in a transparent way, a gain on sale of assets which is properly disclosed, off-balance-sheet leasing when lease payments are disclosed in the notes). When companies do not fully consolidate their investments no information is provided in the notes which would allow users of those accounts to adjust for these decisions and to evaluate their impact on published figures (see also AAA, 2003). This case study indicates how legal contract structuring was used to mask the control in substance of a subsidiary for group accounts purposes. The incorrect answer to the question of control led to a mis-stated financial position being reported on the consolidated balance sheet (see Appendix C). The foundations for the disconnection between the published accounting numbers on firm performance and the underlying economic performance of the entity were laid in the early years of the investment in Sabena. The disconnection between the published accounting numbers and the underlying economic performance was marginal at the start, but the gap enlarged between 1997 and 1998, and widened drastically in 1999 once the Hunter strategy had been fully implemented. If SAir top management had consolidated the foreign airlines many external parties would have taken different decisions on the basis of annual accounts in which these investments would have been fully consolidated. Now shareholders, debt holders and other stakeholders of the SAirgroup have taken suboptimal economic decisions with regard to their relationship with the SAirgroup in 1999 and 2000 because published accounting numbers did not represent the underlying economic reality. The actual debt structure was much riskier than the published debt structure and the published earnings figures were managed upwards.

7. Conclusion

In contrast to existing research we studied the management of accounting numbers from an integrated (multiple incentives and multiple methods) and dynamic perspective using a multi-theory perspective. With this research design we responded to several calls in the literature (see Schipper, 1989; Dechow and Skinner, 2000; Fields, Lys and Vincent, 2001). Through access to internal company data we were able to observe the incentives which triggered the decision to engage in financial misrepresentation together with the underlying choices and mechanisms which support or facilitate this decision from an internal company perspective. This case study approach allows us to provide insights in the process of financial misrepresentation additional to the extant accounting literature. In the first phase of the case analysis we looked through an accounting perspective to the process of financial misrepresentation. In the second phase of the case analysis we added insights from management theory in order to provide a richer explanation for the data observed. The combination of the case results of these two phases allow us first to understand the nature of the relationships between the variables involved in the process of financial misrepresentation and second to gain insight in variables, previously uncovered by traditional earnings management literature, which are used to obtain discretion. The insights of both theoretical perspectives are complimentary for understanding the process of financial misrepresentation.

Traditional earnings management research regards all contracts and available discretion as exogenous variables in the process of financial misrepresentation in order to explain the presence or absence of earnings management and its magnitude. The multi-theory perspective however shows that accounting numbers are used and abused to achieve managerial objectives and to act according to the incentives embedded in non-negotiable contracts within the constraints of the environmentally determined discretion. According to the case results, only the incentives embedded in the non-negotiable contracts and the environmentally determined discretion, such as institutional variables and the quality of GAAP are exogenous in the process of financial misrepresentation. We find that incentives embedded in negotiable contracts, governance characteristics and ownership characteristics, which have traditionally been regarded as exogenous in the process of financial misrepresentation, have an endogenous character. The case results show that these variables, which are supposed to affect financial misrepresentation, depend themselves on that outcome. Incentives in negotiated contracts and certain sources of discretion are determined simultaneously with the type and the magnitude of financial misrepresentation and the methods to arrive at that financial misrepresentation. Simultaneity is, alongside omitted variables, an important cause of endogeneity (Chenhall and Moers, 2007). This finding points to specification problems in large-scale empirical research as the causality assumed there is often reversed in practice and independent and dependent variables are incorrectly distinguished. An additional contribution of the multi-theory perspective is that it identifies the boundaries within which these variables interact. The case data reveal that these variables are simultaneously determined within the frame of the strategic choice of the CEO and the accompanying reporting strategy to present the strategic choice as successful.

Furthermore, this multi-theory perspective allows us to discover additional elements of discretion on top of the variables used in the extant literature. The data indicate that in order to implement the 'necessary' accounting and real choices to obtain the 'target' accounting numbers, the following variables can also be adapted: the composition of the dominant coalition, the organisational design, and the design of the management control system (degree of centralisation, the division of task responsibilities and the incentive and reward structures).

