Learning About Firms’ Failing Path
An Explanation Through Annual Reports Information

SETTORE SCIENTIFICO DISCIPLINARE DI AFFERENZA: SECS-P/07

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LEARNING ABOUT FIRMS’ FAILING PATH
An Explanation Through Annual Reports Information

A Thesis in Business
by
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Learning about failure represents a sort of thread between the three chapters that I am presenting and also between some projects that I have conducted in different fields (e.g. International Financial Accounting, Organization Theory, Behavioral Economics and Management Accounting). My interest toward this topic arose during the first year of my Ph.D. program by reading some works such as:

- (Thornhill and Amit, 2003, p. 506) “This study adds credence to the view that there is value to be gained from the study of failed organizations. Just as medical science would be unlikely to progress by studying only healthy individuals, organization science may be limited in the knowledge attainable only from the study of successful firms. While these results shed new light on why firms fail at different ages, much remains to be learned about firm failure.”
- (McGrath, 1999, p. 28) “By carefully analyzing failures instead of focusing only on successes, scholars can begin to make systematic progress on better analytical models of entrepreneurial value creation.”
- (Sitkin, 1992, p. 232) “Failure is an essential prerequisite for learning”.

These considerations represent an important premise of my work whose aim is to address an issue recently pointed out (Cybinski 2001): understanding, rather than only predicting, enterprise failure presents an enormous theoretical challenge that, at the moment, has largely gone unanswered. Further, according to my work, a propedeutical understanding of failing path is needed for predicting failure.

The first chapter (entitled “Two common steps in firms’ failing path: an explanation through financial statements information”) examines failure as a path and emphasizes relations between time dimension, failure stages and accounting information. Business failure has been traditionally considered an atypical and sudden event that characterizes the end of firms’ life cycle. This first chapter, whose analysis has focused on all the fraud cases and the matched not-tort cases mentioned by WebBRD, shows that the final event is often suddenly announced,
but it is the result of a gradual process: during their failing path, firms encounter two “steps” (i.e. micro-failures and macro-failures) that make the process neither atypical nor sudden at the same time. After the identification of the relevant micro-failures, a survival analysis has been implemented to demonstrate that fraud lets firms earn time in the path to macro-failure, but its disclosure make firms fall down macro-failure very fast.

The second chapter (entitled “Accounting fraud, business failure and creative auditing: a micro-analysis of the strange case of Sunbeam corp.”) puts under the magnifying glass the path to failure of Sunbeam Corp. and emphasizes the reasons of its singularity and exceptionality. This case emerged as an outlier from the analysis conducted in the first chapter through all the US fraud cases mentioned by WebBRD: while the analysis of the TIME1 variable (i.e. the time between the beginning of the fraud and its disclosure) does not signal any outliers, the analysis of the TIME2 variable (i.e. the time between fraud disclosure and the final bankruptcy) has revealed the presence of this outlier. In fact, the maximum value of the TIME2 variable has been estimated equal to 840 days: it is really far from the range estimated by the survival function for the entire sample and it refers to Sunbeam Corp. Different hypotheses have been evaluated in the second chapter, starting from the consideration of Sunbeam’s history peculiarities: fraud duration, scapegoating and creative auditing represent the three main points of analysis. Starting from a micro-analysis of this case that the SEC investigated in depth and the second chapter describes in detail, inputs for future research are then provided about more general problems concerning the relationship between fraud and failure. In particular, we show that complex mechanisms connect together budget manipulation, market performances, M&A choices, and the reactions of auditors and directors taking to eventual bankruptcy. The exceptionally long path to failure of Sunbeam is indeed explained by the interaction between the auditors’ unusual distancing assessment of its statements and the decision of its board to replace the CEO at the first signal of fraud. Moreover, in order to conceal accounting fraud, the sale of the company is perceived as a first best against the acquisition of other businesses: this result provides useful indications for further research on
undetected frauds. Finally, the study proposes an historical explanation of the outlier characteristics of the case as resulting from a blind path in the evolution of accounting regulation and practice, following the Enron scandal and increased vigilance on the auditing and accounting function.

The third chapter (entitled “Auditors’ going-concern decision: difficulties in FASB and IASB convergence process due to the issuing of a new going-concern statement”) examines FASB (Financial Accounting Standards Board) outstanding exposure draft on a proposed standard on management’s responsibility to evaluate a company’s ability to continue as a going concern. Firm’s failing paths, in both fraud and no-tort cases, imply investors’ risks and uncertainties. So, the entity’s ability to continue as a going concern must be monitored and assessed in time and in a proper way. In the U.S., the going concern assessment has for years been the auditor’s responsibility, but investors have complained that by the time the auditor makes the assessment, the business is on the verge of bankruptcy or a delisting from its stock exchange. For this reason, U.S. constituents have expressed a need for accounting literature that clarifies that an entity has the primary responsibility for assessing its ability to continue as a going concern. The FASB agreed and issued the proposed statement mentioned above (entitled “Disclosures about Risks and Uncertainties and the Liquidation Basis of Accounting - Formerly Going Concern”) to state that, when preparing financial statements, management shall assess the reporting entity’s ability to continue as a going concern. This important objective, so clearly defined and emphasized at the beginning of FASB project, has been firstly downsized and then postponed to a future project. The third chapter tries to investigate the reasons of the peculiar evolution of FASB proposed statement which implies the risk of missing the opportunities to both answer an investors’ complain and completely implement the IASB-FASB process of convergence. Moreover, through a time analysis applied to a sample of American cases, the third chapter underlines the importance of other assessments prompter than auditors’ opinion about going concern ability.
Some other future research on this topic may start from the gathered conclusions (first of all, from the definition of failure as a particular path where firms encounter micro and macro-failures). This propedeutical understanding of the failing path is needed for predicting failure. This differs from the considerations of an extensive literature that continuously develops new methods of prediction which are progressively more sophisticated and complex. Based on these considerations, future research may aim to develop some hypotheses such as:

- Not-tort firms’ macro-failure can be predicted FROM the relevant micro-failure happening.
- Fraud firms’ macro-failure can be predicted AT the relevant micro-failure happening.
- Macro-failure prediction does not require new or particular methods: the usual tools and the accounting information are sufficient for gathering the purpose. The analysis will be based on either one or more existing methods of prediction.
TABLE OF CONTENTS

List of tables.................................................................................................................. VIII

Acknowledgements ......................................................................................................... IX

Chapter 1 - TWO COMMON STEPS IN FIRMS’ FAILING PATH: a survival analysis through annual reports information................................................................. 10

The link between chapter 1 and chapter 2................................................................. 37

Chapter 2 - ACCOUNTING FRAUD, BUSINESS FAILURE AND CREATIVE AUDITING: a micro-analysis of the strange case of Sunbeam Corp............................... 38

The link between chapter 1, chapter 2 and chapter 3................................................ 87

Chapter 3 - AUDITORS’ GOING-CONCERN DECISION: difficulties in FASB and IASB convergence process due to the issuing of a new going concern statement........ 88

Estratto per riassunto della tesi di dottorato................................................................. 111
LIST OF TABLES AND FIGURES

Chapter 1:

Table 1 Examples of micro-failures and difference with business failure causes .......................... 17
Figure 1 Firms’ Failing Path ........................................................................................................ 18
Table 2 The sample: fraud and not-tort cases ............................................................................. 20
Table 3 Status and fraud variables ............................................................................................ 22
Table 4 Status and fraud variables ............................................................................................ 22
Figure 2 How many cases for each SIC code? ........................................................................... 22
Figure 3 How many fraud cases for each SIC code? ................................................................. 22
Table 5 Relevant micro-failures years ....................................................................................... 23
Table 6 Macro-failures years ..................................................................................................... 23
Table 7 Micro-failures types listed according to the traditional failure causes clusters ............... 24
Table 8 Relevant micro-failures: type and date for each sampled firm ...................................... 25
Table 9 Frequency of relevant micro-failures categories in fraud and not-tort cases .................. 26
Figure 4 Frequency of relevant micro-failures categories in fraud and not-tort cases ................ 26
Table 10 Frequency of relevant micro-failures types in fraud and not-tort cases ....................... 27
Table 11 Frequency of relevant micro-failures types in fraud and not-tort cases ....................... 27
Figure 5 Frequency of relevant micro-failures types in fraud and not-tort cases ....................... 27
Figure 6 Frequency of relevant micro-failures types in not-tort cases ...................................... 27
Figure 7 Frequency of relevant micro-failures types in fraud cases .......................................... 27
Table 12 Variables used in the survival analysis ....................................................................... 28
Table 13 Descriptive statistical analysis of the \( t_{\text{ime}} \) variable .................................................. 29
Table 14 Descriptive statistical analysis of the \( \text{time}_{2} \) variable ............................................... 29
Table 15 The survival time ........................................................................................................ 30
Table 16 The survival time in not-tort and fraud cases ............................................................ 30
Table 17 The disclosure-to-macrofailure time ........................................................................... 31
Table 18 The disclosure-to-macrofailure time in not-tort and fraud cases ................................. 31
Table 19 Kaplan-Meier estimator for the \( t_{\text{ime}} \) variable ......................................................... 32
Table 20 Nelson-Aalen estimator for the \( t_{\text{ime}} \) variable .......................................................... 32
Figure 8 Kaplan-Meier survivor curves (\( t_{\text{ime}} \) variable) for fraud and not-tort cases ............... 32
Figure 9 Nelson-Aalen survivor curves (\( t_{\text{ime}} \) variable) for fraud and not-tort cases ............... 32
Table 21 Kaplan-Meier estimator for the \( \text{time}_{2} \) variable ....................................................... 33
Table 22 Nelson-Aalen estimator for the \( \text{time}_{2} \) variable ....................................................... 33
Figure 10 Kaplan-Meier survivor curves (\( \text{time}_{2} \) variable) for fraud and not-tort cases .......... 33
Figure 11 Nelson-Aalen survivor curves (\( \text{time}_{2} \) variable) for fraud and not-tort cases .......... 33

Chapter 2:

Table 1 TIME1 variable analysis .............................................................................................. 41
Table 2 TIME2 variable analysis .............................................................................................. 41
Figure 1 One outlier from TIME 2 variable analysis ............................................................... 42
Figure 2 Sunbeam Corp’s fraud process .................................................................................... 42
Table 3 Sunbeam Corp’s fraud process .................................................................................... 42
Table 4 Highlights from Albert Dunlap’s Career (New York Times, Dec. 23, 1997) .................... 60
Figure 2 Sunbeam’s stock scheme ........................................................................................... 63

Chapter 3:

Exhibit 1 A comparison between International and American going-concern principles ............ 94
Exhibit 2: Chronology of the Going-Concern Assumption ....................................................... 95
Exhibit 3: Comparing IAS 1 to FASB’s Proposed Standard .................................................... 97
Table 1 The sample: fraud and not-tort cases .......................................................................... 103
Table 2 Descriptive statistical analysis of the \( t_{\text{ime}} \) variable .................................................. 105
Table 3 Descriptive statistical analysis of the \( \text{time}_{2} \) variable ............................................... 105
Figure 1  *Time1* values for the entire sample. .......................................................... 106
Figure 2  *Time2* values for the entire sample. .......................................................... 106
Table 4 Survival analysis for both *time1* variable. .................................................. 106
Table 5 Survival analysis for both *time2* variable. .................................................. 106
Table 6 Survival analysis for *time1* variable in fraud cases. .................................... 107
Table 7 Survival analysis for *time2* variable in fraud cases. .................................... 107
Figure 3  *Time1* variable in both fraud and no-tort cases: a comparison. ....................... 107
Figure 4  *Time2* variable in both fraud and no-tort cases: a comparison. ....................... 107
Figure 5  *Time1* variable in both fraud and no-tort cases: Kaplan-Meier estimates ............ 107
Figure 6  *Time2* variable in both fraud and no-tort cases: Kaplan-Meier estimates ............ 107
Table 8 Descriptive statistical analysis of the *time2_fraud* variable............................. 108
Table 9 Descriptive statistical analysis of the *time3_fraud* variable............................. 108
Figure 7  *Time2* variable in fraud cases. .................................................................. 108
Figure 8  *Time3* variable in fraud cases. .................................................................. 108
Table 10 Descriptive statistical analysis of the *time_notort* variable............................ 109
Table 11 Descriptive statistical analysis of the *time2_notort* variable............................ 109
Figure 9  *Time* variable in no-tort cases. .................................................................. 109
Figure 10  *Time2* variable in no-tort cases. .................................................................. 109
CHAPTER 1

TWO COMMON STEPS IN FIRMS’ FAILING PATH:

A SURVIVAL ANALYSIS

THROUGH ANNUAL REPORTS INFORMATION

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Abstract
This chapter examines failure as a path and emphasizes relations between time dimension, failure stages and accounting information. Three main streams of literature have been recalled in the chapter; they are about the definition of failure, the increasing emphasis on the time dimension and the importance of explaining rather than only predicting. Business failure has been traditionally defined as an atypical and sudden event that characterizes the end of firms’ life cycle. This chapter shows that the final event is often suddenly announced, but it is the result of a gradual process: during the failing path, firms encounter two “steps” (i.e. micro-failures and macro-failures) that make the process neither atypical nor sudden at the same time. After the identification of the relevant micro-failures, a survival analysis has been implemented to demonstrate that fraud lets firms earn time in the path to macro-failure, but its disclosure make firms fall down macro-failure very fast. This analysis has been conducted through all the fraud cases and the matched not-tort cases mentioned by WebBRD: the sampled firms have filled for bankruptcy in the period 1986-2010 and their activities differ from finance, insurance and real estate division. The chapter aims has been to address an issue recently pointed out (Cybinski 2001): understanding, rather than only predicting, enterprise failure presents an enormous theoretical challenge that, at the moment, has largely gone unanswered. Further, a propedeutical understanding of the failing path is needed for predicting macro-failure.

Keywords: business failure, financial statements, fraud, macro-failure, micro-failure, survival analysis

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1. INTRODUCTION

Business failure has traditionally been considered a sudden and atypical event whose analysis and prediction are very difficult to manage. In fact, business failures continue to happen in spite of the high number of prediction models. The most used techniques of prediction are characterized by different degrees of accuracy and practicality and can be divided into two categories, statistic and machine learning methods (Lin and McClean 2001). They aim to find a way to early detect corporate financial distress. So, the most of the literature about failure tries to create a substantial agreement over the most suitable methodology for predicting business failure (Aziz and Dar 2006).

On the other hand, a minor number of researchers has emphasized the importance of the time dimension for failure that should be considered a process. Moreover, the part of the literature that has sought to gain deeper insight into the failure process of a company is mostly qualitative, related to the managerial-organizational field. This study attempts to fill the gap: it examines failure as a path and emphasizes relations between the time dimension, failure stages and accounting information.

This chapter examines failure as a path: it identifies two “common steps” (micro-failures and macro-failures) that make the process neither atypical nor sudden at the same time. The temporal dimension is really important and must be considered: time makes failure a sequence of steps instead of a single-still event. So, it allows failing firms to act and react and it lets failure be different from the final bankruptcy.

This chapter is organized as follows. In the next section, there is an overview of the previous literature. This is followed by a description of the sample and of the applied methodology. Then, the findings are discussed and some suggestions for further research are provided.
2. PRIOR AND RELATED RESEARCH

The prior research that is related to the topic of this chapter is dated because it refers especially to the definition of failure. This has been traditionally considered an atypical and sudden event that characterizes the end of firms’ life cycle.

It is atypical (Sharma and Mahajan 1980) because it presents particular features according to the internal factors and external environment of the failing firms (Nelson 1991). In fact, the prediction of failure has required the consideration of the firm’s size (Edmister 1972; Beaver 1968), age (Altman 1968; Thornhill and Amit 2003; Yuji 2000), ownership structure (Mata and Portugal 1994), industry (Beaver 1968; Platt and Platt 1991), market (e.g. monetary policy and investors' expectations), country (Gilbert et al. 1990). The interaction between internal and external factors, that characterizes and causes corporate failure, has been widely analyzed (Argenti 1976; Sharma and Mahajan 1980; Thornhill and Amit 2003).

It seems sudden (Sharma and Mahajan 1980) because a lot of financial scandals have been discovered only when substantial losses had already been produced to creditors and stockholders. So, the need of providing ample warning to the interested parties represents the main reason for which good methods of prediction have been searched for a long time: they should predict potential business failures as early as possible to reduce the losses (Deakin 1972). On the other hand, the inability to predict is not the only cause of a sudden announcement: this can be also due to the unwillingness to disclose (Asare 1990). Anyway, in both cases the event is suddenly announced (Hossari 2007), but, as shown by this chapter, it is the result of a gradual process that could extend over years.

The consideration of failure as an event has been a constant from the beginning of the failure literature. Beaver (1968) defines failure as a business
defaulting on interest payments on its debt, overdrawing its bank account, or declaring bankruptcy. The author suggests that financial ratios “can be useful in the prediction of failure for at least five years prior to the event”. Along the same line, Blum (1974) defines failure as “entrance into a bankruptcy proceeding or an explicit agreement with creditors which reduced the debts of the company”. Other similar definitions speak about the cessation of operations by a business concern because of involvement in court procedures or voluntary actions which will result in loss to creditors (Sharma and Mahajan 1980). Progressively, researchers have seized the importance of time as one of the main dimensions: Ismael et al. (1980) suggest that the stability of financial ratios over time improves considerably the ability of the discriminant function to predict failure. Moreover, other dated literature contributions (Argenti 1976; Laitinen 1991) consider alternative types of failure processes according to the behaviour of different financial ratios: capturing the important dimensions or factors, which affect the financial ratios of failing firms, permits to identify different failure processes. On the other hand, a lot of authors have not appreciated the identification of alternative failure processes in a sample of failed firms: a common uniform concept of failure reduces the uncertainty and the risk of inaccuracy in failure prediction models. Only more recent literature contributions have definitely taken into account the time variable. Hill (1996) defines bankruptcy as a change in firm financial status and emphasizes the importance of measuring the explanatory financial variables during the years preceding distress and bankruptcy. Ooghe and De Prijcker (2008) identify four different types of failure processes, based on the company’s maturity and management characteristics: for each process, the authors provide an overview of the direct and indirect effects of non-financial and financial causes. Bankruptcy is only a single and potential event at the end of a path of financial distress that is considered a series of events that reflect varied stages of corporate adversity (Turetsky 2001). These works emphasize the interdependence between internal and external factors during the failure path, but other literature contributions underline the difficulty in the development of a cause-effect relationship between attributes that may cause or be related to bankruptcy (Mckee 2000): relevant
attributes can be difficult to identify and measure also because they may occur in one or more time periods prior to bankruptcy.

Starting from these considerations, the reminder of this chapter addresses the definition and analysis of failure process to identify only two steps that can be considered common to the path of all failing firms. The aim is to explain rather than predict: as highlighted by Cybinski (2001), the researchers should be concerned with the explanation of how firms transform from surviving or even successful ones into failed ones. According to this author, understanding enterprise failure presents an enormous theoretical challenge that, at the moment, has largely gone unanswered because the studies have just produced instruments for discriminating failed from prosperous firms: failure is not a well-defined dichotomous variable because there is a also a “grey” area (i.e. the area of overlap or indecisive area) that should be reduced to a minimum. The presence of this area has been pointed out also by Edmister (1972) many years before. He introduces the “black-grey-white” method to separate loss and good loan distributions: the grey area lies between the black and white areas; it requires the analyst’s greatest efforts and skills in order to classify the applicant as a loss or non-loss borrower. A more recent contribution (Hill 1996) has used a dynamic event history methodology to distinguish between stable, financially distressed and bankrupt firms: according to the author, only using dynamic models we can analyze firm’s progression toward bankruptcy and account for time-varying independent variables because the cross-sectional design only provides a snap-shot of ratio measures in each year and does not truly capture the dynamic process of distress and recovery or bankruptcy.

These last contributions of prior literature have analyzed failure as a methodological problem in order to find a proper statistical model, but their considerations represent the correct premise of the present work.
3. HYPOTHESES

The main stream of literature makes failure appear an instantaneous occurrence. This wrong conviction can be due to the traditional and univocal definition of failure: it is usually considered the last stage of firms’ life cycle, but, with this meaning, it represents just one type of discontinuance which coincides with macro-failure. A firm definitely failed after a process which evolves over a period of time.