At a higher level the case findings allow us to conclude that financial misrepresentation or the management of the accounting numbers can involve decisions in all management areas (financial statements, narratives in the annual report, composition of the top team, decisions on organisational structure, division of responsibilities, the management control system, investment decisions and operating decisions). Eliminating the management of accounting numbers in these situations would require a complete re-orientation of the strategy, restructuring of activities, redesign of the organisation and changing the management control systems back to those required to meet real business needs in terms of the available market opportunities.

With this multi-theory analysis we have shown that current accounting research has overlooked perspectives important for the better understanding and explanation of the managerial incentives to engage in financial misrepresentation and the underlying processes triggered by this decision. Arm's length analysis of financial data alone is not able to reveal such mechanisms and a wider range of research methods must be deployed to uncover them.

Appendix A
Overview of documents and publications consulted

Minutes of meetings

Minutes of the Board of Directors of the SAirgroup and agenda with accompanying documents: 1995–2001 (October)

Minutes of the Management Committee (konzernleitung) of the SAirgroup and agenda with accompanying documents: 1995–2001 (October)

Minutes of the Finance Committee of the SAirgroup and agenda with accompanying documents: 1995–2001 (August)

Minutes of the Executive Committee of the Board of Directors of the SAirgroup (Ausschus der Verwaltungsrat): 1996–1999 (April) – Committee was abolished in April 1999 due to the reform of the Board of Directors

Minutes of the Board of Directors of Sabena and agenda with accompanying documents: 1994–2001 (November)

Minutes of the Management Committee of Sabena and agenda with accompanying: 1994–2001 (November)

Minutes of the Workers' Council Meetings: 1994–2001 (November)

Minutes of the Steering Committee SAir/Sabena: May 1995–March 1998

Minutes of the Steering Committee Diamond – 1999 (No. 1–No. 9)

Minutes of the AMP (Airline Management Partnership) – Management Committee Meeting (October 1999–October 2001)

Contracts

Shareholders' and Master Agreement between the state of Belgium and Swissair Swiss Air Transport Company LTD – 4 May 1995

Loan Agreement between Société Féderale d'Investissement (Belgium) and Swissair – 24 July 1995

Global Warrant Certificate and Terms of Warrants – 25 July 1995

Cooperation Agreement between Sabena and Swissair, Swiss Air Transport Company – 24 July 1995

Codeshare beyond Agreement between Swissair and Sabena, 1 June 1997

Frame Agreement between Swissair Swiss Airtransport Ltd and Sabena NV concerning the cooperation in the area of cargo transportation – 16 December 1996

Cooperation Agreement between Sabena NV and Swisscargo Ltd concerning the cooperation in the area of cargo transportation – 12 August 1997

Fleet Cooperation Agreement, 18 December 1997 between Swissair, SAirgroup, SR Technics, Sabena, DAT and Sobelair (the latter two are subsidiaries of Sabena)

Technical Assistance and Service Agreement (TASA) between Sabena and Gate Gourmet International Ltd (subsidiary of SAirgroup) on 5 February 1997 (relates to catering)

Swissair/ Sabena Airline Management Partnership (legal establishment of the UK partnership) – Allan & Overy, London, 31 July 2000

Consulting reports

Report prepared on a possible acquisition – Flair Report – (24 May 1994) – McKinsey

Report on a multi-partnership strategy – (3 October 1997) – McKinsey

Several reports on the Hunter Strategy – (30 October 1997, 1 December 1997, 14 January 1998, 3 February 1998)

Several reports on project Diamond – (April 1999, June 1999, December 1999) – McKinsey

Several reports on project Diamond, exclusively on the cost-benefit sharing model under project Diamond = AMP (July 1999–November 1999) – Roland Berger

Several consultancy reports on AMP (December 1999–January 2000) – McKinsey

AMP – Clean Slate Report – March 2000 – McKinsey

Strategic options for Sabena Technics – 16 September 1997 – McKinsey

Situation of SR/SN prepared for Sabena – 7 November 1997 – McKinsey

Appendix A
Overview of documents and publications consulted *(continued)*

Development and Evaluation of Strategic Options – catering – Sabena 26 August 1997 – ICARUS – consulting AG
Development and Evaluation of Strategic Options – cargo handling – 26 August 1997 – ICARUS – consulting AG
Strategic Options for Sabena Ground Handling – 16 September 1997 – Mc Kinsey
PWC–Valuation of the maintenance division – Sabena Technics – 1 January 1999
Report for the financing of Aircraft – Sabena – March 1999 – Crédit Lyonnais – Transportation Advisory Group
Selecting the best strategy to value the state participation in Sabena – report for the Board of Directors of Sabena – November 1999 – Boston Consulting Group
Project Nightfly: strategic perspective on shareholder negotiations – (December 1999–March 2000), – ING Bearings – report ordered by the Minister of Public Companies
Project Daylight – ING Bearings – May 2001
Blue Sky – several consulting reports prepared for Sabena – by the Boston Consulting Group (spring 2000–March 2001).
Warburg Dillon Read – comments on financial guidelines of the SAirgroup – 29 September 1999
CSFB – comments on financial guidelines of the SAirgroup – November 1999
Project Shield – October 2000 – McKinsey
Risk assessment and strategy – March 2001 – CSFB

Reports of auditors
Management letters of the auditor of Sabena (KPMG) (1995, 1996, 1997, 1998, 1999, 2000)
Sabena – Opinion on the proposed capital increase – 11 December 2000 – KPMG
Report of STG Coopers and Lybrand to the Finance Committee and to the Board of the SAirgroup (1995, 1996, 1997)
Management Report of PWC to the Finance Committee and to the Board of the SAirgroup (1998, 1999, 2000)
Financial Exposure Report of PWC to the Board of the SAirgroup – February 2001
Audited results for the half year to 30 June 2001 to the Board of the SAirgroup of KPMG

Prospectuses issued by the SAirgroup
SAirGroup – SAirGroup Finance (NL) B.V. – €400,000, 000 – 4.375% – Guaranteed Bonds due 2006 – Guaranteed by SAirgroup – 11 November 1999
SAirGroup – SAirGroup Finance (NL) B.V. – US $350,000,000 Guaranteed Notes due 2004 – Guaranteed by SAirgroup – 11 November 1999
Prospekt SAirgroup 2000–2007 von CHF 300,000,000, 4¼% Anleihe (loan) SAirgroup – 25 January 2000
SAirGroup – SAirGroup Finance (NL) B.V. – €400,000,000 – 6.625%. Guaranteed Bonds due 2010 – Guaranteed by SAirgroup – 5 October 2000

Other documents
Correspondence of the CEO, the Secretary General and the legal department of Sabena 1995–2001
The Annual Reports of Swissair/SAirgroup 1945–2000
The Annual Reports of Sabena 1990–2000
Financial Statement Swissair Group for the 6 months ended 30 June 2001
Sabena Development Plan 1998–2000
Sabena Development Plan 2000–2002
Remuneration contracts of CEO Sabena 1996–2000 and 2000–2001, CEO SAirgroup 1996–2000, CFO SAirgroup 1997–2000, CEO Swissair 1997–1999 (details of the remuneration contracts of the other SBU CEOs were found in the Ernst & Young Report – complete version)

Appendix A
Overview of documents and publications consulted *(continued)*

Bonus and stock option plan SAir-Executives – 1997–2000
Bonus and stock option plan Sabena – Executives – 1999–2000
Press maps of Sabena and SAirgroup – 1995–2001

Reports, documents, articles and books

Chambre des Représentants de Belgique. (2003) ENQUÊTE PARLEMENTAIRE visant à examiner les circonstances qui ont conduit à la mise en faillite de la Sabena, de déterminer les éventuelles responsabilités et de formuler des recommandations pour l'avenir. DOC 50 1514/003 and DOC 50 1514/004

Decraene, S., Denruyter P. and Sciot, G. (2002) *De crash van Sabena.* Leuven, Uitgeverij Van Halewyck

Lüchinger, R. (2001). *SWISSAIR l'histoire secrète de la débâcle.* Lausanne, Editions Bilan,

Moser, S. (2001). *Bruchlandung, wie die Swissair zugrunde gerichtet wurde* Zürich, Orell Füssli Verlag

Press Report of Ernst and Young 'Investigation in Sachen Swissair'

Ernst and Young Report – complete version 'Investigation in Sachen Swissair' report undertaken at the request of the administrator of the SAirgroup

Slits, V. (2004). 'Comment Swissair a pillé la Sabena.' *La Libre Belgique,* 17 November 2004, 1: 18–19.