Hypothesis 1 – The path to failure is characterized by one or more micro-failures and by one macro-failure which are all mentioned in the financial statements. So, failure is not both atypical and sudden at the same time.

The traditional definition of business failure can be compared to the concept of macro-failure. This step of failure path is defined in the chapter as the last stage of a firm’s life cycle: it represents an important type of discontinuance that, the most of the times, requires a defensive reaction (i.e. a radical change) in the firm that wants to survive. It does occur after a process which evolves over a period of time.

Hypothesis 1b – Macro-failure does not occur suddenly.

After macro-failure definition, another concept of failure should be considered: it refers to the previous stage of not meeting some set objectives. Before arriving at macro-failure, firms encounter micro-failures that must be analyzed with attention as precious signals: their identification gives surely more time to firms and stakeholders for a proper evaluation and resolution of the problem. “If it is possible to recognize failing companies in advance then appropriate action to reverse the process can be taken before it is too late” (Taffler, 1982). For this reason, a deep analysis of the concept of micro-failure must be made.

Hypothesis 1a – Micro-failures are not atypical.
As said before, a micro-failure represents the stage of not meeting some set objectives and its definition can be compared to that of business risks given by AICPA (American Institute of Certified Public Accountants): “*business risks result from conditions that could adversely affect the entity’s ability to achieve its objectives and execute its strategies*”. So, the analysis of micro-failures starts from the identification of a firm’s (or its stakeholders) actions (or inactions) and the consequent missed objectives. According to this consideration, micro-failures could incorrectly be compared with failure causes: their difference is the same of that between causes and effects. If a micro-failure occurs, a failure cause has already happened and a set business objective has became unattainable. A categorization of micro-failures will be presented in section V, but the following table (TABLE 1) shows some example to give an intuition about the difference between micro-failures and business failure causes.

TABLE 1 – Examples of micro-failures and difference with business failure causes.

<table>
<thead>
<tr>
<th>BUSINESS FAILURE CAUSES</th>
<th>MICRO-FAILURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product problems (timing, design, distribution/selling,…..)</td>
<td>Customers’ criticism</td>
</tr>
<tr>
<td></td>
<td>Negative economic-financial trends (primarily resulting from a decrease in revenues)</td>
</tr>
<tr>
<td>Assuming debt too early</td>
<td>Excessive indebtedness and difficulty in obtaining new financing</td>
</tr>
</tbody>
</table>

All micro-failures must be taken into consideration because they represent missed objectives and they will impact on profit (because of sales and expenses variations) and liquidity (because of debt and cash flow variations). For this reason, as explained by the literature, great attention should be paid towards different types of signals: economic-financial ratios and items; managerial events (e.g. managers and/or auditors resignation); others (e.g. risky contentious procedure). Inside the set of micro-failures which characterizes a failing firm, there is a micro-failure that is especially relevant because it does influence the path to failure: as explained by the second hypothesis, after a relevant micro-failure has emerged, a firm must make a drastic choice, *i.e.* revealing or not revealing its bad consequences. So, relevant micro-failure \( (X_{MiF}) \) represents the
most reliable signal that a business failure process has started. It is a common step in all business failure paths: in not-tort cases, it represents the disclosure date, \textit{i.e.} the moment from which the failure spiral starts turning around. In fraud cases, it is the last micro-failure to be properly represented in financial statements. If a firm decides to manipulate accounting information after a micro-failure, it will earn time (\textit{i.e.} there is an increase in the amount of time between micro-failure and macro-failure thanks to earnings management), but, when discovered, it will be worse off (\textit{i.e.} the time between disclosure of bad news and macro-failure will be shorter in the manipulation cases than in the true and fair view case).

\textit{Hypothesis 2} – Fraud lets firms earn time in the path to macro-failure.

\textit{Hypothesis 2a} – After relevant micro-failure, not-tort firms go toward macro-failure faster than fraud firms.

\textit{Hypothesis 2b} – After the disclosure of the missed objectives, fraud firms fall down macro-failure faster than not-tort firms.

In order to give an intuition about the second hypothesis meaning, its application to the considered sample, which is going to be described in the next section, can be figured out through a graph (Fig.1).

Fig.1 - Firms’ Failing Path
The symbols of the previous picture need an explanation:

- $X_s$ represents a firm’s successful state. This finds correct representation in financial reports ($R_s$) because firms do want to show their good staying.
- $X_{Mif}$ represents a common step in business failure process. It is the most reliable signal that a business failure process has started and, in fraud cases, the last micro-failure that finds correct representation in financial reports ($R_{Mif}$).
- $X_{MaF}$ represents the firm’s macro-failure which is correctly represented in financial reports ($R_{MaF}$) because firms do not have alternatives in this final step of failure process.

4. SAMPLE

The construction of the sample requires the use of several instruments and the progressive filtration of data through different steps which are described below.

The WebBRD (Bankruptcy Research Database) contains data on all large, public company bankruptcy cases filed in the United States Bankruptcy Courts from October 1, 1979 to our days: thanks to this dataset, I considered all the large, public company bankruptcy cases filed through March 1, 2010. These 882 cases have been distinguished according to the U.S. Standard Industrial Classification (SIC) system which represents a way of identifying the primary business of a company. The SIC codes are 99. Division H (Finance, insurance, and real estate) has not been considered in the construction of the sample because of specific regulations. For this reason, the considered cases become 762: 120 cases have been deleted because they belong to division H. The remaining cases can be separately analyzed thanks to the distinction in subsets proposed by WebBRD: the two subsets, which have been considered in the chapter, have been labeled fraud cases and not-tort cases.
All the fraud cases, mentioned by WebBRD and acting in a division different from the H, are thirty-one. For each of them a deeper analysis has been made thanks to forms 10-k and other sources of financial data. These have been collected through two databases, *i.e.* Mergent’s database and Accounting Research Manager (ARM). The second database has been used for six fraud cases mentioned by WebBRD whose financial data are not available on Mergent’s database. Then, each case history and information have been confirmed by a global information resource called Factiva and thanks to information gathered from LexisNexis Academic.

In order to investigate the path to macro-failure in both the mentioned directions (true-fair view and manipulation of accounting information as explained in section III), a benchmark has been selected for each fraud case: the choice inside the 762 bankrupt companies listed by WebBRD has been based on some conditions such as the year of filing for bankruptcy, the sic code and/or the description of business (TABLE 2). These are the same criteria used by Mergent’s database in the identification of competitors. So, companies details (such as business description, history and subsidiaries), annual reports and other financial data were analyzed also for the benchmarks.

<table>
<thead>
<tr>
<th>TABLE 2</th>
<th>ALL FRAUD CASES MENTIONED BY WebBRD</th>
<th>SIC CODE</th>
<th>YEAR OF FILING:</th>
<th>BENCHMARKS (SELECTION OF COMPETITORS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Adelphia Business Solutions, Inc.</td>
<td>48</td>
<td>2002</td>
<td>ITC DeltaCom, Inc.</td>
</tr>
<tr>
<td>2</td>
<td>Adelphia Communications Corp.</td>
<td>48</td>
<td>2002</td>
<td>IMPSAT Fiber Networks, Inc.</td>
</tr>
<tr>
<td>3</td>
<td>American Banknote Corporation</td>
<td>27</td>
<td>1999</td>
<td>MediaNews Group Inc.</td>
</tr>
<tr>
<td>4</td>
<td>American Tissue, Inc.</td>
<td>26</td>
<td>2001</td>
<td>American Pad &amp; Paper Company</td>
</tr>
<tr>
<td>5</td>
<td>Anicom, Inc.</td>
<td>50</td>
<td>2001</td>
<td>Inacom Corp.</td>
</tr>
<tr>
<td>6</td>
<td>Aurora Foods Inc.</td>
<td>20</td>
<td>2003</td>
<td>Interstate Bakeries Corporation</td>
</tr>
<tr>
<td>7</td>
<td>Bicoastal Corporation</td>
<td>38</td>
<td>1989</td>
<td>Tracor Holdings Inc.</td>
</tr>
<tr>
<td>8</td>
<td>Bonneville Pacific Corporation</td>
<td>16</td>
<td>1991</td>
<td>Morrison Knudsen Corp.</td>
</tr>
<tr>
<td>9</td>
<td>Boston Chicken, Inc.</td>
<td>58</td>
<td>1998</td>
<td>Flagstar Companies Inc.</td>
</tr>
<tr>
<td>10</td>
<td>CareMatrix Corp.</td>
<td>83</td>
<td>2000</td>
<td>Sun HealthCare Group, Inc.</td>
</tr>
<tr>
<td>11</td>
<td>Complete Management, Inc.</td>
<td>87</td>
<td>1999</td>
<td>ProMedCo Management Company</td>
</tr>
</tbody>
</table>
5. ANALYSIS AND RESULTS

The sample analysis has been developed through four different phases: a first analysis of the collected data, a cluster analysis of micro-failures, a deep analysis of time variable and the implementation of survival analysis.

5.1 A first look at the data.

The sample is such that all the sampled firms have encountered macro-failure (TABLE 3): the status variable is equal to 1 for all the 60 cases, but only the first half of the firms has committed fraud (TABLE 4).

* The impossibility of data collection has implied the not consideration of one fraud case: Hunt International Resources Corp. filled for bankruptcy in 1985 and precise financial data about it cannot be gathered anymore.
TABLES 3-4 – Status and fraud variables.

. tab1 status fraud

-> tabulation of status

<table>
<thead>
<tr>
<th>all firms encounter macro-failure</th>
<th>Freq.</th>
<th>Percent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>60</td>
<td>100.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

-> tabulation of fraud

<table>
<thead>
<tr>
<th>0 notort, 1 fraud</th>
<th>Freq.</th>
<th>Percent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>30</td>
<td>50.00</td>
<td>50.00</td>
</tr>
<tr>
<td>1</td>
<td>30</td>
<td>50.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

As shown in the previous table (TABLE 4), the sample has been separated in two subsets: fraud cases and not-tort cases. Other possible factors of distinction among the sampled firms are represented by the SIC code, the relevant micro-failure year and the macro-failure year (Fig.2-3)

An analysis of the SIC codes has revealed, as shown by the previous graphs, that the biggest number of US bankruptcies and fraud have been concentrated in the business of communications: the 18.33% of the sampled firms belong to the Communication sector (sic_code 48).
A huge number of cases have been concentrated in the period 1999-2003 (TABLE 6): more than a half of the sampled firms has fallen down macro-failure between 1999 and 2002. An analysis of the year of filing has revealed that the pick of the relevant micro-failures has been recorded in the period 1997-2000, i.e. about two years before the pick of macro-failures (TABLE 5).

### 5.2 Hypothesis 1a analysis: micro-failures are not atypical.

According to the definition of micro-failure given in section III and thanks to the triangulation of methods and information described in section IV, several micro-failures have been identified for each sampled firm. As emphasized above, micro-failures are different from failure causes, but, in order to show that they are not atypical, micro-failures can be categorized by considering the traditional causes clusters. So, the first step of the analysis identifies the categories of business failure causes traditionally considered by the literature (Argenti 1976; Altman 1983): product/market (e.g. timing, design, distribution/selling, etc.), financial (e.g. initial undercapitalization, assuming debt too early, etc.) and managerial/key employee (e.g. ineffective team, personal problems, etc.) problems. Other relevant factors can be labeled as cultural/social (e.g. violated job and displacement norm) and accidental. The second step of this analysis implies a micro-failures categorization according to the identified “traditional categories” (TABLE 7).
TABLE 7 – Micro-failures types listed according to the traditional failure causes clusters.

| A. PRODUCT/MARKET PROBLEMS | A1. Competition and/or competitors with significantly greater financial resources than the company |
| A2. Customers’ criticism because of goods quality (either too expensive or too low-quality) |
| A3. Depressed industry and market downturn |
| A4. New and stricter industry regulations |
| A5. Seasonal business |

| B. FINANCIAL PROBLEMS | B1. Excessive costs and/or additional and not essential expenses |
| B2. Excessive indebtedness and difficulty in obtaining new financing |
| B3. Investors’ nervousness, bad relationship with the venture capitalists and/or creditors’ pressure |
| B4. Negative economic-financial trends (primarily resulting from a decrease in revenues) |
| B5. Relationship of strong financial dependence with another subject (suppliers, customers, …) |
| B6. Unprofitable affairs (e.g. acquisition of unprofitable divisions) |

| C. MANAGERIAL/KEY EMPLOYEE PROBLEMS | C1. Conflicts of interests |
| C2. Core business abandonment and diversification into other industries |
| C3. Excessive anxiety to keep up with increasingly large competitors |
| C4. Important decision without obtaining board approval |
| C5. Legal, apparently correct but improper (e.g. deficit analytical) accountancy |
| C6. Poor management and disengaged board |
| C7. Principal’s problems with justice for affairs different from the firm |
| C8. Private benefits (withdrawals, bonuses and compensation policy) |
| C9. Too aggressive growth and expansion strategy (i.e. a such rapid growth through mergers or other operations was no sustainable in the long run) |
| C10. Too ambitious objectives and anxiety to hit "must make" numbers (i.e. earnings targets) |
| C11. Wrong operations (because of riskiness or other reasons) |

| D. CULTURAL/SOCIAL FACTORS | D1. Corruption |
| D2. Discriminating problems |
| D3. Powerful enemies |

| E. ACCIDENTAL FACTORS | E1. Calamities |

Thanks to forms 10-k and other sources of financial data described in section IV, relevant micro-failures and their dates of happening have been identified and categorized for each sampled firm (TABLE 8).
<table>
<thead>
<tr>
<th>Fraud cases</th>
<th>Date</th>
<th>Type</th>
<th>Matched not-tort cases</th>
<th>Date</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelphia Business Solutions, Inc.</td>
<td>01/01/1999</td>
<td>C9</td>
<td>ITC DeltaCom, Inc.</td>
<td>30/03/2000</td>
<td>B5</td>
</tr>
<tr>
<td>Adelphia Communications Corp.</td>
<td>01/10/1999</td>
<td>C9</td>
<td>IMPSAT Fiber Networks, Inc.</td>
<td>30/07/2001</td>
<td>A3</td>
</tr>
<tr>
<td>American Banknote Corporation</td>
<td>14/07/1998</td>
<td>C9</td>
<td>MediaNews Group Inc.</td>
<td>31/12/2007</td>
<td>A3</td>
</tr>
<tr>
<td>Anicom, Inc.</td>
<td>24/02/1998</td>
<td>C9</td>
<td>Inacom Corp.</td>
<td>09/10/1998</td>
<td>B6</td>
</tr>
<tr>
<td>Aurora Foods Inc.</td>
<td>01/01/1998</td>
<td>C10</td>
<td>Interstate Bakeries Corporation</td>
<td>15/11/2003</td>
<td>B4</td>
</tr>
<tr>
<td>Bicoastal Corporation</td>
<td>30/06/1986</td>
<td>C2</td>
<td>Tracer Holdings Inc.</td>
<td>01/10/1989</td>
<td>C6</td>
</tr>
<tr>
<td>Bonneville Pacific Corporation</td>
<td>31/07/1986</td>
<td>C8</td>
<td>Morrison Knudsen Corp.</td>
<td>20/10/1994</td>
<td>C6</td>
</tr>
<tr>
<td>Boston Chicken, Inc.</td>
<td>04/08/1992</td>
<td>C9</td>
<td>Flagstar Companies, Inc.</td>
<td>15/08/1994</td>
<td>D3</td>
</tr>
<tr>
<td>CareMatrix Corp.</td>
<td>28/04/1998</td>
<td>B2</td>
<td>Sun HealthCare Group, Inc.</td>
<td>01/07/1998</td>
<td>A4</td>
</tr>
<tr>
<td>Complete Management, Inc.</td>
<td>01/05/1996</td>
<td>C9</td>
<td>ProMedCo Management Company</td>
<td>30/06/2000</td>
<td>B4</td>
</tr>
<tr>
<td>Enron Corp.</td>
<td>01/03/1997</td>
<td>C5</td>
<td>KCS Energy, Inc.</td>
<td>01/01/1998</td>
<td>B4</td>
</tr>
<tr>
<td>Fine Host Corporation</td>
<td>01/01/1994</td>
<td>C9</td>
<td>Planet Hollywood International, Inc.</td>
<td>19/04/1996</td>
<td>C9</td>
</tr>
<tr>
<td>Footstar Inc.</td>
<td>01/01/1997</td>
<td>B6</td>
<td>Jacobson Stores, Inc.</td>
<td>31/05/1997</td>
<td>B4</td>
</tr>
<tr>
<td>Global Crossing Ltd.</td>
<td>01/01/1998</td>
<td>B6</td>
<td>Global TeleSystems, Inc.</td>
<td>04/03/1999</td>
<td>B2</td>
</tr>
<tr>
<td>Impath Inc.</td>
<td>24/02/2000</td>
<td>C4</td>
<td>aaiPharma Inc.</td>
<td>13/02/2004</td>
<td>B4</td>
</tr>
<tr>
<td>Leslie Fay Companies, Inc.</td>
<td>01/01/1990</td>
<td>A2</td>
<td>Plaid Clothing Group Inc.</td>
<td>19/11/1994</td>
<td>B4</td>
</tr>
<tr>
<td>MCSI Inc.</td>
<td>30/06/2000</td>
<td>C9</td>
<td>CHS Electronics, Inc.</td>
<td>10/03/1999</td>
<td>C5</td>
</tr>
<tr>
<td>MiniScribe Corp.</td>
<td>01/01/1986</td>
<td>C10</td>
<td>Daisy Systems Corp.</td>
<td>30/09/1989</td>
<td>B6</td>
</tr>
<tr>
<td>OCA, Inc.</td>
<td>30/09/1998</td>
<td>B3</td>
<td>Mediq, Inc.</td>
<td>29/05/1998</td>
<td>B6</td>
</tr>
<tr>
<td>Peregrine Systems, Inc.</td>
<td>01/04/1999</td>
<td>C10</td>
<td>USInterNetworking, Inc.</td>
<td>01/09/2000</td>
<td>B6</td>
</tr>
<tr>
<td>Seitel Inc.</td>
<td>05/05/2000</td>
<td>C8</td>
<td>Forcenergy Inc</td>
<td>30/06/1997</td>
<td>B2</td>
</tr>
<tr>
<td>Smartalk Teleservices, Inc.</td>
<td>01/01/1997</td>
<td>C9</td>
<td>GST Telecommunications, Inc.</td>
<td>28/10/1998</td>
<td>B2</td>
</tr>
<tr>
<td>Sunbeam Corporation</td>
<td>30/09/1996</td>
<td>C10</td>
<td>Sun Television and Appliances, Inc.</td>
<td>07/01/1997</td>
<td>B1</td>
</tr>
<tr>
<td>Technical Equities Corp.</td>
<td>01/01/1983</td>
<td>C2</td>
<td>Ladish Co. Inc.</td>
<td>30/09/1991</td>
<td>B4</td>
</tr>
<tr>
<td>Washington Group Intern., Inc.</td>
<td>28/09/1999</td>
<td>B6</td>
<td>WCI Communities, Inc.</td>
<td>30/09/2006</td>
<td>B2</td>
</tr>
<tr>
<td>Worldcom, Inc.</td>
<td>01/01/1999</td>
<td>C10</td>
<td>XO Communications, Inc.</td>
<td>16/06/2000</td>
<td>B2</td>
</tr>
</tbody>
</table>
A descriptive analysis of micro-failures categories and types can be implemented through stata. The frequency of the relevant micro-failures categories is summarized in the following table (TABLE 9); moreover the frequency can be separately considered according to the firms type (i.e. fraud or not-tort, Fig.4).

The accidental factors do not influence at all firms’ relevant micro-failures. Overall, also the categories A (product/market problems) and D (cultutral/social factors) are not very influent, but there is a strict differentiation inside the other micro-failures categories (i.e. B and C) according to firms’ subset (fraud and not-tort): in not-tort cases financial micro-failures outnumber managerial problems and vice versa in fraud cases. A deeper analysis permits to consider micro-failures types (TABLE 10).
TABLE 10 – Frequency of relevant micro-failures types in both fraud and not-tort cases (Figs.5-6-7)

<table>
<thead>
<tr>
<th>CATN</th>
<th>RelMi</th>
<th>Freq.</th>
<th>Percent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2</td>
<td></td>
<td>1</td>
<td>1.67</td>
<td>1.67</td>
</tr>
<tr>
<td>A3</td>
<td></td>
<td>2</td>
<td>3.33</td>
<td>5.00</td>
</tr>
<tr>
<td>A4</td>
<td></td>
<td>1</td>
<td>1.67</td>
<td>6.67</td>
</tr>
<tr>
<td>B1</td>
<td></td>
<td>1</td>
<td>1.67</td>
<td>8.33</td>
</tr>
<tr>
<td>B2</td>
<td></td>
<td>8</td>
<td>13.33</td>
<td>21.67</td>
</tr>
<tr>
<td>B3</td>
<td></td>
<td>1</td>
<td>1.67</td>
<td>23.33</td>
</tr>
<tr>
<td>B4</td>
<td></td>
<td>8</td>
<td>13.33</td>
<td>36.67</td>
</tr>
<tr>
<td>B5</td>
<td></td>
<td>2</td>
<td>3.33</td>
<td>40.00</td>
</tr>
<tr>
<td>B6</td>
<td></td>
<td>7</td>
<td>11.67</td>
<td>51.67</td>
</tr>
<tr>
<td>C10</td>
<td></td>
<td>5</td>
<td>8.33</td>
<td>60.00</td>
</tr>
<tr>
<td>C2</td>
<td></td>
<td>3</td>
<td>5.00</td>
<td>65.00</td>
</tr>
<tr>
<td>C4</td>
<td></td>
<td>1</td>
<td>1.67</td>
<td>66.67</td>
</tr>
<tr>
<td>C5</td>
<td></td>
<td>2</td>
<td>3.33</td>
<td>70.00</td>
</tr>
<tr>
<td>C6</td>
<td></td>
<td>3</td>
<td>5.00</td>
<td>75.00</td>
</tr>
<tr>
<td>C8</td>
<td></td>
<td>1</td>
<td>5.00</td>
<td>80.00</td>
</tr>
<tr>
<td>C9</td>
<td></td>
<td>11</td>
<td>18.33</td>
<td>98.33</td>
</tr>
<tr>
<td>D3</td>
<td></td>
<td>1</td>
<td>1.67</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>60</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

Overall, the five most frequent relevant micro-failures types are the following:

- too aggressive growth and expansion strategy (i.e. a such rapid growth through mergers or other operations was no sustainable in the long run) which has been labeled C9;
- excessive indebtedness and difficulty in obtaining new financing which has been labeled B2;
- negative economic-financial trends (primarily resulting from a decrease in revenues) which has been labeled B4;
• unprofitable affairs (*e.g.* acquisition of unprofitable divisions) which has been labeled B6;
• too ambitious objectives and anxiety to hit “must make” numbers (*i.e.* earnings targets) which has been labeled C10.

There is a strict differentiation inside these micro-failures types according to the firms’ status (fraud and not-tort): while in not-tort cases financial micro-failures (B2 and B4) outnumber all the others, in fraud cases the managerial relevant micro-failure type labeled C9 is the prevalent one.

5.3 Hypothesis 1b analysis: macro-failure does not occur suddenly.

In order to analyze this hypothesis, the *time* variable has been introduced: it represents the time interval between the relevant micro-failure date (*d1*) and macro-failure date (*d3*). So, this variable is not calculated from the business path beginning, but from its relevant micro-failure which is the most reliable signal of failure as emphasized in section II. The following stata table (TABLE 11) shows all the variables used in the statistical analysis. The last four variables have been created by the stset command: all the survival analysis (st) commands use these variables which contain all the necessary information for the survival data.

**TABLE 11 – Variables used in the survival analysis.**

<table>
<thead>
<tr>
<th>variable name</th>
<th>storage type</th>
<th>display format</th>
<th>label</th>
<th>variable label</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>byte</td>
<td>%8.0g</td>
<td>1 to 30 are fraud firms, 31 to 60 are notort firms</td>
<td></td>
</tr>
<tr>
<td>d1</td>
<td>str20</td>
<td>%10s</td>
<td>relevant microfailure date</td>
<td></td>
</tr>
<tr>
<td>d2</td>
<td>str20</td>
<td>%10s</td>
<td>disclosure date</td>
<td></td>
</tr>
<tr>
<td>d3</td>
<td>str20</td>
<td>%10s</td>
<td>macrofailure date</td>
<td></td>
</tr>
<tr>
<td>status</td>
<td>byte</td>
<td>%8.0g</td>
<td>all firms encounter macro-failure</td>
<td></td>
</tr>
<tr>
<td>fraud</td>
<td>byte</td>
<td>%8.0g</td>
<td>0 notort, 1 fraud</td>
<td></td>
</tr>
<tr>
<td>sic_code</td>
<td>byte</td>
<td>%8.0g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>maf_year</td>
<td>int</td>
<td>%8.0g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>date_maf</td>
<td>float</td>
<td>%9.0g</td>
<td>relevant microfailure date</td>
<td></td>
</tr>
<tr>
<td>date_disclosure</td>
<td>float</td>
<td>%9.0g</td>
<td>disclosure date</td>
<td></td>
</tr>
<tr>
<td>date_rmif</td>
<td>float</td>
<td>%9.0g</td>
<td>macro failure or bankruptcy date</td>
<td></td>
</tr>
<tr>
<td>time</td>
<td>float</td>
<td>%d</td>
<td>time btw the relevant micro-failure and macro-failure</td>
<td></td>
</tr>
<tr>
<td>-st</td>
<td>byte</td>
<td>%8.0g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>_t</td>
<td>int</td>
<td>%10.0g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>_t0</td>
<td>byte</td>
<td>%10.0g</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sorted by: _t0

Note: dataset has changed since last saved

The following table (TABLE 12) shows a first descriptive statistical analysis of the *time* variable.
TABLE 12 – Descriptive statistical analysis of the time variable.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>time</td>
<td>60</td>
<td>945.4333</td>
<td>566.2778</td>
<td>215</td>
<td>2722</td>
</tr>
</tbody>
</table>

The path towards failure of the sampled firms ranges from 215 days (the minimum value) to 2722 days (the maximum value). A first distinction in the distribution of the time variable between not-tort and fraud cases can be read in the following tables (TABLES 13-14): the minimum and the maximum values of the time variable are lower for not-tort cases. Moreover, the range between these last two values is shorter for not-tort cases: firms which have committed fraud are more distributed over time and their path towards macro-failure lasts more.

TABLE 13-14 – Descriptive statistical analysis of the time variable in not-tort and fraud cases.

Fraud cases:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>time</td>
<td>30</td>
<td>1273.6</td>
<td>566.7232</td>
<td>512</td>
<td>2722</td>
</tr>
</tbody>
</table>

Not-tort cases:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>time</td>
<td>30</td>
<td>617.2667</td>
<td>329.2562</td>
<td>215</td>
<td>1690</td>
</tr>
</tbody>
</table>

These considerations will be deepened by the following analysis.

5.4 Hypothesis 2 analysis: fraud lets firms earn time in the path to macro-failure.

Survival analysis includes several related techniques that focus on time until an event of interest occurs. In this chapter, the time until macro-failure represents the “survival time” (TABLE 15). The median survival time is 753 days by considering all the 60 firms. Moreover, there are 60 failures out of 56726 firm-
days, so giving an incidence rate of 0.00106. If this incidence rate (i.e. the hazard function) could be assumed to be constant, it would be estimated as 0.00106 per day which corresponds to 0.39 per year.

TABLE 15 – The survival time.

<table>
<thead>
<tr>
<th>time at risk</th>
<th>incidence rate</th>
<th>no. of subjects</th>
<th>25%</th>
<th>50%</th>
<th>75%</th>
</tr>
</thead>
<tbody>
<tr>
<td>total</td>
<td>56726</td>
<td>.0010577</td>
<td>60</td>
<td>527</td>
<td>753</td>
</tr>
</tbody>
</table>

Overall, this function estimates about a 25% chance of falling down macro-failure within 527 days after the relevant micro-failure, 50% within 753 days and 75% within 1219 days. Summary statistics on survival time are more significant if considered separately for each group (TABLE 16): overall, 25% of sampled firms have employed at least 527 days from relevant micro-failure to fall down macro-failure, but this differs considerably between fraud and not-tort cases (at least 391 days in not-tort cases and 926 in fraud cases). The median survival time in fraud cases is estimated to be 1182 days and 559 in not-tort cases.

TABLE 16 – The survival time in not-tort and fraud cases.

<table>
<thead>
<tr>
<th>fraud</th>
<th>time at risk</th>
<th>incidence rate</th>
<th>no. of subjects</th>
<th>25%</th>
<th>50%</th>
<th>75%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>18518</td>
<td>.00162</td>
<td>30</td>
<td>391</td>
<td>559</td>
<td>748</td>
</tr>
<tr>
<td>1</td>
<td>38208</td>
<td>.0007852</td>
<td>30</td>
<td>926</td>
<td>1182</td>
<td>1488</td>
</tr>
<tr>
<td>total</td>
<td>56726</td>
<td>.0010577</td>
<td>60</td>
<td>527</td>
<td>753</td>
<td>1219</td>
</tr>
</tbody>
</table>

The previous conclusion, which has been reached by considering the time variable, is reversed by introducing the time2 variable (TABLE 17): this represents the period of time between the disclosure date (d2) and macro-failure date (d3).
In this second case, the median survival time is equal to 312 days. If the incidence rate (i.e. the hazard function) could be assumed to be constant, it would be estimated as 0.0025 per day which corresponds to 0.91 per year.

Overall, 25% of sampled firms have employed at least 99 days from disclosure moment to fall down macro-failure, but this differs considerably (more than before with the time variable) between fraud and not-tort cases (at least 391 days in not-tort cases and 53 in fraud cases). This function (TABLE 18) estimates for fraud firms about a 25% chance of falling down macro-failure within 53 days after the disclosure moment and 75% within 215 days. This function estimates for not-tort firms about a 25% chance of falling down macro-failure within 391 days after the disclosure moment and 75% within 748 days. So, even though overall the path towards macro-failure lasts more for fraud cases, after the disclosure moment firms that have committed fraud fall into macro-failure more rapidly than not-tort firms. This result can be confirmed by the Kaplan-Meier method (TABLE 19) that estimates the survivor function. Its estimator of surviving beyond time \( t \) is the product of survival probabilities in \( t \) and the preceding periods. The cumulative hazard function from the Kaplan-Meier can be obtained by using the relationship

<table>
<thead>
<tr>
<th>fraud</th>
<th>time at risk</th>
<th>incidence rate</th>
<th>no. of subjects</th>
<th>Survival time</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>18518</td>
<td>.00162</td>
<td>30 59 99 312 614</td>
<td>748</td>
</tr>
<tr>
<td>1</td>
<td>4646</td>
<td>.0062419</td>
<td>29 53 99 215</td>
<td>614</td>
</tr>
<tr>
<td>total</td>
<td>23164</td>
<td>.0025471</td>
<td>59</td>
<td>99 312 614</td>
</tr>
</tbody>
</table>
between the survivor and hazard functions, but there are problems in small samples with this approach. It could be more appropriate to use the formula for the Nelson-Aalen estimator (TABLE 20).

TABLES 19-20 – Kaplan-Meier and Nelson-Aalen estimators for the time variable.

These results can be intuitively understood through a graph: graphing the Kaplan-Meier estimator of surviving $S(t)$ against $t$ produces a Kaplan-Meier survivor curve for each case (i.e. fraud and not-tort, Figs.8-9).

After the relevant micro-failure, macro-failure occurs more quickly in not-tort cases (i.e. fraud equals zero): the path towards macro-failure lasts more in fraud cases (i.e. fraud equals one).

The same analysis (TABLE 21-22) can be implemented for $time2$ variable.
After the disclosure moment, macro-failure occurs more quickly in fraud cases (i.e. fraud equals one, Figs.10-11): the interval of time between the disclosure moment and the macro-failure date lasts more in not-tort cases (i.e. fraud equals zero).

6. MAIN CONCLUSION AND SUGGESTIONS FOR FUTURE RESEARCH

Essentially, this chapter has sought to encourage business failure explanation through the identification of two different steps in the failing path: the first, i.e. micro-failure, is not atypical and the second, i.e. macro-failure, does not
occur suddenly. Their consideration will help scholars in the explanation of also fraud happening: fraud lets firms earn time and hope more to avoid macro-failure, but, after the disclosure moment, fraud firms fall down macro-failure faster than not-tort firms.

The results suggest that only after a such explanation of business failure, its prediction can be properly conducted: in the next future, the author aims to utilize the existing methods of predictions in the light of the developed explanation to predict macro-failure when the relevant micro-failure is disclosed.

In addition, other suggestions for future research regard some sampled cases which have been emphasized at the end of the survival analysis through an analysis of the deviance residuals: it will be interesting to go more in depth through a specific accounting history analysis.

7. REFERENCES


The link  

between chapter 1 and chapter 2

The second chapter analyzes the path to failure of Sunbeam Corp., a case emerged as an outlier from the analysis conducted in the first chapter through all the US fraud cases mentioned by WebBRD: the analysis of the time variable between fraud disclosure and the final bankruptcy has revealed the presence of this outlier (Sunbeam Corp. employs the maximum gathered value equal to 840 days). Different hypotheses are evaluated in the next chapter, starting from the consideration of Sunbeam’s history peculiarities: fraud duration, scapegoating and creative auditing represent the three main points of analysis. Starting from a micro-analysis of this case, that the SEC investigated in depth and the next chapter describes in detail, inputs for future research are then provided about more general problems concerning the relationship between fraud and failure path.
CHAPTER 2

ACCOUNTING FRAUD, BUSINESS FAILURE AND CREATIVE AUDITING:
A MICRO-ANALYSIS OF THE STRANGE CASE OF SUNBEAM CORP.

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Department of Management
Ca’ Foscari University

This chapter has been realized under the supervision of professor Giovanni Favero.

February 2012
Abstract

This chapter puts under the magnifying glass the path to failure of Sunbeam Corp. and emphasizes the reasons of its singularity and exceptionality. This case emerged as an outlier from the analysis conducted in the first chapter through all the US fraud cases mentioned by WebBRD: while the analysis of the TIME1 variable (i.e. the time between the beginning of the fraud and its disclosure) does not signal any outliers, the analysis of the TIME2 variable (i.e. the time between fraud disclosure and the final bankruptcy) has revealed the presence of this outlier. In fact, the maximum value of the TIME2 variable has been estimated equal to 840 days: it is really far from the range estimated by the survival function for the entire sample and it refers to Sunbeam Corp. Different hypotheses are evaluated in this chapter, starting from the consideration of Sunbeam’s history peculiarities: fraud duration, scapegoating and creative auditing represent the three main points of analysis. Starting from a micro-analysis of this case that the SEC investigated in depth and this chapter describes in detail, inputs for future research are then provided about more general problems concerning the relationship between fraud and failure. In particular, the chapter shows that complex mechanisms connect together budget manipulation, market performances, M&A choices, and the reactions of auditors and directors taking to eventual bankruptcy. The exceptionally long path to failure of Sunbeam is indeed explained by the interaction between the auditors’ unusual distancing assessment of its statements and the decision of its board to replace the CEO at the first signal of fraud. Moreover, in order to conceal accounting fraud, the sale of the company is perceived as a first best against the acquisition of other businesses: this result provides useful indications for further research on undetected frauds. Finally, the chapter proposes an historical explanation of the outlier characteristics of the case as resulting from a blind path in the evolution of accounting regulation and practice, following the Enron scandal and increased vigilance on the auditing and accounting function.

Keywords: accounting fraud, failure process, creative auditing, historical micro-analysis
Acknowledgements

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1. INTRODUCTION

Differently from the traditional literature which focused on creating a substantial agreement over the most suitable methodology for predicting the final business failure (Beaver 1967; Altman 1968), more recent pieces of research have tried to emphasize relations between time dimension, failure stages and accounting information (Hill et al., 1996; Cybinski, 2001).

This chapter aims to be inserted in this second stream of research as was the previous chapter which represents its starting point: the identification of the relevant micro-failure (i.e. the stage of not meeting some set objectives which implies a drastic choice between either revealing or not revealing its bad consequences) and the implementation of a survival analysis have demonstrated that fraud lets firms earn time in their path toward an eventual macro-failure (i.e. the last stage of a firm’s life cycle), but its disclosure makes firms fall down macro-failure very fast. This analysis was conducted through all the US fraud cases (and the matched not-tort cases) mentioned by WebBRD: the selected firms filed for bankruptcy in the period 1986-2010 and their activities differ from finance, insurance and real estate industries (Chapter 1, Table 2, p. 20).

The results gathered in the first chapter matter for the content of this chapter in two directions. The analysis of the TIME1 variable (TABLE 1) for the
fraud cases, *i.e.* the time between the relevant micro-failure date and the fraud disclosure date, does not signal any outliers: all the examined fraud cases do not present values significantly far from the median survival time which has been estimated equal to 1182 days.

**TABLE 1 – TIME1 variable analysis**

<table>
<thead>
<tr>
<th>fraud</th>
<th>time at risk</th>
<th>incidence</th>
<th>no. of subjects</th>
<th>survival time</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>18518</td>
<td>.00162</td>
<td>30</td>
<td>391</td>
</tr>
<tr>
<td>1</td>
<td>38208</td>
<td>.0007852</td>
<td>30</td>
<td>926</td>
</tr>
<tr>
<td>total</td>
<td>56726</td>
<td>.0010577</td>
<td>60</td>
<td>527</td>
</tr>
</tbody>
</table>

On the other hand, the analysis of the TIME2 variable (TABLE 2) for the fraud cases, *i.e.* the time between the fraud disclosure date and the macro-failure date, has reached the opposite conclusion and revealed the presence of an outlier: overall, this function estimates about a 25% chance of falling down macro-failure within 53 days after the fraud disclosure date, 50% within 99 days and 75% within 215 days. Considering some descriptive statistics, the maximum value of the TIME2 variable has been estimated equal to 840 days: it is really far from the range estimated by the survival function and it refers to Sunbeam Corp (Fig.1).

**TABLE 2 – TIME2 variable analysis**

<table>
<thead>
<tr>
<th>time2</th>
<th>840</th>
<th>.0011905</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>variable</th>
<th>obs</th>
<th>mean</th>
<th>std. dev.</th>
<th>min</th>
<th>max</th>
</tr>
</thead>
<tbody>
<tr>
<td>time2</td>
<td>30</td>
<td>154.8667</td>
<td>178.4815</td>
<td>0</td>
<td>840</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>variable</th>
<th>obs</th>
<th>mean</th>
<th>std. dev.</th>
<th>min</th>
<th>max</th>
</tr>
</thead>
<tbody>
<tr>
<td>time2</td>
<td>1</td>
<td>840</td>
<td></td>
<td>840</td>
<td>840</td>
</tr>
</tbody>
</table>
Another relevant point about this case, emerged as an outlier, regards the small difference, measured by few days, between the value of TIME1 variable and TIME2 variable for Sunbeam Corp (TABLE 3): this is due to the unusual length of the time to fall down macro-failure after the disclosure of Sunbeam’s fraud.

TABLE 3 - Sunbeam Corp’s fraud process

<table>
<thead>
<tr>
<th>FRAUD CASE</th>
<th>FRAUD</th>
<th>MACRO-FAILURE</th>
<th>Δ (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BEGIN</td>
<td>END</td>
<td>Δ</td>
</tr>
</tbody>
</table>

Given the exceptionality of the case, even in the light of the existing literature on the determinants and characteristics of accounting fraud, the present chapter focuses on an in-depth study of Sunbeam’s path to failure, with the aim of explaining the reasons of its uniqueness and in order to derive from this micro-

-42-
analysis new questions and considerations concerning the general relationship between accounting fraud and business failure.

The micro-analytical approach, here adopted, was developed in the historical disciplines some decades ago in order to test (and eventually deny) the validity of macro-scale explanatory paradigms and to revisit and put under discussion the commonplace notions underlying them (Trivellato, 2011). In order to attain this result, the starting point is the critical comparison of all available sources (in our case annual reports -with obvious caveats-, business articles and mainly the results of the SEC investigation). This intensive approach is useful to avoid simplification, “not to sacrifice knowledge of individual elements to wider generalization”, but should be coupled with the informed use of “all forms of abstraction since minimal facts and individual cases can serve to reveal more general phenomena” (Levi, 1992, p. 109). Theoretical models are then used here as a repertoire of instruments useful to detect what are the actual mechanisms at work in the concerned case (Favero, 2011). The latter in its turn should be chosen precisely because it poses some problems, and should be used as a clue to detect the presence of some faults in general models and explanations (Ginzburg, 1989). In this way, the interpretation of an extra-ordinary case, as the outlier here taken into exam, could allow to shed light on broader trends and eventually to falsify general assumptions about what is possible or not (Grendi, 1977, p. 512). In this perspective, the basic research questions of this chapter concern primarily the method itself, and its usefulness in the inquiry of general issues in accounting and organization studies.