T.M. and D. M. (2004). 'La théorie du complot, ou la tentation de réécrire l'histoire.' *Le Temps – Quotidien Suisse édité à Genève*' 17 November 2004, No. 2034, 3.

Appendix B
Definition of ‘control’ in the International Accounting Standards in the 1990s

In the 1990s the definition of ‘control’ of the International Accounting Standards was embedded in IAS 22 ‘Business Combinations’ as well as in IAS 27, ‘Consolidated and separated financial statements’. Both definitions were identical and defined the concept of control as follows: Control is the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities (IAS 27, para. 4). In order to allow preparers of financial statements to judge whether or not control existed in a relationship between investor and investee the following principles were included in IAS 22 and IAS 27 (again these principles are identical). These principles are the following (IAS 27, para. 13).

Control is presumed to exist when the parent owns, directly or indirectly through subsidiaries, more than half of the voting power of an entity unless, in exceptional circumstances, it can be clearly demonstrated that such ownership does not constitute control. Control also exists when the parent owns half or less of the voting power of an entity when there is:

(a) power over more than half of the voting rights by virtue of agreement with other investors;
(b) power to govern the financial and operating policies of the entity under a statute or agreement;
(c) power to appoint or remove the majority of the members of the board of directors or equivalent governing body and control of the entity is by that board or body; or
(d) power to cast the majority of votes at meetings of the Board of Directors or equivalent governing body and control of the entity is by that board or body.

Appendix C
Illustration of the impact of the accounting choices of the SAirgroup[20]

The following accounting methods will be applied to an example of two individual companies, A and B, whereby A holds an investment in B of 49%. The group accounts will be prepared under three different sets of accounting choices: set (1) full consolidation, set (2) equity method and set (3) equity method whereby the investment was written down in the prior year.

	Individual accounts A	*Individual accounts B*	*Group accounts – full consolidation*	*Group accounts – equity method*	*Group accounts – equity method with write-down*
Tangible assets	600	350	950	600	600
Investment	98			85.25***	
Current assets	504	175	679	504	504
Total assets	**1,202**	**525**	**1,629**	**1,189.25**	**1,104**
Capital	500	200	500	500	500
Reserves	200		200	200	102
Result of the year	50	(25)			
Group result			37.75*	37.75	50
Equity	**750**	**175**	**737.75**	**737.75**	**652**
Minority interests			89.25**		
Long-term debt	400	250	650	400	400
Trade creditors	52	100	152	52	52
Total liabilities + equity	**1,202**	**525**	**1,629**	**1,189.75**	**1,104**
Equity/(Equity + total debt)			45.27 %	62.00 %	59.00 %
Return on equity			5.39 %	5.39 %	8.30 %
Return on total assets			2.31 %	3.17 %	4.50 %

* group result = 50 – 12.25 (= share of the loss of B) = 37.75
** minority interests = 102 – 12.75 = 89.25
*** investment (equity method) 98 – 12.75 = 85.25

[20] Under full consolidation the investee's assets, liabilities, revenues, and expenses are combined with those of the investor company, and the minority interest's equity in net assets and net income are disclosed in the consolidated financial statements. The equity method suppresses the components and reports only the investor's proportionate share of an investee's net assets and net income on the investor's balance sheet and income statement, respectively. All things being equal, a company consolidating an equity investment will have more assets, liabilities, revenues and expenses. There is no difference however in the total stockholders' equity or net income between full consolidation and the equity method, unless the investor's share of losses exceeds the carrying amount of the investment under the equity method (see also IAS 28) or if the investor had a gain or loss on issuances of stock by an equity investee. The company that can use the equity method, and avoid consolidation is often able to improve its debt-to-equity ratios, as well as ratios for return on assets and sales (see also Hartgraves and Benston, 2002: 249–250).

Appendix D
Communication on the managerial intent of the write-down of Sabena in the books of the SAirgroup

Translation into English

> 'When Swissair will write down the value of its investment in Sabena in its books, this event is solely an 'accounting' event; it does by no means imply that Swissair will divest from Sabena. The only objective of this operation is to shield the result of the SAirgroup from future losses of Sabena.'

(Extract from the letter of the Secretary General of Sabena with approval of the CEO of SABENA in order to respond to questions raised by members of the Belgian parliament – 19 March 1997)

> 'From an accounting point of view, this write-down allows a company not to include any longer its share in the losses or profits in the investee. From a strategic point of view, this write-down does not imply a sale of the Sabena investment nor a withdrawal.'