More precisely, the research question is about what the micro-analysis of the single case, selected as an outlier in the statistical distribution described before, can show about the mechanisms relating accounting fraud and business failure. This methodological question arouses a series of answers concerning the focus of the investigation, which in their turn can be translated into more operational research questions listed below.
- The micro-analysis of a single case can enlighten causal mechanisms which are too complex to emerge from standard empirical studies based on statistical approaches. A coherent operational research question in this case may ask how the specific fraudulent strategy of performance overstatement adopted in the Sunbeam case can be connected to the peculiar modality of its disclosure, allowing to scapegoat the CEO, to (temporarily) discharge the board and the company of any responsibility, and to pursue a business recovery.

- The exceptional features characterizing the case can suggest (by contrast) new hypotheses about what are the usual mechanisms at work, explaining the reasons for the concentration around average values of the considered statistical variables. The related operational research question will be about the factors (not existing in other cases) which may explain Sunbeam’s exceptionally long time to macro-failure (bankruptcy in this case).

- The outlier can sometimes represent the “tip of the iceberg” of not measurable phenomena (as, for instance, cases of undetected fraud). So, the chapter investigates what allowed the Sunbeam fraud to be discovered, and in what measure the exceptional factors explaining the odd behaviour of Sunbeam could be interpreted as usually invisible.

- Finally, the outlier can be the signal (the remaining spy or red flag) of a dynamic evolution that explains its same emergence as the result of a “blind evolutionary path”. In this case the operational research question takes a counter-factual aspect: what could have made this case unexceptional, or what could have allowed to generalize some of its specific features?

Different hypotheses will be consequently analyzed in the following paragraphs, starting from the consideration of Sunbeam’s history peculiarities. In fact, the chapter is organized as follows. The next section reviews the relevant literature about the factors characterizing Sunbeam’s fraud process: fraud duration, scapegoating and creative auditing. The third section analyzes the presence and the relevance of these factors in the concrete examined case. Section
four illustrates the relations between the identified variables and the contribution of the chapter to the literature. Lastly, some concluding remarks are presented.

2. QUESTIONS AND MODELS FROM LITERATURE

2.1 Determinants of fraud and time to disclosure

As long as the starting problem of this chapter is the exceptionally long time from fraud disclosure to macro-failure in the Sunbeam Corp. case, most of the existing literature focusing on the determinants of fraud and its duration (time to disclosure) seems out of target. However, the micro-analytical approach, here adopted, suggests the opportunity to make reference to a wide set of literature about different aspects of the theoretical debate, in order to allow a whole understanding of its complex evolutionary path, going from fraud to disclosure and then to macro-failure (i.e. bankruptcy).

Generally speaking, the literature considered below starts from the empirical analysis of statistical correlations at aggregate level between fraud dynamics and other variables concerning the firm (endogenous) or its environment (exogenous), to infer some explanatory models, trying then to demonstrate their validity by means of additional empirical tests: these contributions are very useful in order to build up a repertoire of models to be tested on the case, but also to correctly define the relevant context and the pertinent issues (see a summary in Jones, 2011).

In this respect, it should be first reminded that this chapter deals with a specific kind of fraud, related to financial misstatement. This typology was a small minority (4.8%) of the number of frauds occurring at global level in 2009, following a survey of the Association of Certified Fraud Examiners (ACFE, 2010); still it made up the absolute majority (68%) of reported losses, with a median loss of $4,100,000 ($1,730,000 considering only frauds committed in the
United States) against $160,000 for all kinds of occupational fraud;\footnote{The Association of Certified Fraud Examiners (ACFE) defines occupational fraud as the “use of one’s occupation for personal enrichment through the deliberate misuse or misappropriation of the employing organization’s resources or assets” (Report to the Nation on Occupational Fraud and Abuse, p. 2).} perhaps more interestingly here, it was also the longest to be discovered, with a median duration of 27 months against 18 months for all frauds (ACFE, 2010, pp. 10-14).

A further distinction between two main typologies of accounting fraud has been pointed out considering different systems of corporate governance (from Jones, 2011): in fact, an excess of the power retained by entrepreneurs or managers is usually at the origin of misstatement crimes in continental (European) financial systems, whereas in the United States, as in most of the Anglo-Saxon countries, they seem mainly to result from the pressure on performance exerted by financial investors, market analysts and internal budgeting on top and middle managers: as a consequence, the presence of performance understatement for fiscal purposes in continental contexts neatly contrasts with the dominance of overstatement fraud in the Anglo-Saxon system (Tiscini and Di Donato, 2006). If the second ones are assumed to be the pertinent circumstances in our case, it is interesting to highlight that the private benefit of the managers themselves would be only the indirect result of a behaviour aimed in the first place at meeting expected results, with a possible scarce awareness of its same fraudulent nature, at least at the beginning. Still, as discussed below, in the Sunbeam case responsibility was mainly attached to the company CEO, emphasizing his managerial style as directly connected to the resulting fraud.

When taking into exam the models proposed by the literature to explain the motivations for fraudulent overstatement of company financial performances, the first element to point out is that they usually apply an opportunity-cost framework, with contrasting results related to the considered system of incentives. For instance, the non-linear correlation between the number of frauds committed and the expected aggregate economic performance (i.e. optimism) has been explained making reference to different mechanisms, discussed in Davidson (2011). A first explanation takes into consideration the changing performance threshold below or above which investors decide to monitor in depth the state of a
firm instead of relying on public information, and the consequent changes in the cost opportunity for managers in overstating that performance (Povel et al., 2007). Another approach considers instead the effects of the varying ability to predict aggregate trends as affecting the dynamic interrelation between the number of firms performing less than generally expected (correlated with the realised aggregate performance), and the incentive for managers of under-performing firms to overstate their company performance in order to keep up with their fellow competitors on the job market correlated with expectations (Fernandes and Guedes, 2009).

It is worth to signal also the existence of endogenous explanations of the fraud cyclical trend, making reference to a circular predator-prey model (e.g. Volterra, 1928) and using the number of scammers (and the lagged number of victims) as the dependent (or independent) variable affected by (or affecting) the return to fraud (or to vigilance), in its turn affected by (affecting) the level of vigilance (fraud) (McAfee et al., 2011). However, this kind of approach does not consider the evidences suggesting that accounting fraud is a special case of the classical deterrence hypothesis (Becker, 1968) because of the presence of a “linkage” problem, implying for the budget manipulator a higher probability of being discovered in case of cessation of fraud (Baer, 2008). This peculiar situation implies in its turn an adverse incentive of increased vigilance on “current” fraud perpetrators that goes along with a more classical effect on “potential” ones. In particular, higher sanctions increase the opportunity cost of stopping manipulation, generally increasing also the time to disclosure by using means apt to conceal the presence of misstatements and manipulations in the accounts: among them, lobbying (Yu and Yu, 2011) and acquisition (Erickson et al., 2011) emerge in literature as the most used strategies. Acquisition is particularly interesting in the analysis of the case considered in this chapter, as long as it was adopted as a strategy to conceal fraud only after an attempt to sale the company itself. Looking at the issue from this perspective, the argument put forward by Baer (2008) raises a question concerning what could allow manipulators to stop their conduct in case they were not discovered: probably the shift of the blame to
others is one of the few conditions allowing the manipulator to leave the game. Still, it is very difficult to inquire such problems, as long as undetected frauds are here concerned. A second important caveat to keep in mind is indeed the necessity to distinguish between the possibility to commit a fraud in accounting and the possibility of its discovery. Summers and Scott (1998) tried to control for undetected frauds by screening the litigation history of their sample in the following years. Still, this method implies the assumption that before or later any fraud will be detected. In a more recent chapter anticipating an upcoming article, Wang (2004; 2011) proposes instead the use of an econometric model in order to disentangle from the observed probability of a detected fraud an estimate of the two component probabilities of committing and detecting fraud, showing that each of them can be affected by different variables and how they can interact. In particular, the application of Wang’s (2011) model suggests that acquisitions are correlated to fraud because of the high visibility of these transactions, despite the fact that active acquirers are less likely to commit fraud than the average, as long as they are more likely to be discovered. Very interesting is also the emerging correlation between the presence of investments implying higher volatility of their results and a higher probability to commit fraud, the probability of its detection being lower: this point implies that the “veil” created by the uncertainty of business can foster fraudulent behaviour both by exposing companies to more frequent performance shocks and higher financial needs, as argued by Wang (2011), but also allowing managers the possibility to appeal to volatility as a justification for any alteration of expected or assessed performances.

2.2 Time to bankruptcy and managerial scapegoating

The focus on governance mechanisms and fraud deterrence was criticized in literature as not taking into account the role of personal characteristics of the executives, such as overconfidence in their choices and the consequent need to “correct” poor performances that could threaten their ability to get financed on the market or even their job (Schrand and Zechman, 2011). This kind of argument is particularly relevant in the case under scrutiny, given the renown aggressive
managerial style of Al Dunlap, the CEO who was in chief of Sunbeam during the considered period. This emerges indeed as a first peculiar characteristic of the case, influencing its exceptionality.

The relevance of personal attitudes appears relevant also in relationship with the differential effects on market performances observed where financial restatements had negative implications for management integrity, in comparison with those considered to be connected to technical accounting issues (Palmrose, Richardson and Scholz, 2004). As shown below, one argument put forward by the fired CEO after the Sunbeam fraud disclosure was exactly concerning the technical nature of the misstatement, in the unsuccessful attempt to avoid being made guilty for the fraud alone.

However, what is more interesting in the case is the “survival strategy” adopted by the company immediately after the fraud disclosure, a strategy that following the classification proposed by Sutton and Callahan (1987) could be identified as a mix between denying and (partially) accepting responsibility, attained by means of the immediate dismissal of the CEO, who resulted in fact the scapegoat of the situation. Some more clarifications are needed on this point. On the one hand, indeed, the literature about the consequences of financial misrepresentation has clearly shown that it is very difficult, for both companies and regulators, to really sanction fraudulent managers (Velikonja, 2011); on the other hand, it exists clear evidence of heavy reputation effects on the same managers who were identified as responsible for accounting fraud (Karpoff et al., 2008). In particular, the only measure, that companies usually take against a fraudulent CEO, is firing him.

The choice of scapegoating the chief executive in case of fraud can be assimilated to cases where the same choice was adopted as a consequence of bad performances and as a tool to implement a (needed) strategic choice in the framework of the managerial succession: Gamson and Scotch (1964) suggested that managerial scapegoating could be a ritual strategy to cope with poor performances by placating frustrated shareholders and showing awareness that a change is needed. Empirical studies on the matter corroborate the ritual
scapegoating hypothesis: Khanna and Poulsen (1995), for instance, find no difference in actions and even market performances before and after succession in distressed firms, but other empirical studies suggest that performance-related scapegoating usually affects lower managers and not powerful chief executives (Boeker, 1992) and that fraud discovery seems to provide no incentives to managerial turnover (Agrawal et al., 1999).

A possible solution to this puzzle can be found in the literature on auditing, as long as auditors themselves seem to usually play more efficiently the role of ritual scapegoats: a second reason explaining the exceptionality of the Sunbeam case could then be identified in the shift from the auditors to the CEO of the scapegoat function. Guénin-Paracini and Gendron (2010) argued that the role single auditors perform as scapegoats in cases of accounting fraud is maintained and even increased despite of the legitimacy of their function as a group: this could be interpreted in the light of the anthropological theories developed by René Girard. According to Girard (2005), indeed, the struggle of all against all characterizing a major social crisis turns into a fight of all against one (i.e. the scapegoat) who comes to be seen as the only party responsible for the turmoil through a process of mythification. Terrified and angry, actors want to identify the cause of the crisis. Naturally, rather than blaming themselves, they are inclined to suspect others: mutual distrust and accusations spread throughout the entire group. The selection of the surrogate victim is rarely totally random. In most cases, the chosen scapegoat possesses certain victimizing signs, i.e. signs making him an actor somehow departing from normality within the group. The focus on the auditing function as warranting the credibility of capital markets even becoming the sacrificial victims of corporate scandals is perfectly justified where the general evolution of fraud cases and legislative measures in the last decades is concerned, as shown in the following paragraphs. However, these considerations seem far from the Sunbeam case where auditors’ peculiar behaviour and work allowed to recognize the scapegoat in the CEO, who was rapidly fired in order to help the company recover. As discussed in more detail in the next paragraph, the interesting point here is that the inherent ambiguity of the scapegoat role is enhanced in this case, as the same CEO was identified before as the major
intangible asset of the company and then as the major threat to its same survival. This shift was mirrored by a parallel boom and burst of Sunbeam’s share value, following the typical trend of speculative bubbles.

It is from this point of view that Girard’s (1987) original explanation of the origin of the scapegoating mechanism turns out to have more than expected to tell about the relationship between accounting fraud and business failure. In fact, in Girard’s archetypal story, it is mimesis (imitation) that explains the desire to possess things others possess, the struggle of all against all and the identification of a scapegoat to be sacrificed: it is a progressive shift of the same focus of imitation from the act of appropriation to the object of appropriation (mimetic desire) from the act of fighting (generalised conflict) to the object of fighting (the scapegoat as everybody’s enemy). Imitation is the main mechanism explaining speculative bubbles: investors imitate other investors creating waves of optimism and pessimism that explain volatility (Corcos et al., 2002). So, this imitation mechanism can explain also the abrupt change in the value the market assigned to the CEO of Sunbeam Corp., making of him a perfect scapegoat to exit from the difficult situation the company found itself.

2.3 Creative auditing

After famous accounting scandals occurred and influenced the world economy, the concept of creative accounting has emerged as a set of legal and illegal aspects due to the flexibility of accounting policy. Several definitions have been provided about it. Omurgonulsen and Omurgonulsen (2009) have summarized them: creative accounting represents both a process whereby managers use their knowledge of accounting rules to manipulate the figures reported in the accounts of a business and a set of undesirable practices which prevent people seeing the true and fair financial state of a company. Managers prefer to use creative accounting practices to manipulate profit to tie into forecasts and to distract attention from the news, which will not be welcome. So, creative accounting can be framed and related to the “agency theory” (Amat et al., 1999): the information asymmetry between principals (owners or shareholders) and
agents (managers), the opportunistic behavior of agents and the inability of principals to control the desired action of agent provide a theoretical framework to understand the failing path of such companies (Arnold and Lange, 2004). The framework of “principal–agent relationship” emphasizes also one of the most frequent possible causes of creative accounting: this practice sometimes occurs due to the pressure coming from the top management (Leib, 2002). Anyway, the first and most relevant feature of creative accounting is represented by its legacy: it is totally legitimate (Griffiths, 1986). Starting from this consideration, the concept of creative accounting has been isolated from other practices. In fact, an important differentiation (Jones, 2011) must be made between fair presentation where the flexibility within accounting is used to give a true and fair picture of the accounts so that they serve the interests of users; creative accounting where the flexibility within accounting is used to manage the measurement and presentation of the accounts so that they serve the interests of preparers; and fraud which consists in stepping outside the regulatory framework deliberately to give a false picture of the accounts. So, just the last one represents the fraudulent financial reporting, which has been defined as “an intentional misstatement of financial statements (Arens et al., 2010)” the three practices (i.e. not-tort, creative accounting and fraud) represent an escalation in the bad use of accounting by managers.

The same differentiation among separated practice has not been introduced in the literature for the auditing process yet. In the fraud detection literature, accounting and auditing have followed paths which have been separated from a temporal point of view, but similar because of other aspects. In fact, a fruitful area of prior research has been related to tools and techniques to improve fraud detection such as ratios analysis, checklists, analytical procedures, regression analysis, digital analysis, and neural networks (Hogan et al., 2008) before in accounting and then in auditing process. Moreover, there is a significant amount of literature on the cause and features of fraud processes: pressures to meet analysts’ forecasts, rapid growth, compensation incentives, stock options, the need for financing, and poor performance increase the likelihood of fraudulent financial
reporting (Bell and Carcello 2000; Rezaee 2005; Erickson et al., 2006). The good and bad accounting practices (i.e. not-tort, creative accounting and fraud) implemented by managers because of such reasons may find a correspondence into the practices used by auditors, with the same escalation from good to bad methods.

First, external auditors both may and should play a role in reducing opportunities to manage earnings or commit fraud (Becker et al., 1998; Francis et al., 1999; Carcello and Nagy, 2002; Iyer and Rama, 2004; Myers et al., 2003; Carcello and Nagy, 2004). This is related to the same definition of auditing which is “a systematic process of objectively obtaining and evaluating evidence regarding assertions about economic actions and events to ascertain the degree of correspondence between those assertions and established criteria and communicating the results to interested users” (American Accounting Association, 1973). Arens et al. (1997) define auditing as “the process by which a competent, independent person accumulates evidence about quantifiable information related to a specific economic entity for the purpose of determining and reporting on the degree of correspondence between the quantifiable information and established criteria.” According to these definitions, several authors have emphasized the auditing importance in order to implement fraud detection. Moreover, audits are claimed to not only enhance the detection of fraud but also the deterrence of fraud. Chen et al. (2011) examine whether different audit procedures and attitudes conveyed to management deter aggressive earnings management that may be fraudulent, and whether such different procedures and attitudes conveyed influence managers’ perceptions about the ethicality of any anticipated earnings management. This chapter falls within a stream of research which in recent years has put an increased emphasis on the audit as not only a mechanism of fraud detection but also fraud deterrence or prevention (US Treasury Department, 2008). The long-time claim of the financial audit as a fraud deterrence mechanism (Kranacher, 2006; Mautz and Sharaf, 1961; Wells, 2004) is more based on logical reasoning than on empirical evidence (Schneider and Wilner, 1990): management reports more honestly because its actions will be
audited (Baiman et al., 1987). Fraud deterrence should logically increase when managers perceive that an audit increases the probability of detection, whether or not the detection probability actually increases (Decker, 2003; Scheider, 2001): they know that any perpetuated fraud has a higher chance of being discovered with auditing. More in details, deterrence theory (Well, 2004; Chen et al., 2011) proposes three factors that affect people’s judgments about engaging in illegal or undesirable activities, i.e. certainty, severity, and swiftness of punishment. When people perceive an increase in the certainty of being caught in an illegal or socially undesirable act that results in severe and quick punishment, the costs of committing the act increases which reduces the act’s expected utility and the likelihood of people committing the act in the first place: according to deterrence theory, managers would be deterred from potentially fraudulent activities if they perceive an increased probability of punishment when they observe changes in auditor actions and activities. Moreover, detection and deterrence are intimately interwoven because an increase in the detection ability of the auditor, if it becomes widely known, should also lead to an increase in the deterrence ability of an audit. In this role, auditors’ activity has been supported also by standard setters. In fact, as an attempt to prevent fraud, the Auditing Standard Board (ASB) in 2002 issued the Statements of Auditing Standard 99 (SAS 99) which introduced a “Fraud Triangle”. Fraud Triangle indicates that the probability of committing fraud is high in situations when a) management or other employees has incentive or is under financial pressure, b) there exist conditions that provide opportunities for management or employees to commit fraud, and c) there exist ethical values or characteristics that cause management or employees to rationalize the fraudulent act. Peecher, Schwartz, and Solomon (2007) have advocated that auditors triangulate audit evidence from both internal and external sources to identify inconsistencies that could improve the auditor’s ability to detect intentional misstatements.

Second, on the other hand, some studies have emphasized as external auditors may be involved in managers’ fraud plans. This has been related to a decrease in audit quality: the value of external audits derives from users’
expectations auditors will detect and reveal any material omissions or misstatements of financial information. In fact, audit “quality” is defined in terms of the level of assurances, i.e. the probability financial statements contain no material omissions or misstatements. This definition is consistent with both DeAngelo’s (1981) definition of audit quality and the professional literature that describes audit quality in terms of audit risk, with higher quality services reflecting lower audit risk. Raiborn and Schorg (2004) describe the growing distrust in the auditing profession as “a cancer that is metastasizing” because of famous scandals: for instance, Arthur Andersen, Enron external auditor, has been charged with obstruction of justice related to the destruction of Enron documents (Berkowitz, 2002). So, auditors, who were once held in high, have started to be now viewed as ineffective and complacent (Beasely and Hermanson, 2004). The main causes of these audit failures have been recognized in the audit expectation gap and in the independence requirement. A lot of literature has also focused on the first emphasized cause, i.e. the audit expectation gap. Auditing is the act of attesting to the veracity of something, an evidentiary process analogous to the legal process of gathering evidence to establish the “facts of the case”: the audit function plausibly can provide only assurance that financial data correspond to certain specified events that have actually occurred. In the USA, Baron et al. (1977) examined the extent of auditors’ detection responsibilities with respect to the material errors, irregularities and illegal acts. They attempted to establish whether there were any differences in the perceptions regarding the auditors’ detection and disclosure duties between the auditors and users of accounting reports (i.e. financial analysts, bank loan officers and corporate financial managers). They found that auditors and users of accounting reports had significantly different beliefs and preferences on the extent of auditors’ responsibilities for detecting and disclosing the irregularities and illegal acts. In particular, users held auditors to be more responsible for detecting and disclosing irregularities and illegal acts than the auditors believed themselves to be. Recent regulations have tried to reduce both this gap and the first examined cause which has induced some restrictions and affected the decision to outsource the internal audit function (such as the Sarbanes–Oxley Act in the USA) to the external audit
firm: after famous scandals, a fundamental change in the way audits are performed has been needed to win back the public’s trust (Tackett et al., 2004). Moreover, many studies have emphasized the importance of the programs for fraud prevention/detection education and training programs to educate auditing professionals for fraud prevention/detection: Aliabadi et al. (2011) reveal that those who commit fraud are not necessarily genius or have creative mind because they just copy fraud schemes from the past. Therefore, there must be more emphasis on past mistakes.

Differently from both the two previous streams of literature, Guénin-Paracini and Gendron (2010), whose work has already been mentioned in the previous paragraph, emphasize the paradoxical nature of legitimacy surrounding the financial audit function in society. On the one hand, scandals surrounding fraudulent financial statements typically result in litigation against specific auditors while generating reproaches targeted at the whole profession. On the other hand, in spite of lawsuits and criticisms: the influence of auditing as a technical means of control invariably keeps strengthening and the auditors’ moral legitimacy eventually is always restored in the eyes of most stakeholders. In other words, they contend that auditors can be conceived of as modern pharmakoi, constituting a reservoir of victims to sacrifice whenever the occurrence of some fraudulent financial statements threatens the reproduction of economic order auditors have been scapegoated in the aftermath of a number of financial crises: the process of moral condemnation of auditors, which can take place in the wake of fraudulent financial statements emerging in the public sphere, bears resemblance to sacrificial rituals as theorized by René Girard. From this perspective, auditors can be thought of as modern pharmakoi, constituting a reservoir of victims to sacrifice when fraud threatens the smooth-functioning of capital markets. In contending that auditors are modern pharmakoi, they have explicitly stated that auditors are not systematically designated as scapegoats in the aftermath of all capitalistic crises: their point is that auditors have been scapegoated in the aftermath of a number of financial crises.
Starting from Guénin-Paracini and Gendron’s work, this chapter aims to provide an explanation for some different fraud processes where auditors are neither watchdogs nor victims nor legally guilty. Moreover, it focuses on auditing and considers the importance of the Sarbanes-Oxley Act: a cornerstone of financial reporting by public companies is the requirement that their annual financial statements must be audited by independent outside auditors. Although the Sarbanes-Oxley Act seeks to restrict the causes for the breakdown of auditors’ independence, the Act leaves untouched several fundamental facts. First, an outside auditor can never truly be independent since they are paid and selected by the same corporations that are being audited. Second, and related to the first fact, an outside auditor is only financially motivated to do what is minimally required, based on Generally Accepted Auditing Standards (“GAAS”), in auditing the financial statements of a company. As a result, the Act may be effective in contrasting fraud, but less strong against “creative auditing” which represents the main focus of this chapter: it is the first comprehensive attempt, as far as we are aware, at identifying another possible way of auditing, *i.e.* creative auditing. This may be framed and related to the “agency theory” as creative accounting was: auditors (agents) may use their professional knowledge, the asymmetrical information and the flexibility inside auditing rules to distract the principals’ attention (owners, shareholders, investors, etc.) from news which will not be welcome. In fact, according to agency theory, information asymmetry occurs where agents (auditors) have the competitive advantage of information within the company over that of the principals (e.g. owners, investors, etc.). This results in the principal’s inability to control the desired action of the agent (Godfrey *et al.*, 2003). Information within an organization is critical, and auditors working with management of the company are privy to essential information that can be used in a legal, but not proper way, to maximize their own interests at the expense of the principal. This theory may be related to that developed in the late 1920s by the Dutch professor Theodore Limperg (Hayes *et al.*, 1999). Limperg’s theory of inspired confidence addresses both the demand for and the supply of audit services. According to Limperg, the demand for audit services is the direct consequence of the participation of outside stakeholders in the company. These
stakeholders demand accountability from the management, in return for their contribution to the company. Since information provided by management might be biased, a possible divergence between the interest of management and outside stakeholders, an audit of this information is required. With regard to the level of audit assurance that auditors should provide (the supply side), Limperg adopts a normative approach. The auditor’s job should be executed in such a way that the expectations of a rational outsider are not thwarted. So, given the possibilities of audit technology, the auditor should do everything to meet reasonable public expectations. This theory differs from the credibility theory in some extents: the second theory regards the primary function of auditing to be the addition of credibility to the financial statements. Audited financial statements are used by management (agent) in order to enhance the principal’s faith in the agent’s stewardship and reduce the information asymmetry. This has been related to the most widely held theory on auditing until the 1940s (Hayes et al., 1999): under the watchdog theory, an auditor acts as a policeman focusing on arithmetical accuracy and on prevention and detection of fraud. However, due to its inability to explain the shift of auditing to “verification of truth and fairness of the financial statements” this theory seems to have lost much of its explanatory power.

3. THE CASE STUDY: A THICK DESCRIPTION OF THE EVENTS.

Sunbeam Corp has surely represented a case of accounting fraud. Many analysts were initially persuaded that Mr. Dunlap had improved the economic-financial situation of the company: Sunbeam’s stock leaped nearly 50 percent the day Mr. Dunlap was hired to run the company in 1996 and he became a sort of corporate star in the U.S. Although Sunbeam’s fortunes initially seemed to improve under Mr. Dunlap and the company took a huge write-off in 1996 as it closed plants and laid off employees, its reported profits soared in 1997 and, also according to the S.E.C., Mr. Dunlap and Russell A. Kersh (a longtime close associate of Sunbeam’s chief financial officer) “orchestrated a fraudulent scheme
to create the illusion of a successful restructuring of Sunbeam and facilitate the sale of the company at an inflated price”.

The first point, emphasized by the S.E.C., regards “the illusion of a successful restructuring of Sunbeam”: the S.E.C. compliant against Sunbeam states that “at least $62 million of Sunbeam’s reported $189 million in income for the year (1997) did not comply” with accounting rules. In particular, the SEC Release No. 7976, issued on May 15, 2001, addresses a variety of improper earnings management techniques employed by the management of Sunbeam Corporation from the last quarter of 1996 through June of 1998. Among the fraudulent accounting practices employed by Sunbeam was the improper recording of bill and hold sales. This practice began in the second quarter of 1997 and was repeated in the first quarter of 1998. In these purported bill and hold transactions Sunbeam offered incentives to customers to persuade them write purchase orders before they would have otherwise. The Commission concluded that these inducements to purchase meant that it was really the seller, Sunbeam, not the purchaser, that had requested the bill and hold arrangement. Also, because Sunbeam typically paid the cost of storage, shipment and insurance of the product, the risks of ownership were deemed not to have passed to the buyer, one critical criterion for the proper recognition of a bill and hold transaction. The “bill and hold” sale recorded in 1997 contributed to the approximate $62 million in fraudulent income reported in 1997. To avoid reporting a sales decline in the first quarter of 1998, Sunbeam again misused bill and hold transactions. In this instance they recorded $35 million in fictitious sales. Millions of dollars in expenses in 1997 were wrongly charged to 1996, when the company had taken the write-off for Mr. Dunlap’s reorganization. The S.E.C. said the reorganization created what it called “cookie jar” reserves, which could be used to create improper profits in 1997. It also said that Sunbeam unreasonably reduced the value of its inventory so that it could record large profits when the goods were sold: a variety of methods has been used, in particular the so called “channel stuffing”, i.e. putting inventory onto the books of distributors and retailers. For instance, electric blankets, which had been packaged for a certain retailer, were
sent to a distributor who agreed, in return for a guaranteed profit, to hold the blankets until the retailer was ready to accept them. Other sales were made by offering deep discounts to persuade customers to buy merchandise that they would not need for many months. The S.E.C. said that the company should have disclosed those discounts and that the sales should have been recorded in later quarters.

The second point, emphasized by the S.E.C., regards Mr. Dunlap’s strategy to sell the company. This has been wrong because, as analyzed by several authors, Dunlap’s celebrity pushed Sunbeam stock to premium levels, making it too rich for most acquirers and selling Sunbeam was not possible. Before that, Dunlap’s corporate sale strategy was profitably applied to Scott Paper Co.: the CEO, also known as “Rambo in Pinstripes” for his cost-slashing and restructuring techniques, had been around for a long time before Sunbeam (TABLE 4).

TABLE 4 - Highlights from Albert Dunlap’s Career (New York Times, Dec. 23, 1997)

<table>
<thead>
<tr>
<th>Company</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lily-Tulip</td>
<td>o In 1983, he fired all but two of the company’s senior managers on his first day at work.</td>
</tr>
<tr>
<td></td>
<td>o Cut corporate staff by one half and cut 20% of the company’s workforce.</td>
</tr>
<tr>
<td></td>
<td>o He took the company public in 1985.</td>
</tr>
<tr>
<td></td>
<td>o Split the natural resources company into two parts. At the part he kept, he laid off</td>
</tr>
<tr>
<td></td>
<td>approximately 20% of the company’s employees and renegotiated labor contracts to cut costs.</td>
</tr>
<tr>
<td>Consolidated Press Holdings</td>
<td>o Began work in 1991 to restructure the company.</td>
</tr>
<tr>
<td></td>
<td>o Sold most of the holding company’s businesses and revoked company perks</td>
</tr>
<tr>
<td>Scott Paper</td>
<td>o In April 1993, he laid off one third of the company’s workforce.</td>
</tr>
<tr>
<td></td>
<td>o In July 1995, a weakened Scott Paper was sold to Kimberly Clark for around $7 billion.</td>
</tr>
<tr>
<td>Sunbeam</td>
<td>o Shortly after taking over, he replaced most of the senior management.</td>
</tr>
<tr>
<td></td>
<td>o Three months after taking over, he announced 6,000 employee would be laid off.</td>
</tr>
</tbody>
</table>
Albert “Chainsaw Al” Dunlap took over the reins at Sunbeam Corporation in July 1996 in a hire meant to provide the company with a turnaround in the small appliance industry. His plan involved massive cuts to the company’s product lines, plant closings and major cutbacks in the number of employees at Sunbeam. He called for the same types of cutbacks at previous companies he headed, including Scott Paper where, within a few months, he had fired 11,200 workers, including 71 percent at headquarters and 50 percent of the managers, and departed 20 months later with an extra $100 million in his wallet after selling a leaner, meaner, money-making Scott to Kimberly-Clark. Mr. Dunlap would have applied the same strategy to Sunbeam. So, he choose his collaborators: of the five board members, four had been chosen by Dunlap himself. Moreover, on December 23, 1997, the New York Times reported that since Dunlap took over at Sunbeam, in the previous year one half of the company’s 12,000 jobs had been eliminated, approximately 90% of the products produced had been discontinued, and 18 of the 26 plants had been closed. Given the implementation of these same actions, Mr. Dunlap thought to be ready for Sunbeam sale (as was for Scott Paper Co.), but this couldn’t be concluded in spite of Sunbeam investment bankers’ attempts which approached numerous companies, including Gillette, Black and Decker, Rubbermaid, Maytag and Whirlpool. This was due to the strong increase of Sunbeam’s stock price: when Dunlap took over Sunbeam in July 1996, the company’s stock was trading at $12.50. In March 1998, the stock had risen to a high of around $53: with the stock trading near $50 per share, no other company was interested in acquiring Sunbeam.

After Sunbeam’s investment bankers failure in finding a buyer, Dunlap decided to use his company’s inflated stock to acquire other companies: Sunbeam planned to buy three additional companies, i.e. Coleman, Signature Brands and First Alert. On March 30, 1998, the Company, through a wholly-owned subsidiary, acquired approximately 81% of the total number of the outstanding shares of common stock of the Coleman Company, Inc. (“Coleman”), from a subsidiary of MacAndrews and Forbes Holdings, Inc. (“M&F”), in exchange for 14,099,749 shares of the Company’s common stock and
approximately $160 million in cash as well as the assumption of $1,016 million in debt. Coleman was a leading manufacturer and marketer of consumer products for the worldwide outdoor recreation market. Its products had been sold domestically under the Coleman brand name since the 1920’s. On April 3, 1998, Sunbeam completed also the cash acquisitions of First Alert, Inc. (“First Alert”), a leading manufacturer of smoke and carbon monoxide detectors, and Signature Brands USA, Inc. (“Signature Brands”), a leading manufacturer of a comprehensive line of consumer and professional products. The First Alert and the Signature Brands acquisitions were valued at approximately $178 million and $253 million, respectively, including the assumption of debt. The above acquisitions will be accounted for by the purchase method of accounting and the results of operations of the acquired entities will be included in the Company’s Consolidated Statement of Operations from the respective acquisition dates. Also in connection with the purchases of these three companies, Dunlap demanded a new contract from the Board of Directors even though he still had two years left on his current one. He also demanded a new contract for Kersh. Under the new agreement, Dunlap doubled his base salary to $2 million, received a grant of shares that netted him approximately $15 million immediately, and received approximately another $41 million as a result of the early vesting of all of his then outstanding options. He also received a new grant of 3,750,000 options. Kersh also had his salary doubled to $875,000. He too received grants of restricted stock representing a net gain of approximately $1.4 million. Kersh received 1,125,000 new options, a quarter of which vested immediately. As a result of these new agreements, Dunlap and Kersh beneficially owned, respectively, 5% and 1% of a company with a market capitalization of over $3.5 billion, i.e., over $125 million for Dunlap and $25 million for Kersh. As was the case with their original employment agreements, under these new agreements, Dunlap and Kersh had the incentive to raise the price of Sunbeam’s stock and sell the Company to cash in all of these holdings.

It wasn’t until April 3, after Dunlap had just acquired that trio of companies and already warned Wall Street of a slowdown in first-quarter sales, that Sunbeam began to publicly unravel. In fact, Sunbeam’s fourth-quarter
financials disappointed Wall Street. When Dunlap finally reported the numbers on January 28, he turned in earnings of 47 cents per share, which was a cent short of analysts’ expectations. The shortfall caused Sunbeam stock to fall nearly 10%, to $37.625 (Fig. 2).

Fig. 2 - Sunbeam’s stock scheme. The chart illustrates, public investors, ranging from individuals to investment funds, who bought and held Sunbeam’s stock in anticipation of a true turnaround lost billions as a result of the scheme (extract from the “Complaint For Civil Injunction And Civil Penalties” exposed by the Securities and Exchange Commission in front of The United States District Court Southern District Of Florida)

Dunlap attributed the stumble to lower sales of electric blankets. What investors didn’t know would have caused Sunbeam’s stock to suffer a total collapse. Shifting the $21.5 million from reserves into income, i.e. a transaction that only came to light when Sunbeam restated its financial results a year later, enabled Kersh to disguise the company’s calamitous erosion in profit margins. It helped to cover up the deep discounts given to customers by Sunbeam to stuff and load the retail channels. Auditors later concluded that grill sales made under
massive discounts, extended credit terms, and “bill-and-hold” transactions inflated fourth-quarter sales by $50 million. Instead of reporting revenues that were up 26%, to $338.1 million, Sunbeam sales would have increased by only 7%.

As the company’s performance deteriorated, the pressure inside Sunbeam was building. There were signs that it was even getting to Dunlap. According to Sunbeam’s employees, the CEO’s behavior inside the company was still worse than outside. It was becoming increasingly difficult to meet Dunlap’s projections. To double revenues to $2 billion by 1999, Sunbeam would have to increase sales five times faster than rivals. To boost operating margins to 20% in just over a year, Sunbeam would have to improve its profitability more than twelvefold from the measly 2.5% margins it had. To generate $600 million in sales through new products by 1999, the company would have to smash home runs with every at-bat. Almost all his executives believed these goals were impractical. Complaints and employees’ testimonies revealed that Dunlap refused to acknowledge the near-impossibility of meeting the goals. Instead, he began putting excruciating pressure on those who reported to him, who in turn passed that intimidation down the line. People were told that either they meet their goals or another person would be found to do it for them. Executives said he would throw papers or furniture, bang his hands on his desk, and shout so ferociously that a manager’s hair would be blown back by the stream of air that rushed from Dunlap’s mouth, but those people didn’t refuse their wages. The top 250 to 300 executives and managers at Sunbeam received option grants that were typically twice the size of what they might get at other companies. All were aware of what such grants had meant for managers at Scott, many of whom walked away with millions. Sunbeam managers did not understand that Dunlap’s generosity had a perverse impact. Complaints suggest that the outsize rewards made it easier for employees to do things they might otherwise refuse to do and accept the little enthusiasm and the frustration inside Sunbeam. In an effort to hang on to their jobs and their options, some Sunbeam managers began all sorts of game playing. Commissions were withheld from independent sales reps. Bills went unpaid. Some vendors were forced to accept partial payment. One director reported getting a call from a headhunter.
begging for help in collecting a bill from Sunbeam. “It was personally humiliating,” recalled Susan Robertson, a manager in new-product development. “I couldn’t tell for sure if they were simply pinching pennies or (if it was) because we were short on cash. Later on it became apparent it was the latter.” Other dubious techniques were used to boost sales. Product was heavily discounted to get retailers to buy more than needed. Credit terms were extended. By May of 1998, an internal memo shows, all of the company’s major customers were loaded to the gills with Sunbeam merchandise. Wal-Mart Stores, for example, which prefers four weeks of inventory, was loaded with 23.6 weeks of Sunbeam appliances. “We were jamming inventory at people like you couldn’t believe,” said a top salesman. “Most of the stuff I had done before for solid companies. We just took it to another level. We did it every quarter, with every customer, on every product.”

The variety of improper methods did not go completely unnoted, even on Wall Street. By mid-1997, William H. Steele of Buckingham Research Group in San Francisco saw signs of trouble. Inventory in the second quarter hit $208 million, up $60 million from first-quarter levels. Meanwhile, cash on hand fell by $36 million. Steele downgraded the stock to neutral in July. By June 1998, the stock had fallen to around $22 per share and Barron’s Online (June 8, 1998) investigate the reasons of such sudden drop: by early June, Barron’s published an article noting that Sunbeam had negative operating cash flow in 1997 and suggesting that all the company’s profits had come from questionable accounting maneuvers. Despite the chaos inside the company because of such paper, Sunbeam’s chief kept up a steady drumbeat of optimistic sales and earnings forecasts, promises of tantalizing new products, and assurances that the Dunlap magic was working. Even Andrew Shore, an analyst at PaineWebber Inc. and one of the few who hadn’t entirely bought into the Dunlap mystique, upgraded the stock to a buy in October, 1997. He noticed the same disturbing trends as Steele, but wrote: “Sunbeam possesses an intangible asset, the Dunlap factor.”
Although several analysts still continued to believe in Sunbeam and its CEO, the company took soon a radical choice: Mr. Dunlap was soon forced to resign after board members began looking into the claims and hearing from employees of questionable accounting practices. By June 1998, the company’s directors had fired “Chainsaw Al”, commenting that they had “lost confidence” in his leadership abilities (Los Angeles Times, June 16, 1998). A SEC deep investigation started after that and the following emerged: this announcement caused the company’s share price to plummet to $10.4375. By July 14, 1998, the SEC had upgraded its investigation of Sunbeam to a formal one (Plain Dealer; July 14, 1998). The investigation would centre around recording the sales of barbeque grills too early. The company announced it began to recover from “Chainsaw Al” and the new chief executive officer said they had no intention of going bankrupt (The Toronto Star; August 26, 1998). Finally, on October 20, 1998, Sunbeam announced its long awaited restated results. Blame was pointed to Al Dunlap and the improper accounting practices he was alleged to have used during his tenure at Sunbeam. It was found that the 1997 profit, one of the best in Sunbeam’s history, was inflated by $95 million because of sales of grills and other products (using bill and hold strategies) and the operating expenses for 1997 were included in a 1996 restructuring charge (St. Louis Post Dispatch; October 21, 1998). The company restated results from the last quarter 1996 through the first quarter 1998. Al Dunlap reiterated his remark that he relied on the company’s outside auditors and that the restatement was actually “technical accounting issues” (The New York Times; October 21, 1998).