(Extract from a letter of the Secretary General of Sabena with consent of the CEO of Sabena to the Cabinet of the Belgian Minister of Transport – 15 March 1997)

Original French text

> 'S'il est possible que Swissair amortisse la valeur de sa participation en SABENA, il est acquis qu'un telle opération purement comptable n'entraînera en aucune manière le retrait de Swissair. Cette opération aurait pour seul objectif de ne plus faire intervenir les résultats de la SABENA dans la consolidation des résultats du groupe.'

(Extract from the letter of the Secretary General of Sabena with approval of the CEO of SABENA in order to response to questions raised by members of the Belgian Parliament – 19 March 1997)

> 'Sur le plan comptable, l'amortissement d'une participation permet à une entreprise de ne plus devoir consolider cette participation, et donc de ne plus inclure dans ses résultats les profits ou les pertes de cette participation – Sur le plan stratégique, cet amortissement ne signifie pas une vente ou un retrait'

(Extract from a letter of the Secretary General of Sabena with consent of the CEO of Sabena to the Cabinet of the Minister of Transport – 15 March 1997.)

Appendix E

'*Agreement of the 2nd of August 2001 between the Belgian State, the SAirgroup and Sabena*
Article 6.3
The parties and their respective subsidiaries mutually, irrevocably and definitively waive any and all rights or claims, actual or potential, which they may have against each other and each other's directors, officers, employees, agents and representatives for funding or other obligations or liabilities in relation to (i) any decision adopted or actions taken by the Board of Directors of Sabena prior to the date hereof regarding the renewal or expansion of Sabena's fleet; (ii) any transfer of assets or provision of services between Sabena or any of its subsidiaries and SAirgroup or any of its subsidiaries prior to the date hereof which purportedly was not effected on arm's length terms or otherwise not in the best interest of any said parties; (iii) any decisions adopted or actions taken prior to the date hereof which purportedly deprived Sabena or SAirgroup or any of their respective subsidiaries from a corporate opportunity; and (iv) any purported acts or conduct prior to the date hereof as de facto director (''administrateur de fait'') of Sabena.'

References

AAA. (2003). 'Evaluating concepts-based versus rules-based approaches to standard setting'. American Accounting Association Financial Accounting Standards Committee. *Accounting Horizons,* 17(1): 73–89.

Ali, A. and Hwang, L.S. (2000). 'Country-specific factors related to financial reporting and the value relevance of accounting data'. *Journal of Accounting Research,* 38(1): 1–21.

Arnold, B. and de Lange, P. (2004). 'Enron: an examination of agency problems'. *Critical Perspectives on Accounting,* 15: 751–765.

Baker, R. and Hayes, R. (2004). 'Reflecting from over substance: the case of Enron Corporation'. *Critical Perspectives on Accounting,* 15: 767–785.

Ball, R., Kothari, S.P. and Robin, A. (2000). 'The effect of international institutional factors on properties of accounting earnings'. *Journal of Accounting and Economics*, 29*:* 1–51.

Barth, M., Elliot, J. and Finn, M. (1995). 'Market rewards associated with increasing earnings patterns'. Working paper, Cornell University.

Bartov, J. (1993). 'The timing of assets sales and earnings manipulation'. *Accounting Review,* 68: 840–855.

Bartov, J. (2001). 'Does the use of financial derivatives affect earnings management decisions?'. *Accounting Review*, 76: 1–26.

Bauman, M. (2003). 'The impact and valuation of off-balance-sheet activities concealed by equity method accounting'. *Accounting Horizons,* 17(4): 303–314.

Beasly, M. (1996). 'An empirical analysis of the relation between the board of director composition and financial statement fraud'. *Accounting Review,* 71: 443–465.

Beatty, A., Chamberlain, S.L. and Magliolo, J. (1995). 'Managing financial reports of commercial banks: the influence of taxes, regulatory capital and earnings'. *Journal of Accounting Research,* 33(2): 231–261.

Beatty, A. and Petroni, K. (2002). 'Earnings management to avoid earnings declines across publicly and privately held banks'. *Accounting Review,* July: 515–546.