This announcement raised some questions also about external auditors’ position: on December 1, 1998, several months after Dunlap’s discharge, Sunbeam dismissed Arthur Andersen as its outside auditors and named Deloitte & Touche as its new outside auditors (The New York Times; December 1, 1998). In the most of the fraud cases, auditors affirm to have not known the improper accounting practices used by the company. Sunbeam case has been different because Mr. Phillip E. Harlow, the Arthur Andersen partner in charge of the Sunbeam audit, discovered some of the fraudulent transactions and asked the
company to change its financial statements. The S.E.C. investigation focused on a specific method of producing profits, the so called spare-parts gambit: Sunbeam owned a lot of spare parts, used to fix its blenders and grills when they broke. Those parts were stored in the warehouse of a company called EPI Printers, which sent the parts out as needed. The improper method consisted in selling the parts for $11 million to EPI and booking an $8 million profit. Unfortunately, EPI thought the parts were worth $2 million. But Sunbeam found a way around that. EPI was persuaded to sign an “agreement to agree” to buy the parts for $11 million, with a clause letting EPI walk away in January. In fact, the parts were never sold, but the profit was posted. Mr. Harlow sustained to have effectively discovered that and concluded the profit was not allowed under generally accepted accounting rules, but the company’s management refused to make most of the requested changes: Sunbeam agreed to cut it just by $3 million. After that, before deciding to sign, Mr. Harlow deeply analysed Sunbeam financial statements and understood that the remaining profit was not material: this was the same of saying that the part, which was not presented fairly, was not material, so it did not matter. After Sunbeam fraud disclosure, Mr. Harlow was supported by its partner (Arthur Andersen) which stated this case involved not fraud, but “professional disagreements about the application of sophisticated accounting standards.” As emphasized by The New York Times (May 18, 2001), “in the typical accounting fraud case, the auditors say they were fooled. Here, at least according to the S.E.C., the auditors discovered a substantial part of what the commission calls sham profits”. Moreover, stating the immateriality of a part of improper profits, they used their professional knowledge, the asymmetrical information and the flexibility inside auditing rules to distract other stakeholders’ attention from news which will not be welcome. For these reasons the chapter may affirm that Sunbeam represents a case of creative auditing implementation. In fact, after Mr. Dunlap was fired, Arthur Andersen (Mr. Harlow partner), along with another accounting firm, re-audited the books and concluded that the 1997 profits should have been far lower, but Sunbeam external auditors acted better than the typical auditor in the typical accounting fraud.
Sunbeam 840 days path from fraud disclosure to bankruptcy (it filed for Chapter 11 bankruptcy protection on February 6, 2001 – look at TABLE 3) was rapidly followed by the 2002 company announcement that it had emerged from Chapter 11 bankruptcy protection. This announcement came with a name change for the company, from Sunbeam Corporation to American Household Inc (The New York Times; December 19, 2002). So, Sunbeam fraud path seemed to have just one bad cause whose elimination has permitted a long path before bankruptcy and a fast exit from bankruptcy. In fact, only Al Dunlap has been banned from ever serving as an officer or director of a public company because of its actions as Sunbeam CEO. His worst mistake, at a management and corporate governance level, seems to have been his tendency to surround himself with few loyal executives from prior ventures: after arriving at Sunbeam, Dunlap replaced almost all of top management with his own selections (appointed as formally “independent” members of the board), who were also provided with strong financial incentives to improve the Company's stock price, and he quickly replaced all Sunbeam board members except one major shareholder (Franklin Resources with a 35% stake). Throughout his tenure, Dunlap exercised complete, unfettered authority over all aspects of Sunbeam’s business and staffing. Dunlap set goals, directed business activity, and fired and hired executives. Dunlap monitored Sunbeam’s affairs and executive performance through, among other things, participation in Operating Committee meetings, and other meetings held for the purpose of updating him on the conduct of the business, including restructuring efforts; frequent meetings with Kersh; and obtaining regular business reports prepared specifically for him (from the “Complaint For Civil Injunction And Civil Penalties” exposed by the Securities and Exchange Commission in front of The United States District Court Southern District Of Florida). Several authors have emphasized his sudden passage from a corporate star to a criminal, from Sunbeam best intangible asset to its worst liability: a business column, at Sunbeam fraud disclosure time and referring to Mr. Dunlap, titled “He anointed himself America’s best CEO. But Al Dunlap drove Sunbeam into the ground”. Corporate America treated Al Dunlap (and his way of behaving) as “a miracle worker” when he achieved fame by running Scott Paper for two
years, drastically pruning its operations and finally selling the company to rival Kimberley Clark. After few years, he became to be considered Sunbeam fraud cause, also by the same executives who worked with him: “Dunlap and Kersh were looking for a way out,” Langerman told his fellow directors. “They were giving us the bait the other day, hoping that we would take it. That would have let them off. Al could say, ‘I did my best. I succeeded, and this board decided it didn’t want me.’”

4. PUTTING THE CASE AT WORK

In this section of the chapter, a basic question will be addressed: what does this case, which the SEC investigated in depth and this chapter describes in detail, say about more general problems concerning the relationship between fraud and failure path? The reply can start by building up a complex but clear model explaining why finally Sunbeam emerged as an outlier in the statistics concerning fraudulent US companies in the 1990s and 2000s, given the very long time from fraud disclosure to macro-failure, showing how single casual relations are here strictly inter-connected one to each other. These relations are usually discussed in the literature one by one and in terms of statistical correlations emerging from the empirical study of large databases. This approach is necessary in order to test the general validity of the causal theories of the researchers, but it is not sufficient to understand how different factors could be inter-connected. The approach here in use, based on the micro-analysis of a case, could instead provide the researchers insights on how different considered factors could interfere with each other and suggest how different lines of empirical research could successfully be connected together, in order to attain a better understanding of fraud and failure mechanisms. Finally, as long as the case under consideration was selected as an outlier in a statistical distribution, it is interesting to consider what it could say by contrast about the average fraudulent behaviour of business companies: if it was an exception because of one or more factors, it means that usually this combination of factors is not present.
Why was Sunbeam story so exceptional? The narrative above suggests three points to focus on: over-manipulation of accounting information, the role of M&A and “creative auditing” (a concept here introduced for the first time).

The first element (i.e. over-manipulation of accounting) concerns the fact that evidently Dunlap over-boosted company performance. Still, he exaggerated and made pervasive practices that were usual in any business, taking creative accounting “to another level” (i.e. accounting fraud). This point has some interesting implications concerning the general diffusion of creative-accounting practices and undisclosed fraud, partially already discussed in the literature mentioned in the second paragraph. The exceptional overstatement of Sunbeam performance finds in part its origin in a peculiar phenomenon of short circuiting between the higher-than-usual amount of stock options entering the wage of managers and the effects that overstatement started soon exerting on the stock price, providing top and middle managers with stronger and stronger incentives to boost reported performances at any level of the company’s accounting process, following the inputs coming from the CEO. This mechanism is in line with theoretical models (Bar-Gill and Bebchuk, 2002; Goldman and Slezak, 2006) asserting that a connection exists between performance-based compensation and misreporting practices. Even more interesting than the causes of the exaggerated overstatement of Sunbeam performance are its effects: the increase in the stock price was so high it finally prevented Dunlap from selling the company. This point raises a theoretical problem: what does it mean saying that the price of a company stock exceeded the threshold for selling the company itself? A stock is after all “a piece” of a company, isn’t it? Following the account of the events as reported above, this paradox may be interpreted as the result of an inverted premium for control: an eventual buyer would discount the fact that the company, once acquired, would lose its best non-replicable “intangible asset”, the CEO himself. The question may also regard whether buyers really believed in Sunbeam performances, but answering would be difficult; certainly they did not believe those performances were replicable.
The failed sale of the company has even another implication, concerning its motivation. It should have represented the final step of the process of business reorganization started by Dunlap and the realization of the value created in that process, but the sale and its commitment have represented a crucial step in the fraud process: they would have allowed to cover, under the so-called “veil of acquisition”, all the problems that could emerge from inaccurate and inappropriate accounting practices preceding it. This finding has by contrast an important implication for the ongoing research concerning accounting fraud, information uncertainty and acquisition losses (Erickson et al., 2011a; literature about disclosed and undisclosed frauds as summarized in Jones et al., 2011). Recent studies show that companies accused of committing accounting fraud result more prone to acquire other companies because they used acquisition (evidently without success) as a tool to conceal the fraud itself (Erickson et al., 2011b): Sunbeam was not an exception, as will be discussed below. Moreover, the case analysis suggests that companies making fraud look at the acquisition of other companies as a second best strategy: they prefer to be acquired by other companies because this would provide a successful concealment of fraudulent accounting behaviour preceding the acquisition. Let’s say that the historical budgets of acquired companies could result an interesting source for an empirical investigation on the diffusion of undisclosed fraud.

This emphasizes the importance of the second element listed above, *i.e.* the role of M&A. As long as the sale of the company resulted impossible, Dunlap resorted then to the second best strategy of acquiring other companies. The opportunity of this choice is explained by two factors: it provided an alternative tool, even if less effective, to conceal accounting fraud and it allowed to use over-valued company stocks as means of exchange (instead of money) for the acquisition. This has implied another interesting short circuit in Sunbeam story: Ronald O. Perelman, Coleman former majority shareholder, accepted Sunbeam stocks in reward of most part of Coleman acquisition, but he became the second largest shareholder of Sunbeam itself. Perelman’s position allowed him to enter the board after Dunlap’s removal of and support the appointment of Jerry Levin,
the former CEO of Coleman, as his successor at Sunbeam in a tentative salvage of the company (Hill, 1999). In fact, company performances started showing some difficulties only two months after the triple acquisition was completed, perhaps a bit too early: it was evidently the unavoidable consequence of short-term profit-boosting practices described above (i.e. channel stuffing, bill-and-hold sales and the improper transfer of reserves to incomes). The effect was a loss on the 1998 first quarter report and a consequent collapse in the stock price. Jonathan R. Laing’s analysis for Barron’s then started alarming the board who fired Dunlap after a rapid inspection about second-quarter results, and appointed Levin as CEO. By the way, this confirms what has recently pointed out in some empirical studies (e.g. Dyck et al., 2006): analysts represent the most effective early whistle-blowers of frauds.

Was then Dunlap used as a scapegoat in order to solve the difficult mess the company found itself in at that point? Without doubt he was, but this statement must be précised by saying that it concerns the mechanism of making a single person guilty for what was certainly a more complex process (Guénin-Paracini and Gendron, 2010, 136). Still, it is worth to recall that Dunlap’s case is not at all exceptional (whereas Sunbeam’s case after Dunlap is), as it fits quite well with the general results found in literature, showing a contrast between the difficulty in legally sanctioning the individuals responsible for the fraud inside the company (Velikonja, 2011) and the heavy professional consequences of disciplinary measures (Karpoff, Lee, and Martin, 2008). Did then the scapegoating of Dunlap explain the exceptionally long time to failure? Not alone. In fact, as explained above, Sunbeam Corp. has been selected because it emerged as an outlier from a statistical analysis and several factors, which may explain its unusualness and uniqueness, have been investigated in this chapter: creative auditing represents the third of the explaining factors listed above, but Arthur Andersen auditing failure has been publicly known and punished only after Enron bankruptcy, as greatly emphasized by the business and scientific literature. The financial scandal surrounding the collapse of Enron caused erosion in the reputation of its auditor, leading to concerns about Andersen’s ability to continue
in existence and ultimately to the firm’s demise. Some studies suggested that Andersen way of working was not different from that of other auditing firms: for instance, Cahan et al. (2011) have examined the period 1992–2001 using a sample of 11,907 Andersen client-year observations and found no overall evidence suggesting that Andersen’s audit quality was lower relative to the Big 4 in the pre-Enron period. Despite these studies, the collapse of Arthur Andersen generated a series of questions in the media and elsewhere regarding the extent to which the financial audit function is controllable (Gendron and Spira, 2009) and responsible in firms’ fraud. The report by Powers et al. (2002) into the collapse of Enron for the US Securities and Exchange Commission (SEC) identifies the significant failure of established safeguards, including: financial accounting and reporting standards and public disclosure requirements; the role of auditors and oversight of the audit profession; and corporate governance regulations and practice. The report indicates that, overall, many of the consequences of Enron failure “could and should have been avoided”. Further financial scandals resulted in a “crisis of confidence” in American capitalism that led to wide-ranging debates culminating in the Sarbanes-Oxley Act of 2002 which reformed, and considerably strengthened, the regulation of accounting, auditing and corporate governance (Dewing and Russell, 2004). After Enron, the primary purpose of a financial statement audit has been stated in a more strict way: it consists in determining if a company’s financial statements present fairly its financial position at a certain point in time. Since management is responsible for preparing the financial statements, someone independent of the company’s management needs to vouch for the statements as being truthful and accurate. Such is the professional responsibility of the external auditors, who provide assurance that the financial statements both conform to generally accepted accounting principles and present fairly, in all material respects, the company’s financial position (Buckhoff et al., 2010). If properly planned and conducted, a financial statement audit should uncover material financial statement fraud. If the auditors issue an opinion that the financial statements present fairly, when in fact they do not, they can be held liable for any losses incurred by those who relied upon the misrepresented financial statements. Such liability was the downfall of Arthur Andersen, the
external auditor for Enron and before for Sunbeam: this second company should have not represented an outlier in the statistical sample, from which it has been selected, if Enron fraud did not draw so much attention on the auditing function, implying such legal consequences and leading faster the company to its final macro-failure.

5. FINDINGS AND DISCUSSION

The main findings of this chapter are particularly interesting in light of recent research on the effectiveness of triangulating audit evidence in detecting financial statement fraud, but two clarifications must be made: first, in emphasizing Sunbeam manager’s role in the fraud process, the study does not argue that managers are systematically designated as scapegoats in the aftermath of all fraud processes. There is no determinism involved: the point is that managers may have been scapegoated in a number of fraud processes. Second, in popular speech, the word “scapegoat” often implies the innocence of the “scapegoated” party. Importantly, this is not the case in Girard’s theory. For Girard, the scapegoat is not necessarily innocent. He can be guilty, but he is not the only one: everybody is somewhat responsible for the crisis that the scapegoat is accused to have provoked. In other words, by describing managers as scapegoats, the study does not argue that they are immaculate.

One of the main findings regards “creative auditing”: this work is the first comprehensive attempt, as far as we are aware, at identifying this different and possible way of auditing where agents (i.e. auditors) use their professional knowledge, asymmetrical information and flexibility inside auditing rules to distract the principals’ attention (i.e. owners, shareholders, investors, etc.) from news which will not be welcome. This results in the principal’s inability to control the desired action of the agent: information within an organization is critical, and auditors working with management of the company are privy to essential information that can be used in a legal, but not proper way, to maximize their own interests at the expense of the principal.
There are at least four implications to be drawn from this research, reflecting the operational research questions posed in the introductory paragraph. First of all, the investigation of a single, statistically exceptional case, allowed to explain the succession of the events in a way that could never be made with a larger dataset, enlightening a whole series of complex connections between accounting manipulation, market performance, M&A choices, auditing, and the reactions to fraud disclosure. Secondly, the unusual factors explaining Sunbeam’s exceptionally long time to macro-failure lets emerge quite evidently the fact that usually auditors do not take distance from the fraudulent practices (and are consequently condemned), and the board of directors does not immediately replace (scapegoat) the CEO discharging on her or him the whole responsibility of accounting manipulation. However, what is more interesting is the fact that usually fraudulent managers do not exceed in overstating the performance and, in that case, they can succeed in selling the company before the fraud is disclosed. So, the third implication suggests that some elements of the case could be exceptional not because they are really unusual, but because they are part of a fraudulent strategy: Sunbeam could not avoid fraud disclosure by means of the sale of the company and the consequent concealment of manipulation thanks to the “acquisition veil”. This point is interestingly suggesting that a dataset rich in undetected cases of fraud could be usefully found studying the budgets of sold companies. Another interesting implication concerns the fact that evidently the acquisition of another company is not providing the same concealment effect as the sale of the company itself: the correlation between fraud and acquisitions found by Erickson et al. (2011) should then be corrected if undetected fraud cases could be taken into account. A final implication regards the collapse of Arthur Andersen which represented a sort of “historical turn” for auditing and generated a series of doubts about the extent to which the financial audit function is controllable (Gendron and Spira, 2009) and responsible in firms’ fraud. After Enron, the primary purpose of a financial statement audit has been stated in a more strict way (Sarbanes-Oxley Act of 2002): if properly planned and conducted, a financial statement audit should uncover material financial statement fraud. Sunbeam should have not represented an outlier in the statistical sample, from
which it has been selected, if Enron fraud did not draw so much attention on the auditing function, imply such legal consequences and increase the vigilance.

There are also some limitations in this research. In fact, the analysis of a single case may represent a drawback of the study. However, as explained in the introduction, the examined case has been statistically selected from the sample built in the first chapter: it includes all the US fraud cases mentioned by WebBRD which filed for bankruptcy in the period 1986-2010 and whose activities differ from finance, insurance and real estate industries. In fact, the analysis of a specific variable (called TIME2, i.e. the time between the fraud disclosure date and the macro-failure date) has revealed the presence of an outlier: its maximum value, which is really far from the range estimated by the survival function, has been estimated equal to 840 days and refers to Sunbeam Corp. The decision to adopt a micro-analytical approach to investigate the outlier was then taken in the hypothesis that this methodology could be the best tool to exploit what seemed to be a puzzling secondary result of the statistical analysis. Indeed, transferring a method that was devised in order to cope with the inherent idiosyncrasy of historical events to the field of accounting studies showed to give strange but rich fruits. Most of the study conclusions and implications are logically plausible, but require further investigations that could assess by means of empirical quantification the scope and diffusion of the discovered causal mechanisms. So, it can be said that this chapter started from the results of a statistical analysis and now comes back to it. Still, what the micro-analysis of a case can provide is the possibility to sketch a model of the complex mechanisms relating fraud and failure that is not based on the theoretical imagination of single scholars, but on the actual inquiry of a piece of reality, as partial as it could be: if the case is carefully selected, as shown at the beginning of this chapter, it can also become a logical term of comparison, useful to suggest new general hypotheses about the characteristics and the representativeness of the same dataset from which it was hand-picked.
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The link

between chapter 1, chapter 2 and chapter 3

Firm’s failing paths, in both fraud and no-tort cases as distinguished in the first chapter, imply investors’ risks and uncertainties. So, the entity ability to continue as a going concern must be monitored and assessed in time and in a proper way. In the U.S., the going concern assessment has for years been the auditor’s responsibility. The second chapter has introduced the concept of creative auditing and emphasizes two interesting points: auditors may discover, but they may also be involved in managers’ fraud plans. Moreover, recent regulations (such as the Sarbanes–Oxley Act) have tried to reduce the gap between auditors and users of accounting reports’ beliefs and preferences: this gap was firstly shown by Baron et al. (1977) and regards the different perceptions of the extent of auditors’ responsibilities for detecting and disclosing the irregularities and illegal acts. In addition to this problem, investors have complained that by the time the auditor makes the going-concern assessment, a failing business is on the verge of bankruptcy or a delisting from its stock exchange. For this reason, U.S. constituents have expressed a need for accounting literature that clarifies that an entity has the primary responsibility for assessing its ability to continue as a going concern. The FASB (Financial Accounting Standards Board) agreed and issued a proposed statement (entitled “Disclosures about Risks and Uncertainties and the Liquidation Basis of Accounting - Formerly Going Concern”) to establish that, when preparing financial statements, management shall assess the reporting entity’s ability to continue as a going concern. This important objective, so clearly defined and emphasized at the beginning of the project, has been firstly downsized and then postponed to a future project. The third chapter tries to investigate the reasons of the peculiar evolution of FASB proposed statement which implies the risk of missing the opportunities to both answer an investors’ complain/need and completely implement the IASB-FASB process of convergence.
CHAPTER 3

AUDITORS’ GOING-CONCERN DECISION:
DIFFICULTIES IN FASB AND IASB CONVERGENCE PROCESS
DUE TO THE ISSUING OF A NEW GOING-CONCERN STATEMENT

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Abstract

Firm’s failing paths, in both fraud and no-tort cases, imply investors’ risks and uncertainties. So, the entity’s ability to continue as a going concern must be monitored and assessed in time and in a proper way. In the U.S., the going concern assessment has for years been the auditor’s responsibility, but investors have complained that by the time the auditor makes the assessment, a failing business is on the verge of bankruptcy or a delisting from its stock exchange. For this reason, U.S. constituents have expressed a need for accounting literature that clarifies that an entity has the primary responsibility for assessing its ability to continue as a going concern. The FASB (Financial Accounting Standards Board) agreed and issued a proposed statement (entitled “Disclosures about Risks and Uncertainties and the Liquidation Basis of Accounting - Formerly Going Concern”) to establish that, when preparing financial statements, management shall assess the reporting entity’s ability to continue as a going concern. This important objective, so clearly defined and emphasized at the beginning of the project, has been firstly downsized and then postponed to a future project. The present chapter tries to investigate the reasons of the peculiar evolution of FASB proposed statement which implies the risk of missing the opportunities to both answer an investors’ complain and completely implement the IASB-FASB process of convergence. Moreover, through a time analysis applied to a specific sample of American cases, this chapter underlines the importance of other assessments which should be prompter than auditors’ opinion about going concern ability.

Keywords: going concern, auditors, Fasb, Iasb, failure, fraud

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1. INTRODUCTION: PECULIARITY OF AMERICAN GOING CONCERN ASSESSMENT AND POSSIBLE EVOLUTION THROUGH A NEW AMERICAN STATEMENT

This chapter focuses on the peculiarity of American going concern decisions in firms’ failing path: this should have been recently revised through a proposed Statement, entitled “Disclosures about Risks and Uncertainties and the Liquidation Basis of Accounting (Formerly Going Concern)” and issued by the FASB (Financial Accounting Standards Board). It aimed to solve two instances, to both answer an investors’ complaint and implement the IASB-FASB process of convergence.

Given that going concern assessment has for years been American auditors’ responsibility, investors have complained that, by the time auditors make the assessment, American businesses are on the verge of bankruptcy or a delisting from their stock exchange. In order to verify the complaint, the chapter analyzes a sample of American public bankrupt companies. It aims to emphasize the timeliness of auditors’ going concern decision by considering the time of its issuance during firms’ failing path.

The importance to focus on this investors’ complaint has been recognized also by U.S. constituents: they have expressed a need for accounting literature that clarifies that an entity has the primary responsibility for assessing its ability to continue as a going concern. The Board (i.e. the FASB) has agreed that accounting guidance related to the going concern assumption should be directed specifically to entities because it is the entity that is responsible for preparing its financial statements and evaluating its ability to continue as a going concern. Accordingly, the Board concluded that guidance related to the going concern assumption should reside in the accounting literature established by the FASB and decided to undertake the abovementioned project to determine what analysis and disclosures in financial statements management should be required when there is substantial doubt about an entity’s ability to continue as a going concern. So, the initial objective of this project was to emphasize management responsibility in a
matter (i.e. going concern) which has traditionally been auditors’ priority because of the peculiarity of American going concern rules: in this sense, the proposed statement aimed to implement the convergence with the International Standards. In fact, on one hand, the IASB Framework makes two underlying assumptions: first, that financial statements are prepared on the accrual basis and second, that the reporting entity is normally a going concern. On the other hand, the FASB’s Concepts Statements extensively discuss the need for accrual accounting procedures, but briefly discuss going concern and do not identify either as underlying assumptions. From the beginning of the convergence process between the two standard setters, it has seemed clear that converging the accrual assumption difference likely will be just a matter of emphasis in drafting, but the going concern assumption difference could be more challenging. This may represent one reason of the project peculiar evolution: the FASB new statement objectives and developing path have been revised, also in a radical way, several times. The paper aims to deepen the reasons of this project evolution: by changing the objective, the FASB seems to miss the opportunity to both answer an investors’ need and implement a total convergence with the IASB Framework. In fact, the convergence with the International Standards has been implemented only from few points of view (e.g. the time horizon not limited to 12 months especially in the case of subsequent events, the liquidation basis of accounting and a revised definition of limited life entities), which have represented critical changes for the American accounting perspective. Also for these few revisions the FASB main problem has been represented by the project overlap with rules and standards of other American agencies (e.g. SEC, AICPA, PCAOB). The conflict between the accounting and auditing standards has been especially relevant for the management going concern assessment: the refuse to affirm the management responsibility for the going-concern judgment does not come from the same

1 “We do not believe that management, as preparers of financial statements, can effectively divorce its consideration of management’s going concern assessment from the similar evaluation made by the auditor. Developing inconsistent standards in this area does not improve financial reporting. Rather, it creates unnecessary complexities in financial reporting by allowing for the possibility for management and auditors to reach different conclusions using the same information and judgments about the future. (...) For this reason, the auditor’s conclusion with respect to an entity’s ability to continue as a going concern is one of the most important judgments made during the course of the audit.” (Letter of comment n. 17, Ernest & Young, New York – December 8, 2008)
managers, but seems to derive from the auditors’ priority. This is in contrast with the fact that auditors appear to be reluctant to disclose existing going-concern problems in their audit reports, as emphasized in the second chapter and by recent and considerable literature: one of the main topic of discussion in the last year has been represented by the auditors’ responsibility for assessing the appropriateness of the going-concern assumption in the financial statements of their clients, as recalled in the following paragraph.

The remainder of the paper is organized as follows. First, as a general background, going concern present rules and prior research on auditors’ going-concern decision are briefly discussed. Second, the choice and the characteristics of the sample are described. Third, the research design and the results of the analysis are presented. Finally, conclusions are drawn.

2. INTERNATIONAL AND AMERICAN GOING CONCERN ASSESSMENTS: A COMPARISON

The proposed Statement, entitled “Disclosures about Risks and Uncertainties and the Liquidation Basis of Accounting (Formerly Going Concern)” and issued by the FASB, aimed to both answer to investors’ complains and to fix a unique going concern principle which, as abovementioned, has been traditionally considered in deeply different ways by the two Boards. In fact, the project has been included in the IASB and FASB process of convergence undertaken after their joint meeting in September 2002 where the U.S. Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) issued the Norwalk Agreement. After that, in February 2006, the FASB and IASB issued a Memorandum of Understanding (MoU) which set forth the relative priorities within the FASB-IASB joint work program and was based on three principles: firstly, convergence of accounting standards...
standards can best be achieved through the development of high quality, common standards over time. Secondly, trying to eliminate differences between two standards that are in need of significant improvement is not the best use of the FASB’s and the IASB’s resources: a new common standard should be developed that improves the financial information reported to investors. Lastly, serving the needs of investors means that the Boards should seek convergence by replacing standards in need of improvement with jointly developed new standards. A new American going concern statement has appeared as the only solution to overcome a challenging difference: from the beginning of the convergence process between the two standard setters, it has seemed clear that converging the going concern assumption difference would be really challenging. In fact, the IASB’s Framework introduced a “going concern” assumption in 1989 (IASB Framework, Paragraph 23): this underlying assumption contemplates the case that there exists the intention, or the necessity, to liquidate or materially curtail operations when normal operations will not continue for the foreseeable future; in these cases management may need to prepare statements on a different basis (which should be disclosed). In May 2008 IASB and FASB jointly published an exposure draft (“An improved Conceptual Framework for Financial Reporting”) that proposed to remove the concept of underlying assumption as the accrual concept and the going concern convention were not mentioned. In the 2010 final and approved document the accrual basis has not been carried forward whereas the going concern principle has been maintained, and using the same wording, in the IASB Framework as underlying assumption (The Conceptual Framework for Financial Reporting, par. 4.1).

More specifically, the first International Accounting Standard (IAS 1, par. 25), turning the framework idea of going concern into requirement, specifies the going concern assumption (IAS 1, par. 25) and precisely identifies managers’ role (IAS 1, par. 26): management should take into account all available information and consider specific factors (e.g. current and expected profitability; debt repayment schedules, including replacement financing; etc.). This is really far from FASB dictate (Exhibit 1): even though users understand that management is
responsible for the form and the content of a business’s financial statements, there is no official guidance requiring management to assess their entity’s ability to continue as a going concern. Currently, AU section 341 provides the only formal guidance in this area: it states that “the auditor has a responsibility to evaluate whether there is substantial doubt about the entity’s ability to continue as a going concern for a reasonable period of time.” If there is substantial doubt, an explanatory paragraph should be included in the auditors’ report. This responsibility often places American auditors in an uncomfortable position with clients as emphasized by the literature and recalled in the following paragraph.

### Exhibit 1: a comparison between International and American going-concern principles

<table>
<thead>
<tr>
<th>IASB Framework, par. 4.1</th>
<th>FASB and AICPA</th>
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<tr>
<td>Financial reports are normally prepared on the assumption that an entity is a going concern and will continue in operation for the foreseeable future. Hence, it is assumed that the entity has neither the intention nor the need to liquidate or curtail materially the scale of its operations; if such an intention or need exists, the financial report may have to be prepared on a different basis and, if so, the basis used is disclosed.</td>
<td>Financial reporting should provide information about an enterprise’s financial performance during a period. Investors and creditors often use information about the past to help in assessing the prospects of an enterprise. Thus, although investment and credit decisions reflect investors’ and creditors’ expectations about future enterprise performance, those expectations are commonly based at least partly on evaluations of past enterprise performance.10</td>
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<tr>
<td><strong>IAS 1, par. 25</strong></td>
<td><strong>SFAC 1, footnote 10</strong></td>
</tr>
<tr>
<td>When preparing financial statements, management shall make an assessment of an entity’s ability to continue as a going concern. An entity shall prepare financial statements on a going concern basis unless management either intends to liquidate the entity or to cease trading, or has no realistic alternative but to do so. When management is aware, in making its assessment, of material uncertainties related to events or conditions that may cast significant doubt upon the entity’s ability to continue as a going concern, the entity shall disclose those uncertainties. When an entity does not prepare financial statements on a going concern basis, it shall disclose that fact, together with the basis on which it prepared the financial statements and the reason why the entity is not regarded as a going concern.</td>
<td>Investors and creditors ordinarily invest in or lend to enterprises that they expect to continue in operation—an expectation that is familiar to accountants as “the going concern” assumption.</td>
</tr>
<tr>
<td><strong>IAS 1, par. 26</strong></td>
<td><strong>1989, AICPA, Statement on Auditing Standards (SAS) 59, The Auditor’s Consideration of an Entity’s Ability to Continue as a Going Concern</strong> (later incorporated in AU section 341), par. 02</td>
</tr>
</tbody>
</table>
| In assessing whether the going concern assumption is appropriate, management takes into account all available information about the future, which is at least, but is not limited to, | The auditor has a responsibility to evaluate whether there is substantial doubt about the entity’s ability to continue as a...
twelve months from the end of the reporting period. The degree of consideration depends on the facts in each case. When an entity has a history of profitable operations and ready access to financial resources, the entity may reach a conclusion that the going concern basis of accounting is appropriate without detailed analysis. In other cases, management may need to consider a wide range of factors relating to current and expected profitability, debt repayment schedules and potential sources of replacement financing before it can satisfy itself that the going concern basis is appropriate.

While, at least since Friedman (1948), economists recommend that policymakers follow rules rather than discretion, audit standard-setters usually promulgate a substantial degree of discretion regarding GC judgments. The table emphasizes the relation between the nature of GC accounting standards and audit standards, in terms of the extent to which they promulgate discretion or rules-based guidance.

The going-concern assumption’s journey into GAAP has been peculiar also before the IASB-FASB convergence process: it started in the 17th century (Exhibit 2). The last proposed statement (on October 9, 2008, the Board issued the first proposed Statement, Going Concern, for a 60-day comment period) implied an hope of full convergence with international standards given that the language set forth in the FASB exposure draft was almost identical to that of sections 25 and 26 of International Accounting Standard (IAS) 1, Presentation of Financial Statements (Exhibit 3).

Exhibit 2: Chronology of the Going-Concern Assumption

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>1620</td>
<td>Economist John R. Commons traced the going-concern concept to a 1620 lawsuit (Jollifé v. Brode, Cro. Jac. 596) in which a court determined that a going-concern value was greater than the book value (historical cost minus depreciation) of the plant because the plant could be used to generate excess income through future operations. This appeared in his 1924 book Legal Foundations of Capitalism. C.T. Devine points out that a continuing entity (going concern) is clearly different from one subject to liquidation.</td>
</tr>
<tr>
<td>1892</td>
<td>Lawrence R. Dicksee’s book Auditing: A Practical Manual for Auditors is published and is the first to provide a description and rationale for the going-concern assumption.</td>
</tr>
<tr>
<td>1909</td>
<td>Henry Rand Hatfield publishes Modern Accounting: Its Principles and Some of Its Problems, which includes a discussion of the going-concern assumption.</td>
</tr>
<tr>
<td>1927</td>
<td>Henry Rand Hatfield publishes Accounting: Its Principles and Problems, in which he identifies a going concern as being generally accepted.</td>
</tr>
<tr>
<td>1953</td>
<td>The American Institute of Accountants publishes Accounting Research Bulletin 43, Restatement and Revision of Accounting Research Bulletins, which includes the</td>
</tr>
</tbody>
</table>
The hope was not satisfied: the FASB new statement objectives and developing path have been revised, also in a radical way, several times. In fact, at the beginning of this project, the objective was clearly stated to be the incorporation into FASB literature guidance on (1) the required disclosures about risks and uncertainties that may interfere with an entity’s ability to meet its obligations when they become due and (2) the adoption and application of the liquidation basis of accounting. The Board originally undertook this project to determine what analysis and disclosures in financial statements management should be required to make about whether there is substantial doubt about an entity’s ability to continue as a going concern. In the Board following meetings, this objective, so clearly defined and explained, has been firstly downsized and then postponed to a future project. Firstly, on December 1, 2010 the Board stated the management responsibility only in a specific case: it decided that management would update its assessment of the entity’s ability to meet its obligations as they become due if a subsequent event that significantly affects management’s assessment occurs before the financial statements are issued, or are available to be issued. The time horizon for the reassessment would be extended to include the foreseeable future beginning as of the date of the subsequent event. The
determination of whether the related disclosures are required would be based on that updated assessment. The entity would still be required to apply the guidance in Topic 855, Subsequent Events, for recognition and disclosure of specified subsequent events (Subsequent Events). Secondly, on October 26, 2011 the Board postponed making a decision about whether the management of an entity, as opposed to its outside accountants, should have primary responsibility for generating the going-concern assessment. Lastly, on January 11, 2012 the Board decided not to require that management of an entity assess whether there is substantial doubt about the entity’s ability to continue as a going concern because a majority of Board members observed that such a requirement would be difficult to apply and not so beneficial for the users of financial statements.

Exhibit 3: Comparing IAS 1 to FASB’s Proposed Standard

<table>
<thead>
<tr>
<th>International Accounting Standard 1, Presentation of Financial Statements, Issued September 1997</th>
<th>FASB Exposure Draft, Going Concern, Issued October 9, 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>25. When preparing financial statements, management shall <strong>make an assessment of an entity’s</strong> ability to continue as a going concern. An entity shall prepare financial statements on a going concern basis unless management either intends to liquidate the entity or to cease trading, or has no realistic alternative but to do so. When management is aware, in making its assessment, of material uncertainties related to events or conditions that may cast significant doubt upon the entity’s ability to continue as a going concern, the entity shall disclose those uncertainties. When an entity does not prepare financial statements on a going concern basis, it shall disclose that fact, together with the basis on which it prepared the financial statements and the reason why the entity is not regarded as a going concern.</td>
<td>3. When preparing financial statements, management shall <strong>assess the reporting entity’s</strong> ability to continue as a going concern. An entity shall prepare financial statements on a going concern basis unless management either intends to liquidate the entity or to cease operations or has no realistic alternative but to do so. 7. When management is aware, in making its assessment, of material uncertainties about events or conditions that may cast substantial doubt upon the entity’s ability to continue as a going concern, the entity shall disclose those uncertainties. [Note: list of examples not presented.] 8. When an entity does not prepare financial statements on a going concern basis, it shall disclose that fact, together with the basis on which it prepared the financial statements and the reason why the entity is not regarded as a going concern.</td>
</tr>
</tbody>
</table>
| 26. In assessing whether the going concern assumption is appropriate, management takes into account all available information about the future, which is at least, but is not | 4. In assessing whether the going concern assumption is appropriate, management **shall take** into account all available information about the future, which is at
limited to, \textit{twelve} months from the end of the reporting period. The degree of consideration depends on the facts in each case. \textit{When} an entity has a history of profitable operations and ready access to financial resources, \textit{the entity may reach a conclusion} that the going concern basis of accounting is appropriate without detailed analysis. In other cases, management may need to consider a wide range of factors relating to current and expected profitability, debt repayment schedules and potential sources of replacement financing before it can satisfy itself that the going concern basis is appropriate.

least, but is not limited to, \textit{12} months from the end of the reporting period. The degree of consideration depends on the facts in each case. \textit{If} an entity has a history of profitable operations and ready access to financial resources, \textit{management may conclude} that the going concern basis of accounting is appropriate without detailed analysis. In other cases, management may need to consider a wide range of factors relating to current and expected profitability, debt repayment schedules, and potential sources of replacement financing before it can satisfy itself that the going concern basis is appropriate.

3. PRIOR LITERATURE ABOUT THE MAIN RESEARCH ISSUES

As emphasized in the previous paragraph, the going concern assessment has traditionally been American auditors’ responsibility: the U.S. guidance for considering an entity’s ability to continue as a going concern is located in AICPA Statement on Auditing Standards No. 1, \textit{Codification of Auditing Standards and Procedures}, Section 341, “The Auditor’s Consideration of an Entity’s Ability to Continue as a Going Concern,” and states that the auditor has a responsibility to evaluate whether there is substantial doubt about the entity’s ability to continue as a going concern for a reasonable period of time, not to exceed one year beyond the date of the financial statements being audited. This evaluation is based on knowledge of relevant conditions and events obtained from the auditing procedures performed during a financial statement audit. More specifically, on the basis of the going-concern opinion literature, it can be stated that the auditor’s going-concern opinion decision consists of two stages (Krishnan and Krishnan, 1996). In the first stage, the auditor evaluates information to form an initial impression of an entity’s financial condition. In the second stage, the auditor will decide on the type of audit report to be issued. Referring to DeAngelo’s (1981b) definition of audit quality, the first stage depends on the auditor’s competence, while the second stage depends on the auditor’s independence.
About auditors’ competence, previous research has confirmed that auditors have the ability to identify a company with going-concern problems, but some empirical studies have shown that many companies in the year prior to bankruptcy receive an audit report in which no going-concern uncertainty is disclosed (Menon and Schwartz, 1987; Hopwood et al., 1991; Citron and Taffler, 1992; Carcello et al., 1997; Lennox, 1999a). So, the main problem seems to be the timeliness of American auditors’ going concern assessment, as abovementioned: investors have complained that by the time the auditor makes the assessment, the business is on the verge of bankruptcy or a delisting from its stock exchange.

RQ 1 – When do auditors issue qualified opinions during firms’ failing paths?

Other factors, which sustain the mentioned investors’ complain, may be derived from another prosperous stream of literature which has analyzed the second stage of the audit procedure and question auditor independence. It has suggested that if an auditor acts as a rational economic agent, the auditor may be influenced by the perceived consequences of issuing a going-concern report (DeAngelo, 1981a; Watts and Zimmerman, 1986). Risk of litigation, risk of loss of reputation and risk of audit loss are factors suggested in the literature which may relate to the economic trade-offs faced by the auditor (Krishnan and Krishnan, 1996). Consequently, these factors could influence the auditor's going-concern opinion decision. Audit loss subsequent to the issuance of a going-concern opinion can occur due to auditor switching or due to bankruptcy of the client. The belief that a client will go bankrupt as a result of a going-concern uncertainty disclosure in the audit report is known in the literature as the self-fulfilling prophecy hypothesis (Mutchler, 1984). The risk of litigation and risk of loss of reputation may have a positive effect on auditor independence, while the risk of audit loss may compromise auditor independence.