Beneish, M. (1997). 'Detecting GAAP violation: implications for assessing earnings management among firms with extreme financial performance'. *Journal of Accounting and Public Policy,* 17: 271–309.

Benston, G. and Hartgraves, A. (2002). 'Enron: what happened and what we can learn from it'. *Journal of Accounting and Public Policy,* 21: 105–127.

Boyd, B. (1994). 'Board control and CEO compensation'. *Strategic Management Journal,* 15: 335–344.

Briloff, A. (2001). 'Garbage in/garbage out: a critique of fraudulent financial reporting: 1987–1997 (The COSO report and the SEC accounting regulatory process)', *Critical Perspectives on Accounting,* 12: 125–148.

Burghstahler, D. and Dichev, I. (1997). 'Earnings management to avoid earnings decreases and losses'. *Journal of Accounting and Economics,* 24: 99–126.

Chenhall, R and Moers, F. (2007). 'The issue of endogeneity within theory-based quantitative management accounting research'. *European Accounting Review,* 16(1): 173–196.

Core, J. (2001). 'A review of the empirical disclosure literature: discussion'. *Journal of Accounting and Economics,* 31(1–3): 441–456.

Cyert, R. and March, J. (1963). *A Behavioral Theory of the Firm.* Prentice Hall.

DeAngelo, H., DeAngelo L. and Skinner, D. (1996). 'Reversal of fortune: dividend signaling and the disappearance of sustained earnings growth'. *Journal of Financial Economics,* 40: 341–371.

Dechow, P. and Skinner, D. (2000). 'Earnings management: reconciling the views of accounting academics, practitioners and regulators'. *Accounting Horizons,* 14(2): 235–250.

Dechow, P., Sloan, R. and Sweeney, A. (1995). 'Detecting earnings management', *Accounting Review.* 70(2): 193–225.

Dechow, P., Sloan, R. and Sweeney, A. (1996). 'Causes and consequences of earnings manipulation: an analysis of firms subject to enforcement actions by the SEC'. *Contemporary Accounting Research,* 13(1): 193–225.

De Fond, M. and Jiambalvo, M. (1994). 'Debt covenant violation and manipulation of accruals. *Journal of Accounting and Economics,* 17: 145–176.

De Fond, M. and Park, C. (1997). 'Smoothing income in anticipation of future earnings'. *Journal of Accounting and Economics,* 23: 115–139.

Degeorge, F, Patel, J. and Zeckhauser, R. (1999). 'Earnings management to exceed thresholds. *Journal of Business,* 27: 1–33.

de Jong, A., DeJong, D., Mertens, G. and Roosenboom, P.

(2007). 'Investor relations, reputational bonding, and corporate governance: the case of Royal Ahold'. *Journal of Accounting and Public Policy,* 26: 328–375.

Dempsey, S., Hunt, H. and Schroeder, N. (1993). 'Earnings management and corporate ownership structure: an examination of extra-ordinary item reporting'. *Journal of business finance and accounting, 20,*(4): 479–500.

Donnelly, R. and Lynch C. (2002). 'The ownership structure of UK firms and the informativeness of accounting earnings'. *Accounting and Business Research,* 32(4): 245–257.

Eisenhardt, K. (1989). 'Building theories from case study research'. *Academy of Management Review,* 14: 532–550.

Ely, K. (1995). 'Operating lease accounting and the market's assessment of equity risk'. *Journal of Accounting Research,* 33(2): 397–415.

Ewart, R and Wagenhofer, A. (2005). 'Economic effects of tightening accounting standards to restrict earnings management'. *Accounting Review* , 80(4): 1101–1124.

Fan, J. P.H. and Wong, T.J. (2002). 'Corporate ownership structure and the informativeness of accounting earnings in East Asia'. *Journal of Accounting and Economics,* 33: 401–425.

Fields, T., Lys, T. and Vincent, L. (2001). 'Empirical research on accounting choice'. *Journal of Accounting and Economics*, 31(1–3): 255–307.

Finkelstein, S. and Hambrick, D. (1996). *Strategic Leadership: Top Executives and their Effects on Organizations.* St. Paul.

Francis, J. (2001). 'Discussion of empirical research on accounting choice'. *Journal of Accounting and Economics,* 31(1–3): 309–319.