The two streams of literature (just recalled) suggest that auditors’ opinions about firms’ going concern cover an important role for investors’ decisions, but their work should be sustained and confirmed by other actors. Moreover, some
literature shows that the ability of going-concern opinions to predict or identify failing companies is inferior to bankruptcy prediction models (Mutchler, 1985; Koh and Kilough, 1990; Hopwood et al., 1991; Nogler, 1995). Auditors’ work may only benefit from the work of actors having more updated and relevant information at their disposal: this paper, through the analysis of a sample of US companies, reveals that a specific temporal relation between auditors and managers’ decisions exists also in the American context.

RQ 2 - Management assessment and auditors’ going-concern decision: when is the first issued with respect to auditors’ processing of judgment?

In the following paragraph some hypotheses about these research questions will be formulated and developed.

4. RESEARCH HYPOTHESES

In order to answer the two research questions, this paper starts from the consideration of the abovementioned pieces of literature and analyzes the sample of American companies described below. About the first research question, the chapter aims to verify the abovementioned investors’ complaint and to analyze American auditors’ timeliness in going concern assessment. For these reasons, the definitions of relevant micro-failure (i.e. the stage of not meeting some set objectives which influences firms’ path to failure because requires a drastic choice, either revealing or not revealing its bad consequences) and macro-failure (i.e. the end of a firm’s life cycle), described in the first chapter, must be here recalled.

H1 - By the time the auditors make the assessment about firms’ ability of continuing as a going-concern, the business is closer to the macro-failure rather than the relevant micro-failure in its failing path.

The identification of the relevant micro-failures for all the sampled firms (for both the fraud and no-tort cases) have been made thanks to forms 10-K which are
annual reports required by the U.S. Securities and Exchange Commission (SEC),
that give a comprehensive summary of each public company’s performance. The
10-K includes information such as company history, organizational structure,
executive compensation, equity, subsidiaries and audited financial statements.
Forms 10-K, as well as other SEC filings, have been searched at the EDGAR
database on the SEC’s website. In addition to the 10-K, which is filed annually,
other data have been downloaded. In fact, in the period between these filings, and
in case of a significant event, such as a CEO departing or bankruptcy, a Form 8-K
must be filed in order to provide up to date information.

About the second hypothesis, the inter-dependence between management
and auditors’ going concern assessments is going to be investigated, by
distinguishing between fraud and no-tort cases: if American auditors’ assessment
will be effective and sufficient (i.e. other going-concern assessments are not
needed), then fraud cases will be discovered in time. So, in fraud cases, at the
relevant micro-failure time, there should be disagreement between management
and auditors’ going concern assessments.

| H₂a | In fraud cases, auditors’ going-concern decision precedes management assessment. |
| H₂b | In not-tort cases, auditors’ going-concern decision does not precede management assessment. |

5. SAMPLE

The sample firms include all the U.S. fraud cases mentioned by WebBRD
(i.e. the Bankruptcy Research Database which contains data on all large, public
company bankruptcy cases filed in the United States Bankruptcy Courts) and
acting in a division different from the H (i.e. the SIC code division which
identifies Finance, insurance, and real estate activities subject to specific regulations), that file for bankruptcy between 1991 and March 1, 2010.

The choice of American companies is related to the willingness to analyze auditors’ work and to better understand FASB difficulties in issuing a new going-concern statement in line with IASB assumption. I delete companies in the financial, real estate and insurance sectors because these types of companies have unique financial characteristics and specific regulations.

On one hand, there are several reasons why a set of bankrupt firms provides a useful sample over which to examine auditors’ judgments bias. First, bankruptcy represents the most reliable and objective end of the firms’ life cycles: there is no need to investigate specific features in the financial statements of these companies to assess they were stressed before bankruptcy. So, for each sample firm, auditors should have modified going-concern reports some time before the final event. In fact, as shown in the first chapter, financial deterioration of the firm occurs before the actual bankruptcy filing, suggesting that alert auditors should begin revising their going-concern opinions far in advance of the bankruptcy announcement. Moreover, bankruptcy is relevant for all the stakeholders because it causes firms to incur substantial direct and indirect costs, which impacts profitability: Warner (1977) finds that the direct costs of bankruptcy are approximately 5.3% of the firm’s value immediately prior to bankruptcy while Weiss (1990) reports that these costs average 3.1% of total firm value. Ferris and Lawless (2000) measure the median direct costs of bankruptcy as 3.5% of firm assets. Indirect costs are even more significant. Altman (1984) estimates that mean indirect bankruptcy costs approximate 17.5% of the firm’s value one year prior to bankruptcy.

On the other hand, limiting the sample to firms only making fraud (the initial idea was to compare the main European and American frauds) could introduce a selection bias since auditors may have not perceived management true opinion about firms’ going-concern status. The construction of a matched sample
of no-tort firms with similar activities and comparable levels of financial distress (since they are going towards sure bankruptcy) provides a benchmark against which to evaluate the assessment provided by management for those firms that ultimately go bankrupt.

For this reason, each sampled firm has been matched with another U.S. firm identified by WebBRD as a no-tort case of bankruptcy: the selection has been based on two more conditions which are the period of filing for bankruptcy, the sic code and/or the description of business (TABLE 1). These are the same criteria used by Mergent’s database in the identification of competitors. So, companies details (such as business description, history and subsidiaries), annual reports and other financial data were analyzed also for the matched firms.

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>ALL FRAUD CASES MENTIONED BY WebBRD</th>
<th>YEAR OF FILING</th>
<th>SIC CODE</th>
<th>BENCHMARKS (SELECTION OF COMPETITORS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Adelphia Business Solutions, Inc.</td>
<td>2002</td>
<td>48</td>
<td>ITC DeltaCom, Inc.</td>
</tr>
<tr>
<td>2</td>
<td>Adelphia Communications Corp.</td>
<td>2002</td>
<td>48</td>
<td>IMPSAT Fiber Networks, Inc.</td>
</tr>
<tr>
<td>3</td>
<td>American Banknote Corporation</td>
<td>1999</td>
<td>27</td>
<td>MediaNews Group Inc.</td>
</tr>
<tr>
<td>4</td>
<td>American Tissue, Inc.</td>
<td>2001</td>
<td>26</td>
<td>American Pad &amp; Paper Company</td>
</tr>
<tr>
<td>5</td>
<td>Anicom, Inc.</td>
<td>2001</td>
<td>50</td>
<td>Inacom Corp.</td>
</tr>
<tr>
<td>6</td>
<td>Aurora Foods Inc.</td>
<td>2003</td>
<td>20</td>
<td>Interstate Bakeries Corporation</td>
</tr>
<tr>
<td>7</td>
<td>Bonneville Pacific Corporation</td>
<td>1991</td>
<td>16</td>
<td>Morrison Knudsen Corp.</td>
</tr>
<tr>
<td>8</td>
<td>Boston Chicken, Inc.</td>
<td>1998</td>
<td>58</td>
<td>Flagstar Companies Inc.</td>
</tr>
<tr>
<td>9</td>
<td>CareMatrix Corp.</td>
<td>2000</td>
<td>83</td>
<td>Sun Health Care Group, Inc.</td>
</tr>
<tr>
<td>10</td>
<td>Complete Management, Inc.</td>
<td>1999</td>
<td>87</td>
<td>ProMedCo Management Company</td>
</tr>
<tr>
<td>11</td>
<td>Enron Corp.</td>
<td>2001</td>
<td>51</td>
<td>KCS Energy, Inc.</td>
</tr>
<tr>
<td>12</td>
<td>Fine Host Corporation</td>
<td>1999</td>
<td>58</td>
<td>Planet Hollywood International Inc.</td>
</tr>
<tr>
<td>13</td>
<td>Footstar Inc.</td>
<td>2004</td>
<td>56</td>
<td>Jacobson Stores, Inc.</td>
</tr>
<tr>
<td>14</td>
<td>Global Crossing Ltd.</td>
<td>2002</td>
<td>48</td>
<td>Global TeleSystems, Inc.</td>
</tr>
<tr>
<td>15</td>
<td>Impath Inc.</td>
<td>2003</td>
<td>80</td>
<td>aaiPharma Inc.</td>
</tr>
<tr>
<td>16</td>
<td>Leslie Fay Companies, Inc.</td>
<td>1993</td>
<td>23</td>
<td>Plaid Clothing Group Inc.</td>
</tr>
<tr>
<td>17</td>
<td>MCSI Inc.</td>
<td>2003</td>
<td>50</td>
<td>CHS Electronics, Inc.</td>
</tr>
<tr>
<td>18</td>
<td>MobileMedia Communications, Inc.</td>
<td>1997</td>
<td>48</td>
<td>Geotek Communications, Inc.</td>
</tr>
<tr>
<td>19</td>
<td>OCA, Inc.</td>
<td>2006</td>
<td>80</td>
<td>Mediq, Inc.</td>
</tr>
<tr>
<td>20</td>
<td>Peregrine Systems, Inc.</td>
<td>2002</td>
<td>73</td>
<td>USInterNetworking, Inc.</td>
</tr>
</tbody>
</table>
This approach of selection provides an initial characterization of the sampled firms and allows interesting comparisons of auditors’ going-concern opinions: the analysis of auditors’ opinions for firms making fraud against their matched firm counterparts allows to control for possible selection bias and permits useful conclusions regarding the nature of auditors’ opinions for financially distressed firms.

6. ANALYSIS AND RESULTS

In order to test the abovementioned hypotheses, an important point must be recalled: auditors’ judgments about firms’ going-concern should be changed when economic-financial difficulties starts to be evident. More specifically, under U.S. auditing standards (SAS No. 59), if the auditor determines that there is “substantial doubt about the ability of [company name] to continue as a going concern”, then this should be disclosed in the audit report. Both the Auditing Standards and the abovementioned stream of literature seem to affirm that going concern doubts may be completely disclosed in auditors’ decisions which represent the section of an audit that judges and establishes the credibility of firms’ financial statements. In particular, a qualified auditor’s opinion implies that the firm’s financial condition is uncertain: in this case, some limitations exist about financial statement conditions, such as an inability to gather certain information or a significant upcoming event which may or may not occur. It is opposite of unqualified opinion which is auditor’s opinion of a financial statement, given without any reservations. Such an opinion basically states that the auditor feels the company followed all accounting rules appropriately and that
the financial reports are an accurate representation of the company’s financial condition. So, in order to test the hypotheses, the year of the last unqualified report has been taken into account: this is the last year to which financial statements refer without auditors’ substantial doubt about the ability of the entity to remain a going-concern. For instance, if the annual report refers to the accounting period starting the 1\textsuperscript{st} January 2009 and ending the 31\textsuperscript{st} December 2009 and in 2010 auditors have issued the last unqualified going-concern opinion about the 2009 financial situation, the recorded year will assume a value equal to 2009. Starting from this year (in order to consider an objective datum), then the auditors’ qualified opinion has been recorded in a year later (as confirmed by the abovementioned sources of information). In order to properly consider this crucial event in firms’ failing path, a survival analysis has been implemented.

In order to test the hypotheses, \textit{time1} variable (\textit{i.e.} the number of years between relevant micro-failure and auditors’ assessment) and \textit{time2} variable (\textit{i.e.} the number of years between auditors’ assessment and final macro-failure) have been compared. Some descriptive statistics have been calculated for both: the minimum value assumed by \textit{time1} variable (TABLEs 2) is 0 because there is one case (out of 54) in which auditors’ assessment year coincides with relevant micro-failure happening. The minimum value assumed by \textit{time2} variable (TABLEs 3) is -1 and signals the main case of auditors’ fraud involvement (\textit{i.e.} Enron fraud).

\textbf{TABLEs 2-3 – Descriptive statistical analysis of \textit{time1} and \textit{time2} variables.}

\begin{tabular}{|c|c|c|c|c|c|}
\hline
\textbf{Variable} & \textbf{Obs} & \textbf{Mean} & \textbf{Std. Dev.} & \textbf{Min} & \textbf{Max} \\
\hline
\textit{time1} & 54 & 2.351852 & 1.402927 & 0 & 7 \\
\hline
\textit{time2} & 54 & .3518519 & .7808415 & -1 & 3 \\
\hline
\end{tabular}

This first analysis emphasizes some difference between \textit{time1} and \textit{time2} values, as shown by the charts (Figs.1-2).
The survival analysis (TABLEs 4-5) estimates about a 75% chance that \textit{time1} equals 3 years and \textit{time2} equals 2 years: the difference is still more relevant by differentiating fraud and no-tort cases (Figs.3-4).

### TABLE 4 – Survival analysis for both \textit{time1} and \textit{time2} variables.

<table>
<thead>
<tr>
<th>Survival time</th>
<th>no. of subjects</th>
<th>25%</th>
<th>50%</th>
<th>75%</th>
</tr>
</thead>
<tbody>
<tr>
<td>total</td>
<td>126</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>incidence rate</th>
<th>time at risk</th>
<th>failure _d: status</th>
<th>analysis time _t: time1</th>
<th>incidence rate</th>
<th>time at risk</th>
<th>failure _d: status</th>
<th>analysis time _t: time2</th>
</tr>
</thead>
</table>

In fact, especially in fraud cases, \textit{time1} variable (TABLE 6) assumes values significantly greater than \textit{time2} variable (TABLE 7): the functions estimate about a 50% chance that \textit{time1} equals 3 years and \textit{time2} equals 1 year. It calculates about a 75% chance that \textit{time1} equals 4 years and \textit{time2} equals 2 years (Figs.5-6).
TABLEs 6-7 – Survival analysis for both time1 and time2 variables in fraud cases.

<table>
<thead>
<tr>
<th>fraud</th>
<th>time at risk</th>
<th>incidence rate</th>
<th>no. of subjects</th>
<th>25%</th>
<th>50%</th>
<th>75%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>46</td>
<td>0.5652174</td>
<td>26</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>80</td>
<td>0.3375</td>
<td>27</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>total</td>
<td>126</td>
<td>0.4206349</td>
<td>53</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>fraud</th>
<th>time at risk</th>
<th>incidence rate</th>
<th>no. of subjects</th>
<th>25%</th>
<th>50%</th>
<th>75%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5</td>
<td>0.625</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>16</td>
<td>0.1</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>total</td>
<td>21</td>
<td>0.7142857</td>
<td>15</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Figs.3-4-5-6 – Comparison between time1 and time2 variables in both fraud and no-tort cases.

The consideration of management assessment year requires the abovementioned distinction: the relevant micro-failure (X_MiF) represents the most reliable signal that a business failure process has started, because after a relevant micro-failure has emerged, a firm must make a drastic choice, i.e. revealing or not revealing its bad consequences. In no-tort cases firms’ economic downturn is
more evident because a negative management assessment reveals those bad consequences. So, in no-tort cases, relevant micro-failure date coincides with management assessment year. On the other hand, in fraud cases, as emphasized in chapter 1, investors must wait the disclosure moment in order that a firm economic downturn will be revealed by the management.

In order to gain more insight into this difference, \textit{time2\_fraud} variable (\textit{i.e.} the number of years between auditors’ assessment and final macro-failure in fraud cases) and \textit{time3\_fraud} variable (\textit{i.e.} the number of years between disclosure moment and final macro-failure in fraud cases) have been compared. Descriptive statistics (Figs.7-8) suggest that management evaluation and auditors’ assessment are close in the failing path of firms making fraud: both the variables means and the ranges (between maximum and minimum values) seem to affirm the same (TABLEs 8-9).

TABLEs 8-9 – Descriptive statistical analysis of both \textit{time2\_fraud} and \textit{time3\_fraud} variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>time2_fraud</td>
<td>27</td>
<td>.5185185</td>
<td>1.014145</td>
<td>-1</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>time3_fraud</td>
<td>27</td>
<td>.5925926</td>
<td>.8439495</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Figs.7-8 – Comparison between \textit{time2} and \textit{time3} variables in fraud cases.
On the other hand, about not-tort cases, descriptive statistics (Figs. 9-10) compare \( \text{time\_notort} \) variable (\( i.e. \) the number of years between management assessment and final macro-failure in not-tort cases) and \( \text{time2\_notort} \) variable (\( i.e. \) the number of years between auditors’ assessment and final macro-failure in not-tort cases): auditors’ negative going concern decision is prompter than management assessment, after firms’ negative economic downturn has been clearly revealed (TABLEs 10-11).

**TABLEs 10-11 – Descriptive statistical analysis of both \( \text{time\_notort} \) and \( \text{time2\_notort} \) variables.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \text{time_notort} )</td>
<td>27</td>
<td>1.88889</td>
<td>.9336996</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>( \text{time2_notort} )</td>
<td>27</td>
<td>.1851852</td>
<td>.3958474</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

**Figs. 9-10 – Comparison between \( \text{time} \) and \( \text{time2} \) variables in no-tort cases.**

<table>
<thead>
<tr>
<th>( \text{Time_notort variable} )</th>
<th>( \text{Time2_notort variable} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>Frequency</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
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<tr>
<td>10</td>
<td>10</td>
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<tr>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

**7. CONCLUSION**

Based on a set of sample firms including all the U.S. fraud cases, mentioned by WebBRD and acting in a division different from the H, that file for bankruptcy during the period 1991-2010 and a corresponding set of industry matched firms that do not make fraud, this chapter sustains the recalled investors’ complain and emphasizes the need of other going concern assessments which
should both enforce and make prompter auditors’ judgments. Moreover, the study highlights the existence of a precise temporal relation between management assessment and auditors’ opinion about firms going-concern status in both fraud and not-tort cases.

The first part of the paper has also analyzed the difficulty in FASB-IASB convergence process due to FASB attempt to issue a going-concern statement in line with IASB dictate. One of the main reasons of this difficulty has been recognized in US auditors’ influence and traditional priority in going-concern judgment, as shown by the chronology of the principle and the project evolution (before and after the letters of comments of 2008 exposure draft). The relation between managers’ responsibility and auditors’ opinion, which has been traditionally affirmed in the IASB Framework, has difficulty in being affirmed in the US context and delays IASB-FASB convergence process. This has recently pointed out and formally recognized also by International Accounting Standards Board chairman Hans Hoogervorst who urged the U.S. to decide in favor of supporting IFRS, calling for “a clear timeline for the completion of the initial endorsement process.” On the other hand, Financial Accounting Standards Board chair Leslie Seidman, speaking at an American Institute of CPAs conference in Washington, said “Our letter expresses strong support for IFRS becoming the foundation for future accounting standards, but also offers constructive suggestions to mitigate the transition risks that have been identified. In other words, we suggested a modified incorporation approach that could potentially gain broad support in the U.S.” Her speech advocated a cautious transition to International Financial Reporting Standards: according to her words, FASB and the IASB would firstly complete their priority convergence projects (revenue recognition, financial instruments, leasing and insurance contracts) where going-concern statement seems to be not included.

3 The board, in January 2012, definitively decided that senior executives couldn’t be expected to provide an unbiased assessment of a company’s financial status when it is on the brink of insolvency. Instead, the accounting board decided to develop disclosure rules about “what management’s staying up at night about,” according to FASB Chairman Leslie Seidman. Financial Accounting Standards Board chair Leslie Seidman advocated a cautious transition to International Financial Reporting Standards during her last speech in which she said the board should retain its control over U.S. GAAP.
In spite of the divergence between the evolution of the International and US going-concern principle and these formal difficulties in the convergence process, the second part of the paper has shown that also in the US context there is compliance/correspondence between managers’ decisions and auditors’ opinions: in each US audit report there is a recall to the importance of managers’ judgment. So, managers’ responsibility and accuracy in their assessments is really relevant for auditors’ work. This may be especially relevant for the fraud cases: this chapter represents the first attempt, as far as I am aware, to analyze the temporal evolution of auditors’ going-concern opinions and reports distinguishing between fraud and not-tort cases. The paper analysis emphasizes the positive relation between auditors’ going-concern decision and management assessment also in the US context where managers’ responsibility should be increased thanks to IASB and FASB convergence process: this may imply a double control (by both managers and auditors), making easier to discover fraud and decreasing the need of ulterior check by analysts.
REFERENCES