Fudenberg, D. and Tirole, J. (1995). 'A theory of income and dividend smoothing based on incumbency rents'. *Journal of Political Economy,* 103: 75–93.

Gaver, J., Gaver, K. and Austin, J. (1995). 'Additional evidence on bonus plans income management'. *Journal of Accounting and Economics,* 19: 3–28.

Gephart, R.P. (2004). 'Qualitative research and the Academy of Management Journal'. *Academy of Management Journal,* 47(4): 454–462.

Godfrey, J., Mather, P. and Ramsay, A. (2003). 'Earnings and impression management in financial reports: the case of CEO changes', *Abacus.* 39(1): 95–123.

Graham, J, Harvey, C and Rajgopal, S. (2005). 'The economic implications of corporate financial reporting'. *Journal of Accounting and Economics,* 40: 3–75.

Guenther, D., Maydew, E and Nutter, S. (1997). 'Financial reporting, tax-costs and book-tax conformity'. *Journal of Accounting and Economics,* 23: 225–248.

Guidry, F. Leone, A and Rock, S. (1999). 'Earnings-based bonus plans and earnings management by business unit managers'. *Journal of Accounting and Economics,* 26: 113–142.

Hambrick, D. and Fukutomi, G. (1991). 'The seasons of a CEO's tenure'. *Academy of Management Review,* 16: 719–742.

Hambrick, D. and Mason, P. (1984). 'Upper echelons: the organization as a reflection of its top managers'. *Academy of Management Review,* 9: 194–206.

Han, J. and Wang, S. (1998). 'Political costs and earnings management of oil companies during the 1990 Persian Gulf crises'. *Accounting Review,* 73: 103–117.

Hand, J. (1989). 'Did firms undertake debt-equity swaps for an accounting paper profit or true financial gain?'. *Accounting Review,* 64: 587–623.

Hartgraves, A and Benston, G. (2002). 'The evolving accounting standards for special purpose entities and consolidations'. *Accounting Horizons,* 16: 245–258.

Healy, P. (1985). 'The effects of bonus schemes on accounting decisions'. *Journal of Accounting and Economics,* 7: 85–107.

Healy, P. and J. Wahlen. (1999). 'A review of the earnings management literature and its implications for standard setting'. *Accounting Horizons,* 13: 365–383.

Holthausen, R., Larcker, D. and Sloan, R. (1995). 'Annual bonus schemes and the manipulation of earnings'. *Journal of Accounting and Economics,* 19: 29–74.

Hope, O.K. (2003). 'Disclosure practices, enforcement of accounting standards, and analysts' forecast accuracy: an international study'. *Journal of Accounting Research,* 41(2): 235–272.

Hunt, A., Moyer, S. and Shevlin, T. (1995). 'Earnings volatility, earnings management, and equity value'. Working paper, University of Washington.

IASC. (1989). *Framework for the preparation and presentation of financial statements*. International Accounting Standards Committee (subsequently International Accounting Standards Board).

Jensen, M. and E. Zajac. (2004). 'Corporate elites and corporate strategy: how demographic preferences and structural position shape the scope of the firm'. *Strategic Management Journal,* 25: 507–524.

Kasznik, R. (1999). 'On the association between voluntary disclosure and earnings management'. *Journal of Accounting Research,* 37(1): 57–81.

Key, K. (1997). 'Political cost incentives for earnings management in the cable television industry'. *Journal of Accounting and Economics,* 23(3): 309–337.

La Porta, R., Lopez-de-Silanes, F., Schleifer, A. and Vishny, R. (1997). 'Legal determinants of external finance'. *Journal of Finance,* 52: 1131–1150.

La Porta, R., Lopez-de-Silanes, F., Schleifer, A. and Vishny, R. (1998). 'Law and finance'. *Journal of Political Economy,* 106: 1113–1155.

Lee, T. (2006). 'The war of the sidewardly mobile corporate financial report' *Critical Perspectives on Accounting,* 17: 419–455.

Leuz, C. and Verrecchia, R.E. (2000). 'The economic consequences of increased disclosure'. *Journal of Accounting Research,* 38, supplement: 91–124.

Lev, B. (2002). 'Where have all Enron's intangibles gone?'. *Journal of Accounting and Public Policy,* 21: 131–135.

Lys, T. and Vincent, L. (1995). 'An analysis of value destrruction in AT&T's acquisition of NCR'. *Journal of Financial Economics,* 39: 353–378.

McNichols, M. (2000). 'Research design issues in earnings management studies'. *Journal of Accounting and Public Policy,* 19: 313–345.

Miles, M. and Huberman, A. (1998). *Qualitative data analysis, an expanded sourcebook.* London, Sage Publications.

Murphy, K. and Zimmerman, J. (1993). 'Financial performance surrounding CEO turnover'. *Journal of Accounting and Economics,* 16: 273–316.

Nelson, M. (2003). 'Behavioral evidence on the effects of principles- and rules-based standards'. *Accounting Horizons,* 17: 91–104.

Nelson, M., Elliot, J. and Tarpley, R. (2002). 'Evidence from auditors about managers' and auditors' earnings management decision'. *Accounting Review*, 77, supplement: 175–202.

Nelson, M., Elliot, J and Tarpley, R. (2003). 'How are earnings managed? Examples from auditors', *Accounting Horizons,* supplement: 17–35.

Occasio, W. (1994). 'Political dynamics and the circulation of power: CEO succession in U.S. industrial corporations, 1960–1990.' *Administrative Science Quarterly,* 39: 285–312.

Occasio, W. (1999). 'Institutionalized action and corporate governance: the reliance on rules of CEO succession'. *Administrative Science Quarterly,* 44: 384–416.

O'Connell, B. (2004). 'Enron.Con: ''He that filches from my good name … makes me poor indeed'' '. *Critical Perspectives on Accounting*, 15: 733–749.

Peasnell, K.V., Pope, P.F. and Young, S. (2001). 'The characteristics of firms subject to adverse rulings by the Financial Reporting Review Panel'. *Accounting and Business Research,* 31(4): 291–311.

Pope, P. and Walker, M. (1999). 'International differences in the timeliness, conservatism, and classification of earnings'. *Journal of Accounting Research* 37, supplement: 53–87.

Pourciau, S. (1993). 'Earnings management and nonroutine executive changes'. *Journal of Accounting and Economics,* 16: 317–336.

Puffer, S. and Weintrop, J. (1991). 'Corporate performance and CEO turnover: the role of performance expectations'. *Administrative Science Quarterly,* 36: 1–19.

Revsine, L. (1991). 'The selective financial misrepresentation hypothesis', *Accounting Horizons,* (December): 16–27.

Revsine, L. (2002). 'Enron: sad but inevitable'. *Journal of Accounting and Public Policy,* 21: 137–145.

Roychowdhury, S. (2006). 'Earnings management through real activities manipulation'. *Journal of Accounting & Economics*, 42: 335–370.

Schipper, K. (1989). 'Earnings Management'. *Accounting Horizons,* 3(4): 91–102.

Shevlin, T. (1987). 'Taxes and off-balance sheet financing: research and development limited partnerships'. *Accounting Review,* 62: 480–509.

Shleifer, A. and Vishny, R. (1989). 'Management entrenchment: the case of manager-specific investments'. *Journal of Financial Economics,* 25: 123–139.

Sweeney, A. (1994). 'Debt-covenant violations and managers' accounting responses'. *Journal of Accounting and Economics,* 17: 281–308.

Warfield, T., Wild, J. and Wild, K. (1995). 'Managerial ownership, accounting choices, and informativeness of earnings'. *Journal of Accounting and Economics,* 20: 61–91.

Watts, R and Zimmerman, J. (1990). 'Positive accounting theory: a ten-year perspective'. *Accounting Review,* 65: 131–156.

Wayne, T., Herrmann, D and Inoue, T. (2004). 'Earnings management through affiliated transactions'. *Journal of International Accounting Research,* 3(2): 1–25.

Williams, P. (2004). 'Recovering accounting as a worthy endeavour'. *Critical Perspectives on Accounting*, 15(4/5): 513–517.

Wilson, M. and Shailer, G. (2007). 'Accounting manipulations and political costs: Tooth & Co Ltd, 1910–1965'. *Accounting and Business Research,* 37(4): 247–266.

Yin, R. (2003). *Case Study Research Design Methods* London, Sage Publication: Applied Social Research Methods Sciences.

Zahra, S. and Pearce, J. (1989). 'Boards of Directors and corporate financial performance: a review and integrative model'. *Journal of Management,* 15: 291–334.